Studies in Contemporary German Social Thought
Thomas McCarthy, general editor


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The Legitimacy of the Modern Age

Hans Blumenberg
Translated by Robert M. Wallace
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From Hegel and Marx, Dilthey and Weber, to Freud and the Frankfurt School, German social theory enjoyed an undisputed preeminence. After the violent break brought about by National Socialism and World War II, this tradition has recently come to life again, and indeed to such an extent that contemporary German social thought has begun to approach the heights earlier attained. One important element in this renaissance has been the rapid and extensive translation into German of English-language works in the humanities and the social sciences, with the result that social thought in Germany is today markedly influenced by ideas and approaches of Anglo-American origin. Unfortunately, efforts in the other direction, the translation and reception of German works into English, have been sporadic at best. This series is intended to correct that imbalance.

The term social thought is here understood very broadly to include not only sociological and political thought as such but also the social-theoretical concerns of history and philosophy, psychology and linguistics, aesthetics and theology. The term contemporary is also to be construed broadly: though our attention will be focused primarily on postwar thinkers, we shall also publish works by and on earlier thinkers whose influence on contemporary German social thought is pervasive. The series will begin with translations of works by authors whose names are already widely recognized in English-speaking countries—Adorno, Bloch, Gadamer, Habermas, Marcuse, Ritter—and by authors of similar accomplishment who are not yet so familiar outside of Germany—Blumenberg, Peukert, Schmidt, Theunissen, Tugendhat.
Subsequent volumes will also include monographs and collections of essays written in English on German social thought and its concerns.

To understand and appropriate other traditions is to broaden the horizons of one's own. It is our hope that this series, by tapping a neglected store of intellectual riches and making it accessible to the English-speaking public, will expand the frame of reference of our social and political discourse.

Thomas McCarthy
Hans Blumenberg's *The Legitimacy of the Modern Age* is a book that rethinks both the substance and the process of Western intellectual history in a remarkably thorough and original way, shedding light on some of the most difficult questions of our time. *Die Legitimität der Neuzeit* was published in 1966, the first major work of a younger German philosopher who, without being identified with any one of the dominant philosophical schools in Germany, had clearly assimilated all of them, together with the historiography of philosophy, science, and theology. The book soon became the center of a widespread discussion, and it continues to be one of the recent works most frequently cited in German philosophical discourse. A second edition, substantially revised in order to respond to criticisms and dispel misunderstandings evident in the reviews, appeared in three paperback volumes in 1973, 1974, and 1976. It is this second edition that is here presented in a complete translation.

1. The Intellectual Situation in Which Blumenberg Intervened

An English-speaking reader may wonder, to begin with, what can be meant by the title, *The Legitimacy of the Modern Age*. Assuming that the "modern age" is the age succeeding the Middle Ages and continuing through to the present, one might wonder why it should be described as "legitimate." Has it ever been suggested that it might be "illegitimate"?
While readers may not be familiar with this way of posing the question, they are certainly aware of related questions, of which the question of the legitimacy or illegitimacy of the modern age as a whole is a natural extension. For over two centuries now—Rousseau’s *Discourse on the Arts and Sciences* (1755) is a convenient benchmark for the period—serious thinkers have been questioning the dominance and even the validity of such basic modern concepts as reason, science, progress, freedom of the individual, and technology. Usually, of course, these criticisms are formulated with reference to what are taken to be antithetical ideals, such as imagination, intuition, nature, community, order, or transcendence. Sometimes these antitheses are seen as constant aspects of “the human condition,” and what is questioned is only the superior status ascribed to reason (etc.) by the Enlightenment and its adherents. More often, though, the contrast is seen, at least to some degree, as representing a historical process whereby an initial, positively valued state of affairs (nature, cosmos, community, relation to transcendence, or whatever) was supplanted by the ‘modern’ condition. And the crisis-wracked state of the ‘model world’ in the twentieth century is then naturally interpreted as evidence of the unhealthy effects of the turning away from the original, preferable state of affairs.

This kind of analysis is common among literary people—one thinks of T. S. Eliot, or of Russian and French authors such as Tolstoy, Dostoevski, Baudelaire, and Flaubert, whose resonance is still so great. Related attitudes are also present in various forms in the population at large, for example, in the recent ‘counterculture’ and in the current wave of anti-‘secular humanist’ Christian fundamentalism in the United States. In academic philosophy, the critical focus on the ‘Cartesian’ premises of empiricism and twentieth-century philosophy of science also comes very close to implying an original error behind certain basic modern concepts, though the critics are generally too sophisticated to call for an outright return to Aristotle, Aquinas, or other premodern authorities.

Since the second half of the nineteenth century, a number of major works of German scholarship have focused on questions related to the nature and status of the modern age and its basic concepts and attitudes. Marx’s concern to define ‘capitalism’ and to analyze its
genesis from precapitalist economic and social formations and Nietzsche's celebration of the Renaissance as the greatest attempt to break free from what he considered to be the suffocating influence of Christianity are early landmarks in this effort. Wilhelm Dilthey's *The World-View and Analysis of Man since the Renaissance*, Max Weber's *The Protestant Ethic and the Spirit of Capitalism*, Ernst Cassirer's *The Individual and the Cosmos in Renaissance Philosophy* are others, more tentative and less spectacularly comprehensive than Marx or Nietzsche but equally serious in their effort to define basic characteristics of modernity—of something with which, without being able to identify it with 'the human condition' or even the whole of our Western tradition, and without exalting it above other civilizations or periods, they nevertheless felt inextricably involved. But no single, clear definition of this 'something,' of the modern period or modern attitude, emerges from their work.

It took radical opposition to provoke a more precise definition. Germany has experienced more extreme forms of some of the crises of the twentieth century than most other Western countries, and since the 1920s German philosophy has also perhaps taken extreme positions more seriously. Heidegger, for instance, suggested that the history of philosophy is characterized largely by forgetfulness of the most important question (the question of the meaning of Being). Husserl, in his *Crisis of the European Sciences* (written in the late 1930s), traced the agony of his times to a failure in the original formulation (somewhere deep in the Western past) of the theoretical attitude. Adorno, in his *Dialectic of Enlightenment* (written with Max Horkheimer in the 1940s) and his *Negative Dialectics*, tended to see the social and intellectual reality of his time as so thoroughly delusive that philosophy was reduced to a "negative dialectic" of refusal. To all of these thinkers there seemed to be something radically wrong in their tradition and their world. They did not, in general, locate the original error or fault in the modern age as such. To the extent that they situated it in history at all, they imagined it as earlier, as already beginning to be evident in, for example, Greek thought. However, it did appear that the modern age exhibited most clearly the results of the fatal error or fault embodied in the tradition.

The writer of this period who focused the question of the nature and legitimacy of the modern age most clearly in a major work is Karl Löwith. Löwith employed a more 'historiographical' approach in
formulating his philosophical issues than did most of his contemporaries. In *Meaning in History* (1949) he undertook to diagnose and analyze historically a central modern misconception: the idea of progress. In the process he established what seemed to amount to the illegitimacy of the modern age as a whole, an illegitimacy that followed from his thesis that some central modern ideas (especially that of progress) were secularized versions of what were originally—and properly—medieval/Christian ideas.

Löwith's outright characterization of the modern age as crucially illegitimate was one of the main provocations leading to the original analysis and defense of modernity that is presented in Blumenberg's *Legitimacy of the Modern Age*. Part I of this book is devoted to a fundamental critique of theories, including Löwith's, that describe central modern phenomena as products of the secularization of Christian ideas. It also describes how the appearance of secularization, in such cases as the idea of progress, arises. Part II presents a comprehensive alternative account of the genesis of what Blumenberg takes to be the legitimate modern concepts and attitudes, as a human response to the late-medieval crisis of the Christian relation to the world. Part III then traces the history of interpretations of the human interest in theoretical knowledge of the world ("theoretical curiosity") from the ancients to Feuerbach and Freud in order to bring into better focus the nature and status of modern science; and part IV examines the epochal "threshold" from medieval to modern in still greater detail as it appears in the thought (on opposite sides of the "threshold") of Nicholas of Cusa and Giordano Bruno.

2. Löwith's Indictment of 'Progress' and the Modern Age as Products of Secularization

To understand Blumenberg's train of thought, one needs to have a clear idea of the way in which Löwith (and others) cast doubt on the legitimacy of modernity. Löwith's *Meaning in History* focuses on the eighteenth- and nineteenth-century 'philosophies of history'—from Voltaire, Turgot, and Condorcet to Hegel, Marx, Proudhon, and Comte—in which he finds the classical formulations of the modern idea of progress. Not content with optimism about their own times and their own futures, these authors (with the partial exception of Voltaire) interpreted history as a whole as embodying a logic of in-
evitable progress in which apparent relapses (what used to be called "dark ages," for instance) have to be understood as necessary stages in preparing for subsequent steps forward. In the course of the twentieth century, most of us have become more or less skeptical about such theories, but certainly no alternative pattern of interpretation has achieved anything like the broad acceptance that the idea of progress once had. And one may reasonably wonder whether it does not still underlie many of our attitudes, such as our continuing faith in science and the sense of superiority and of somehow inevitable world leadership that certain Western countries still seem to possess.

In any case Löwith is not satisfied to note the prevalence of the idea of progress in eighteenth- and nineteenth-century thought and to congratulate those of us who think we have overcome this illusion. He respects the intellectual claims of the 'philosophers of history' whom he studies, so that for him their ideas constitute a real philosophical problem and not just a historical or psychological 'phenomenon.' The possibility of interpreting their ideas as naive projections of contemporary scientific and technical progress, economic growth, and 'bourgeois-democratic' revolutions onto the screen of the history of the human race as a whole is something that he does not even entertain. How then does Löwith interpret the modern 'philosophies of history'? He interprets them as a "secularization" of the eschatological pattern set up by the Jewish and Christian religions, of their faith in a fulfillment of the world's history through 'final' events (coming of the Messiah, Last Judgment, etc.), a faith whose essence he describes as "hope," "living by expectation," or simply "futurism." In contrast, he describes ancient philosophy and religion as founded on a "reverence for the past and the ever present," which are embodied in the cyclical pattern of reality exemplified by organic life and the revolutions of the heavens. In history this pattern took the form of the continual growth, maturity, and decline of individuals, cities, peoples, and (for some ancient thinkers) entire 'worlds.' It was Judaism and, above all, Christianity that broke the rule of this model in the Hellenistic/Roman world, introducing the entirely novel ideas of creation from nothing and total final destruction, of a unique world history centered (in Christianity) on a unique Incarnation and directed at one absolutely final Judgment. This, Löwith argues, is the only possible source of the modern notion of a single, unified, future-directed history of progress,
despite the irreligious and even antireligious postures of many of the modern theorists of progress.

Whether or not English-speaking readers have previously encountered Löwith's thesis, they are undoubtedly familiar with the similar proposition that Marx's idea of communism (and other similar revolutionary visions) are 'really' secularized versions of the biblical paradise or the coming of the Messiah. This particular 'secularization theory' has been repeated so often (Löwith too subscribes to it), and so seldom directly denied, that it might almost be described as "common knowledge." A similar situation existed in Germany during the 1950s and early 1960s with regard to Löwith's thesis that the idea of progress is a secularization of eschatology. It was more or less independently proposed by several other writers in the 1940s and 1950s, was not systematically criticized by anyone, and became, in effect, part of the 'conventional wisdom' of German scholarship.

It is a profoundly pessimistic doctrine. Löwith (to continue to use him as our prime example) was not discussing Marxism alone but modern 'philosophy of history' in toto (apart from twentieth-century authors such as Spengler and Toynbee and his admired nineteenth-century predecessor in the criticism of 'progress,' Jacob Burckhardt), and he did not hesitate to extend his diagnosis to the "modern mind" in general. Since abandoning the Christian versions of creation and consummation, Löwith writes, "The modern mind has not made up its mind whether it should be Christian or pagan. It sees with one eye of faith and the other of reason. Hence its vision is necessarily dim in comparison with either Greek or biblical thinking." The bastard nature of the idea of progress—a pattern whose true meaning is Christian and Jewish but whose modern form is non-Christian and non-Jewish, that is, "pagan"—is seen as characteristic of the modern mind in general. In Löwith's later writings it becomes increasingly clear that the 'alternative' he has in mind is unambiguously "pagan": It is a return to the cyclical cosmos of Stoicism. Such a return would presuppose the destruction not only of belief in ongoing progress but also of the minimal underlying idea of the irreversibility of basic historical change. It is not surprising, then, that this alternative is mainly implicit rather than being systematically argued for.

Löwith's 'alternative' was not as universally adopted as was his theory of the secularization of eschatology. Heideggerians, theologians—everyone had his own preferred 'alternative,' but everyone
seemed at least tacitly to agree that the modern idea of progress had
been definitively analyzed and disposed of. And numerous other basic
modern ideas were quickly found to be secularized versions of this or
that Christian antecedent. German philosophical and historical scholars
have usually been more aware of and better grounded in Christian
theology than is common among their counterparts in the English-
speaking countries, and young scholars quickly made maximum use
of the new interpretive model.¹

3. Blumenberg’s Defense of Possible Progress and His
Account of the Origin of the Modern Age

This, then, was the situation when Blumenberg first presented his
critique of the secularization “category” at the Seventh German Phi-
losophy Congress in 1962, a critique that was expanded and equipped
with a complete alternative account of the origin of the modern age
in Die Legitimität der Neuzeit (1966) and was defended and further
elaborated in this revised edition.

Very briefly, as it applies to Löwith’s theory that the idea of progress
is the result of a secularization of Christian eschatology, Blumenberg’s
critique (part I, chapter 3) has two main elements. First, he points out
that the ‘future’ that the modern idea of progress anticipates is con-
ceived of as the product of an immanent process of development
rather than as a transcendent intervention comparable to the coming
of the Messiah, the end of the world, the Last Judgment, and so forth.
And if the common element is supposed to be “hope,” the Christian
attitude to the final events has been characterized far more by fear
than by hope for most of the Christian era and has been such as to
discourage precisely the kind of forward-looking constructive effort
that is implied in ‘progress’—so that the transformation of the one
into the other is very difficult to picture. Second, there are in any case
alternative accounts of the origin of the idea, accounts that do not
reduce it merely to a naive projection of an optimistic period in Eu-
ropean history any more than Löwith’s does. Blumenberg describes
the idea of progress as arising from two primary early-modern form-
ative experiences: the overcoming of the fixed, authoritative status of
Aristotelian science by the idea of a cooperative, long-term scientific
progress guided by method; and the overcoming (in the literary and
aesthetic realm) of the idea of ancient art and literature as permanently
valid models of perfection in favor of the idea of the arts as embodying the creative spirit of their particular ages and in that sense as capable of again achieving validity equal to that of the creations of the ancients. These two parallel developments, both of which occur primarily in the course of the seventeenth century, are then followed by a process in which the idea is extended to other realms (technology, society) and generalized as the idea of progress 'across the board', which figures in the writings of Voltaire and his successors in the 'philosophy of history.'

Anticipating Löwith's response that this cannot be a complete account of the origin of the idea of progress because 'it cannot be a mere accident that Greek philosophy did not come up with any philosophy of history or of freedom, and that Greek historians thought very differently from post-Christian metaphysicians about human nature and the nature of history,' Blumenberg presents in part II, "Theological Absolutism and Human Self-Assertion," a highly original interpretation of the role of Christianity in bringing about modern "human self-assertion," of which 'progress' is to be understood as a mode of implementation. Blumenberg makes it clear here (and in parts III and IV) that while the modern age is not the result of a transformation (whether through 'secularization' or any other process) of something that was originally Christian, this does not mean that it sprang into existence spontaneously, as though into a historical void. The continuity underlying the change of epoch is, he says, a continuity of problems rather than of solutions, of questions rather than of answers. Instead of remaining forever fixated on 'doctrines' or 'ideas' as the stuff of our tradition, we need to learn to relate these to the human activity of inquiring, of questioning, which gives them their relevance and concrete meaning. When we do so, Blumenberg suggests, we may find other kinds of continuity besides those of rightful inheritance or illegitimate misappropriation, and other kinds of novelty besides that of unprovoked 'creation from nothing.'

To summarize very briefly the analysis that Blumenberg unfolds in part II: The problem to which modern "self-assertion" (science, art, 'individualism,' etc.) is a response was posed for us by the overriding emphasis in the late Middle Ages on the theme of divine omnipotence. As expressed in Ockham's nominalism, it was this theme that finally destroyed the credibility—in a sense, even the conceivable—of the cosmic order to which Löwith looks back and that High Scholastic
Aristotelianism had tried to reaffirm. Given the absolute and unlimited power of God to create (or destroy) whatever He pleases, with or without reason (the only ultimate reason being “Quia voluit” [because He willed it]), the actual, finite world becomes totally contingent, no longer the embodiment of the full range and variety—the order—of what is possible. In the face of such utter contingency, one can, of course, persist in focusing one’s hopes on salvation in the ‘next’ world, which was the official medieval ‘solution’; but this solution was rendered just as desperate by omnipotence, in the form of (undeserved and unearnable) ‘grace’ and predestination, as was the older reliance on the cosmos. Alternatively, one can set out (experimentally, hypothetically) to construct whatever may be possible in this particular world in the way of security and self-realization “even if there is no God” (part II, chapter 3, last paragraph). If one takes the latter route, one need not be applying Christian ideas in a non-Christian context (trying “to be God oneself,” as Luther suspected—see part II, chapter 3, text to note 55), but neither is one starting absolutely from scratch. The nature of what one undertakes is deeply determined by the problem—the contingency of existence in the world—that one is addressing. And that problem is evidently not an ‘eternal’ one. (Or else, Löwith might ask, why didn’t the Greeks et al. address themselves to it?) It is posed, and becomes inescapable, at a particular historical point for particular historical reasons, which we have to reconstruct if we want to understand our age and ourselves.

In his reconstruction of this process, Blumenberg does not put “theological absolutism” in the place of Descartes’s Cogito as the truly absolute and inexplicable source of the modern age, now pushed one chronological step backward in history. Instead, he interprets it, in some of the most fascinating passages of part II (chapters 1 and 3), as the ultimate working out of the ‘solution’ developed by the Christian “Fathers,” in particular by St. Augustine, to the problem of Gnostic dualism. And Gnosticism in its turn appears as a new response to the ancient questions (about order versus chaos, for example) that had reached such an extreme form in, for instance, Neoplatonism (see part II, chapter 1, first three paragraphs) as to be ripe for reformulation as the contest of good with evil.
4. Blumenberg’s Explanation of the Modern Doctrines of 'Inevitable Progress'

It is important to notice, though, that problems or questions do not always function in this relatively straightforward way as the focus of the central interests and efforts of an age, from which its secondary ideas flow (like progress from "self-assertion"). Questions that do not have such a central role do not for that reason fade away when an epochal change dissolves the context in which they originated. And this fact helps to explain some very confusing phenomena, for example, the great modern 'philosophies of history.' Löwith might very naturally have responded to Blumenberg's critique of his interpretation of progress as secularized eschatology with the following question: If the modern idea of progress is essentially so modest as your account of its genesis implies—just a hypothetical projection into the future of the kind of process and success that Europeans had begun to experience by the seventeenth century in certain areas of endeavor—then why is it that in nearly all of its best-known modern formulations, in the great 'philosophies of history,' it is presented as the universal and necessary pattern of human history as a whole? However, a defense of the legitimacy of the modern age does not entail a defense of every prominent phenomenon of that age, but only of those that are essential to its central undertaking. And the notion of progress as a necessary and inevitable process is certainly not essential to human self-assertion; indeed from one point of view it might almost be described as its antithesis. Blumenberg describes this notion, and the 'philosophies of history' that embody it, as the result of an attempt—which was 'natural' but was nevertheless doomed to failure—to answer a premodern question by modern means, means that were not adapted to the task. Christianity, he says, through its claim to be able to account for the overall pattern of world history in terms of the poles of creation and eschatology, had put in place a new question, one that had been (as Löwith so forcefully insists) unknown to the Greeks: the question of the meaning and pattern of world history as a whole. When modern thinkers abandoned the Christian 'answers,' they still felt an obligation to answer the questions that went with them—to show that modern thought was equal to any challenge, as it were. It was this compulsion to "reoccupy" the "position" of the medieval Christian schema of creation and eschatology—rather than leave it empty, as a rationality
that was aware of its own limits might have done—that led to the grandiose constructions of the 'philosophy of history.' And naturally these constructions drew more attention to themselves than did the modest idea of possible progress that was overextended (and discredited) in their service.

5. Some Other “Reoccupied Positions” in the Modern Age

Up to this point in my summary of Blumenberg’s analysis of the modern age, the idea of progress has been my leading example, and for several reasons: because its problematic character is widely recognized, because it has been the subject of a highly focused attack in Löwith’s *Meaning in History*, and because that attack led directly to the general question of the legitimacy of the modern age as a whole. The alternative analysis that I have been describing—according to which the legitimate modern idea of ‘possible progress’ was distorted and largely discredited as a result of its being forced to “reoccupy” a “position” that was established by medieval Christianity (the “position” of an account of history as a whole)—is an instance of a pattern that Blumenberg describes as affecting quite a number of equally important modern ideas, so that it ultimately serves to clarify and to defend the legitimacy of the full range of what Blumenberg takes to be genuinely modern. I shall now briefly list four other instances of Blumenberg’s use of his model of “reoccupation,” so as to give an idea of the range of its applicability and to lead into a concluding discussion of the model in its full generality. Without developing these instances in the extensive detail that they deserve, I shall add a few comments on their potential importance for the particular areas of inquiry in which they are situated.

First, Blumenberg tells us in part II, chapter 2, that the assumption that “the world has a particular quality for man”—specifically, an “endangering” quality—which “prescribes his basic mode of behavior” as “self-preservation” (part II, chapter 2, last two paragraphs), reoccupies the position of the idea of divine providence as the teleology determining the “quality” of the world for man, and thus man’s necessary basic mode of behavior. This is one upshot of Blumenberg’s reformulation (to which most of this chapter is devoted) of Nietzsche’s critique of the remnants of teleology in modern thought, specifically in the idea of ‘self-preservation’ which is such a powerful ‘overriding end’ in modern theories all the way from Hobbes to Darwin and
contemporary 'sociobiology.' Blumenberg wants to distinguish sharply between this teleology, with its requirement of behavior aimed at "self-preservation," and "self-assertion," which is not required by anything inherent in the world or in man, but is purely historical. If I read this chapter correctly, Blumenberg is suggesting that the relation between "self-preservation" and "self-assertion" is the same as that between "inevitable Progress" and the possible progress that he defends. It is certainly true that since the time of Hobbes, if not earlier, the self-assertion of individuals has been seen largely as their quest for survival and 'security,' which is a much narrower project than "self-assertion" as Blumenberg defines it—as the "existential program" in which "man posits his existence in a historical situation and indicates to himself how he is going to deal with the reality surrounding him and what use he will make of the possibilities that are open to him" (part II, chapter 2, third paragraph). What seems to have happened, then, is that our unformulated, semiconscious project of self-assertion has been forced to play the role of—to "reoccupy" the "position" of—a basic mode of behavior required by a supposedly crucial characteristic of reality. So it has appeared mainly in the guise of the 'self-preservation' required by the 'dangerous character' of reality. And in the process, self-assertion's authentic meaning and relation to the past (as a response to "theological absolutism" in the process that I have sketched), has been prevented from coming into focus, and it has been discredited as a merely 'instinctive,' egotistical, and ignoble attitude in comparison to the ideal human attitudes of other ages.

A second example: The early modern mechanistic mode of explanation of nature, with its absolute 'matter,' reoccupies the position of the late-medieval nominalistic mode of explanation with its absolute (divine) 'will.' (See part II, chapter 3, paragraph 15.) When we consider how since Descartes the syndrome of the 'mind/body problem' repeatedly emerges from the feeling that matter is somehow 'ultimate,' in which case 'mind' must be reducible to it—and how, in the idealistic reaction, exactly the reverse is asserted—then the potential importance of this suggestion becomes evident. Again, Blumenberg is not indicting modern materialism as mistaken or illegitimate in toto. Instead, he is suggesting that a legitimate core idea—that of a reality that can be grasped mathematically (res extensa: 'matter') for the purpose of "self-assertion"—has been forced into the "inherited," alien "position" of
the sole principle of all explanation or understanding whatever. Chapters 3, 4, and 5 of part II lay out an extensive context for this suggestion.

A third case is the supposedly secularized paradise or messianic expectations of Marxism. Blumenberg points out (part I, chapter 7, last three paragraphs) that as with 'progress,' the process and the end state projected by Marx differ from the religious ones in that their accomplishment is supposed to be the result of immanent human processes rather than of transcendent intervention. The appearance of secularization here arises, Blumenberg says, because just as the philosophy of history "reoccupied the position of" the "salvation story" (from the Creation to the Last Judgment) as an account of world history as a whole, so the ideal of communism ends by reoccupying the position of the 'beatific vision' of Christian theology as a conception of happiness that (unlike classical, Greek conceptions, for example) cannot be disappointed by concrete experience. "The constancy of language" here (the 'evangelistic' language of, say, the Communist Manifesto) "is an index of a constant function for consciousness but not of an identity of content." And presumably the Marxian 'content' cannot fairly be judged on the basis of the role it has been forced into, any more than the modest idea of progress can be so judged.

A fourth example is to be found in part I, chapter 8, where Blumenberg deals with the thesis (put forward by Carl Schmitt, the controversial professor of jurisprudence, in his Politische Theologie [Political Theology] of 1922 and 1934) that "all the significant concepts of the modern doctrine of the state are secularized theological concepts." (See part I, chapter 8, text to note 3.) Blumenberg introduces his discussion of Schmitt's 'secularization theory' (a discussion that is much expanded in this edition to deal with a new book that Schmitt published in 1970 under the title Politische Theologie II) with four paragraphs on the relation between Christianity and modern politics—more specifically, between theological absolutism and modern political absolutism. It is clear from this discussion and from his subsequent discussion of Schmitt's secularization theory of the state that Blumenberg does not share that theory. It is also clear, however, that he agrees with Schmitt that there is a marked contrast between "the modern doctrine of the state" (where Schmitt has in mind concepts like sovereignty, raison d'état, 'will,' 'decision,' 'friend and enemy') and the modern rationalism that tries to comprehend politics in terms of such concepts as contract, consent, liberty, law, and rights. The latter concepts are all consistent
with “self-assertion” and the fundamental individualism that it implies, whereas the former, those used to explicate the notion of the state itself, all suggest the possibility, with which we are so familiar in modern history, of the state overriding the interests of individuals. How is this discord within both modern thought and modern practice to be explained? Again, Blumenberg clearly agrees with Schmitt that medieval Christianity is a necessary part of the explanation. There is a “mirror-image correspondence between political and theological absolutism.” The “intolerability of the factionalization of absolute [religious] positions within the state” that resulted from the Reformation “was counteracted by means of the transfer of the category of the unconditional friend/enemy relation onto the conflicts between the national states that were in the process of integrating themselves. . . .” (It is no accident that both royal “absolutism” and Hobbes’s theory of the sovereign were born during this period.) But Blumenberg evidently does not see this “projection,” the national state’s “taking over of the pseudomorphic qualities of absolute [divine] authority,” as a process of secularization. “The symmetry of the development of internal conflicts between absolute positions and the setting up of an absolute agent may be describable as an ‘inducing’ process but hardly as the transfer of specific attributes of one realm to the other”; it was a consequence of the disintegration of Christianity as a unity in the European world, of the multiplication of Christian ‘denominations’ and the political problems created by that multiplication, rather than of a unilateral and uncoerced ‘adoption’ of theological attributes by the secular state.

Blumenberg does not use the terminology of “reoccupied positions” here, but I believe that the same idea underlies what he says. He has described another case where a conflict in modern thought appears to be explained by a ‘secularization’ theory, but that explanation in fact distorts the reality. As he said in his brief discussion of Schmitt in the first edition of this book, “The doctrine that ‘all the significant concepts of the modern doctrine of the state are secularized theological concepts’ has not become more plausible since it was propounded in 1922, to the extent that we have learned to doubt whether this ‘modernity’ was ever modern—here there are the striking nonsimultaneities in what is chronologically simultaneous, the durability of the not yet modern in the modern age, the fundamental delay of enlightenment.” In other words, the “modern doctrine of the state,” like ‘inevitable
Progress’ and so forth, is not modern in the same sense as “self-assertion” is and needs to be understood and radically criticized if self-assertion, enlightenment, and true modernity are ever to prevail.

6. Blumenberg’s Project as a Radicalization of Enlightenment

These accounts and others that I have not the space to mention cut a wide swath through the intellectual phenomena of our age. One could imagine them, if effective, clearing our minds—and even, by extension, our lives—of some very pervasive and destructive patterns of confusion. To that extent, Blumenberg’s work would embody in a new form the Enlightenment’s vision of philosophy as a liberating force in the world. Thus it is very important that we be clear about the nature of his model and its implications.

What exactly does Blumenberg mean when he says that these phenomena—the great philosophies of history, the axiom that the self’s overriding concern is ‘self-preservation,’ early modern mechanistic materialism, the anticipation of communism, the modern ‘primacy of the political,’ and so on—result from the reoccupation of positions established by medieval Christianity? To begin with, some of our ideas, like the original modest idea of possible progress, are simply articulations of the “existential program” of “self-assertion.” Others, however, are attempts at answering questions that do not naturally arise as part of the project of “self-assertion;” questions that we “inherit” from earlier phases of our history and that we feel we ought to be able to answer. But the process is not as simple as this description makes it sound. There are two important qualifications. First, of course, the “inherited” questions have lost their specifically medieval/Christian character. We no longer feel, for example, that we need or ought to be able to describe the overall pattern of God’s dealings with the world, as medieval Christianity did. Instead, we want to be able to describe the overall pattern of history as a whole—a project that does not, on the face of it, necessarily require the theorist to have recourse to hypotheses that modern rationality has forsworn. And second, the problem to be addressed has more the character of a need, or perhaps an obligation, than the articulate, conceptual character of an explicit question. In the medieval Christian context it was so fundamental as hardly to require formulation as a question—obviously one wanted to be able to grasp the overall pattern of God’s dealings with the
world; otherwise what was the purpose of revelation? In the modern age we inherit this need, and in trying to satisfy it with the means available to us, we imply what we now understand the question to be, rather than consciously and critically stating it.

It is this quality of 'need' or 'obligation,' this absence of explicit derivation and formulation as a question—and the 'translations' that these qualities make possible between one epoch and the succeeding one—that lead Blumenberg to use the metaphor of a system of "positions" that are "occupied" (and "reoccupied") by ideas. And this metaphor, explicated in terms of the contrast of "content" with "function," figures in his central doctrine that "totally heterogeneous contents [can] take on identical functions in specific positions in the system of man's interpretation of the world and of himself" (part I, chapter 6, third paragraph). The contrast of content with function is what ultimately distinguishes Blumenberg's model from the secularization theory, which it obviously resembles in the importance it assigns to the medieval Christian experience in determining modern phenomena. The idea of progress, for example, is viewed neither as a secularized Christian idea nor as a modern idea unaffected by Christianity; in Blumenberg's account, it is essentially modern in its content (the initial idea of possible progress) but heavily affected by Christianity in the function that the content is forced to perform (the function of explaining the meaning and pattern of history as a whole). (This is in addition, of course, to being "affected by Christianity" in the sense that self-assertion, of which it is a part, originates as a response to the crisis of medieval Christianity, to theological absolutism.)

What exactly does Blumenberg expect to result from this sort of analysis? Its implications obviously extend well beyond the satisfaction of scholarly curiosity about the origin of modern intellectual phenomena. Certain ideas are shown to follow from a project or a posture—"human self-assertion"—which while not inevitable or universally obligatory, at least seems to involve no necessary 'false consciousness'; while a second set of ideas (that of 'inevitable Progress,' for example) is presented as resulting from attempts to meet 'needs' that are not rational," are not humanly universal, but came into being as the presumed background of a third set of ideas (medieval, Christian) that are incompatible with the first set. One cannot help thinking that to the extent that this situation is understood, the power of the second set of ideas must be diminished. However, unlike his eighteenth-century
Blumenberg has a powerful awareness of the obstacles to this sort of enlightenment. It is not by accident that he uses the term “need” for the motive that produces “reoccupations” rather than using the dismissive terminology of “idols” or “prejudices” with which science and enlightenment were originally satisfied to label their opponents. He thus recognizes a certain “rootedness” in the phenomenon that cannot simply be swept away by rationality, though it should be noted that this is not the “rootedness” of a “philosophical anthropology”—if needs come into being in history, presumably they can also disappear, or at least be altered by their owners’ changed attitudes to them.

Blumenberg often mentions the Enlightenment’s intolerance of the ages preceding it, expressed in the common idea that dogmatic religion prospered only because of the lies of priests—an intolerance that led the Enlightenment to underestimate the resilience of some of the “prejudices” that it set out to combat. He clearly intends not to repeat this sort of error. And yet the question might be asked whether he does not slip into a similar error when he distinguishes between questions that we confront as a result of “reoccupations” of medieval Christian “positions” and those that arise directly from the project of self-assertion and appears to suggest that it is the latter with which we should really be concerned. A defender of the timeless nature of metaphysical questions (the “great questions,” as they are often called) might argue that this is an invidious distinction, that all questions should be taken on their own terms, whether they are open to modern, scientific treatment or not (unless we are going to fall into the kind of dogmatism represented by logical positivism, which declared questions that were not amenable to scientific treatment meaningless), and that the way in which questions happen to have arisen has nothing to do with their claim to our attention.

Blumenberg is so aware of this possible objection that he has devoted a major part of his book—part III, on “The ‘Trial’ of Theoretical Curiosity”—to a consideration of its nature and historical roots. For the innocence of theoretical curiosity—in other words, the equivalence of all theoretical questions, none of which are to be regarded as inherently distracting or unworthy of attention—is itself one of the distinctive beliefs of the modern age, which that age asserted against the medieval Christian suspicion (beginning with Augustine) that curiosity distracted the soul from its overriding interest in God and salvation. If we decide that certain questions are to be avoided because
they would not have arisen in the modern context had we not felt obliged to emulate the accomplishments of preceding ages, this would seem to raise questions about our faith in the innocence of curiosity. Is it possible that Blumenberg is again prescribing a kind of discipline of the soul, based on a fear of its getting dispersed and lost among incompatible interests?

The answer is no, Blumenberg is not constraining curiosity because he is not in fact recommending that certain questions be avoided. Rather, he is expanding the range of curiosity, and compensating for the difficulty or impossibility of satisfying it in certain cases, by raising and undertaking to answer second-order questions about how the troublesome questions of, for example, the philosophy of history arose. What he says to the defender of metaphysics is that when certain questions have been frustrating all efforts at answering them for centuries, sometimes to the point (as in the great philosophies of history) where those efforts have themselves become disreputable or have been abandoned in exhaustion, we should try stating them clearly as questions and investigating the circumstances in which questions of this nature first came to be asked. When we satisfy this second-order kind of curiosity, we may discover that the question seems more at home in its original circumstances—as the question of the meaning and pattern of the world’s history as a whole, for example, seems in the context of medieval Christianity—than it has ever seemed in the modern contest. Without perhaps being critically ‘destroyed’ or removed from the system of ‘valid’ questions by this process, the question certainly presents itself in a new light as a result of it. Seeing the question in this light, we are no longer simply curious people who happen to be confronted with an interesting and seemingly important question. Now, as a result of our analysis, we are conscious of our particular situation and commitments in relation to that question: a situation (probably) outside the context of its origin, and commitments (probably) that make it exceedingly difficult for us to generate an answer to it that we can defend against our own criticism. But this is not a merely negative result: It is a positive step forward in self-knowledge. By questioning the nature of our own questioning, we alter the dynamic of our curiosity not by fiat, by proscribing questions, but by extending it to and satisfying it on another level.8

An important consequence of our increased self-consciousness (since the eighteenth century) about central modern concepts like science
and progress, and of our increased sympathy for and understanding of other periods in our history (and other cultures) in which these concepts did not (and do not) play a central role, has been an ongoing and pervasive split in our thinking. On the one hand, we depend on science, progress, and so forth, and the rationality they represent, to an ever increasing degree. On the other hand, we often wonder what the grounds for this dependence are—is it not simply an expression of one among many possible human attitudes? Science and progress will never answer the ‘great questions’ of metaphysics; they will not save our souls; they will not even fill us with the eudemonia that the Greeks expected from the completion of theory, because they will never be complete. How is it that we are committed to them? Should we not perhaps be able to go beyond this seemingly arbitrary commitment?

And yet when we do attempt to go beyond it or back behind it—to formulate an alternative world view—the possibilities are so endless, and the grounds for choosing between them (other than faith and conversion) so slight, that we generally wind up in a very unsatisfying relativism: ‘understanding’ everything, committed to nothing.

Blumenberg’s response to this situation is, first, to demonstrate that modernity is not an arbitrary commitment—that while it is not a transformed, ‘secularized’ version of earlier, Christian commitments, it is very much a product of them, as a response to the crisis of the medieval Christian world view, which in turn was intimately determined by what went before it. In other words, our modern commitments are highly determined by our history.

At the same time, by demonstrating this and also demonstrating (by means of the functional model and the idea of “reoccupation”) that modernity’s problems do not result from the inconsistency of its authentic elements, he shows that modern science and progress may be capable of more than we imagine in moods of sober resignation to our historical ‘fate.’ If modern science can clarify itself—the historical conditions of its possibility and necessity, and thus its nature; and if it can distinguish the questions to which it is suited from those that are forced upon it; and if it can help us, through this knowledge, to revise our attitudes to the latter; then it will be helping us to ‘master’ reality not only in the sense of ‘the facts’ but also in the sense of the very process of inquiry itself. And this would go a long way toward overcoming the alienation from that process that is expressed in both
our resignation and our relativistic dallying with ‘alternatives.’ As Blumenberg writes:

There are phases of objectivization that loose themselves from their original motivation (the science and technology of the later phases of the modern age provide a stupendous example of this!); and to bring them back into their human function, to subject them again to man’s purposes in relation to the world, requires an unavoidable counter-exertion. The medieval system ended in such a phase of objectivization that has become autonomous, of hardung that is insulated from what is human. What is here called “self-assertion” is the countermove of retrieving the lost motives, of new concentration on man’s self-interest. (Pp. 177–178)

Retrieving the lost motives of modern science and philosophy—restoring their relation to man’s self-interest—by articulating and pursuing them more radically than has hitherto been done, is the central purpose of this book.

Notes

a. Throughout this introduction and the translation that follows it, single quotation marks have been used exclusively as ‘scare quotes,’ to draw attention to special uses of terms or to emphasize the problematic status, in the discussion, of the concepts referred to by the words in question. The only exception to this rule is a quotation within a quotation (i.e., within a set of double quotes), which requires single quotation marks for contrast.


d. “Science,” here and throughout this introduction and the translation that follows, refers to what in German is called Wissenschaft, which covers both the natural sciences and the ‘cultural sciences’ [Geisteswissenschaften], to which Blumenberg’s own work, for example, belongs.

e. For a more detailed discussion of Löwith’s Meaning in History, Blumenberg’s critique, and Löwith’s response to that critique, see my “Progress, Secularization and Modernity: The Löwith/Blumenberg Debate,” New German Critique 22 (winter 1981): 63–79.

1958); C. F. von Weizsäcker, *The Relevance of Science* (New York: Harper & Row, 1964)—German edition: *Die Tragweite der Wissenschaft* (Stuttgart: Hirzel, 1966). Bultmann’s and von Weizsäcker’s books were both originally Gifford lectures, which is why their original publications were in English.


h. Those who are acquainted with the writings of Hannah Arendt and Leo Strauss will recognize the affinity between their attitudes to ancient philosophy and Löwith’s.

i. Two major earlier ‘secularization’ theorists, Max Weber and Carl Schmitt, might be seen as forerunners of this wave of the 1950s. Their writings did not, however, lend themselves so readily to imitation or generalization as Löwith’s did. In Weber’s *The Protestant Ethic and the Spirit of Capitalism* the “secularization” process was almost an afterthought, not essential to the central thesis of the book. And for Schmitt (as Blumenberg describes in part I, chapter 8) secularization was (uniquely) a category of *legitimacy*, which was not an interpretation that could meet the kinds of needs that Löwith’s did.


k. For Blumenberg’s definition of the term, see part II, chapter 2, paragraph 3.

l. Such a question is implied by a broader statement on p. 197 of Löwith’s review (cited in note j).

m. *Die Legitimität der Neuzeit* (Frankfurt am Main: Suhrkamp, 1966), p. 60.

n. Blumenberg described the need for an account of the pattern of history as a whole as “not, in itself, rational” in the first edition (cited in note m), p. 36.

o. As is also clear from the themes of several of his other works: “Paradigmen zu einer Metaphorologie,” *Archiv für Begriffsgeschichte* 6 (1960):7–142; *Schiffbruch mit Zuschauer: Paradigma einer Darwinismentheorie* (Frankfurt: suhrkamp taschenbuch wissenschaft #289, 1979); *Arbeit am Mythos* (Frankfurt: Suhrkamp, 1979); and *Die Lesbarkeit der Welt* (Frankfurt: Suhrkamp, 1981). These examine the nature of metaphor and myth and their persistence through all the ‘enlightenment’ of the modern age. In fact a major focus of Blumenberg’s remaining major work, *Die Genesis der kopernikanischen Welt* (Frankfurt am Main: Suhrkamp, 1975), is on the influence of Copernicanism as a dominant metaphor in modern times.


q. This turning can be seen as an extension (and a reformulation) of Kant’s “transcendental” turning, which sought to protect reason from self-inflicted antinomies through inquiry into the conditions of the possibility of objective knowledge, and thus to limit reason’s ambitions by enhancing its self-knowledge. The relation is evident in Blumenberg’s discussion of Kant in part III, chapter 10.
Secularization: Critique of a Category of Historical Wrong
What the term “secularization” signifies should, it seems, be readily determinable. Whether as an observation, a reproach, or an endorsement, everyone is familiar with this designation for a long-term process by which a disappearance of religious ties, attitudes to transcendence, expectations of an afterlife, ritual performances, and firmly established turns of speech is driven onward in both private and daily public life. One need not even stick to the data (though of course they are the easiest to empirically and statistically) of institutional membership and influence, which are characterized by a higher degree of inertia than their motivational basis in the human life-world. It used to be one of those standing turns of speech to lament the world’s becoming “ever more worldly” (rather than ever less so), while now what is asserted is that the modern age is an epoch of pure “worldliness,” and its body politic is accordingly the secular state.

We would not be able to accept the formulas of ‘secularization’ as so much a matter of course if we did not find ourselves still within the horizon of the operation of this process: We are describing something that would not even exist for us if we were not still in a position to understand what had to precede it, what the hope of salvation, what the next world, transcendence, divine judgment, refraining from involvement in the world and falling under the influence of the world once meant—that is, to understand the elements of that ‘unworldliness’ that must after all be implied as a point of departure if we are to be able to speak of “secularization.” That there are fewer sacred things
and more profane ones is a quantitative determination to which any number of differentiations could be appended in order to describe this same disappearance. Its final stage would be a situation in which no remains of these elements were left in existence, but at that point one would cease to be able to understand the term "secularization" at all. In this descriptive sense one can cite almost anything as a consequence of secularization, including specific losses, as, for instance, when someone says that the crisis of all authority is a phenomenon or a result of secularization. Something is absent, which is supposed to have been present before. Such a statement hardly explains the loss; it simply subsumes it in the great stock of what was somehow fated to disappear.

Bear in mind also that the use of the expression no longer implies any clear judgment of value. Even one who deplores secularization as the decay of a former capacity for transcendence does so with hardly less resignation than someone who takes it as the triumph of enlightenment—since after all it has not turned out to be the final, definitive triumph. The historian will incline to neither attitude. But what attitude will be appropriate for him when he speaks of "secularization"? One would think that that would have been to some extent clarified. It is just that assumption that will be disputed here.

Expressions of such a generous character, of such a degree of generality and intransitive indeterminacy, are allowed to pass, in our overrich supply of terminology, until almost without arousing notice or suspicion they present themselves in a more precise function. The world that became ever more worldly was a subject whose extension was about as obscure as that of the impersonal "it" in the proposition "It's raining." But in the more precise function, propositions of an entirely different form appear, propositions of the form 'B is the secularized A.' For example: The modern work ethic is secularized monastic asceticism; The world revolution is the secularized expectation of the end of the world; The president of the Federal Republic is a secularized monarch. Such propositions define an unequivocal relation between whence and whither, an evolution, a change in the attributes of a substance. The great all-inclusive process of the secularization of the world now no longer appears as a quantitative loss but rather as an aggregate of specifiable and transitively qualitative transformations in which in each case the later phase is possible and intelligible only in relation to the earlier phase assigned to it. What we have here is
no longer the simple comparative statement that the world has become more ‘worldly’ but rather, in each asserted case, only the assertion of a specific mutation leading to the specific ‘product of secularization.’

I am not proposing a linguistic prohibition here. Anyone who wants to speak of secularization as a tidal wave, which at a particular time has reached a particular point, which perhaps presses irresistibly forward or may be dammable, which here or there breaches the dam, which appears to recede at another point—such a person may hold to his description of changing conditions and their general direction, unaffected by what is at issue here. Only the claim to render intelligible by this terminology something that would otherwise not be intelligible, or would be less so, will be contradicted here.

Insofar as “secularization” is nothing but a spiritual anathema upon what has transpired in history since the Middle Ages, it belongs to a vocabulary whose explanatory value depends on presuppositions that are not available to theory and that cannot be credited to or expected of the understanding of reality that is itself characterized as “worldly.” But secularization has been accepted as a category for the interpretation of historical circumstances and connections even by people who could not be prepared to conform to the theological premises. Here the difference between the theological and the historical uses of the categories of worldliness and secularization lies neither in a change of the prescribed evaluation nor in the reinterpretation of loss as eman­
cipation. For a positive evaluation of secularization is perfectly possible even in theology: The very people who were attempting to restore the radicalness of the original religious distance from the world and to renew theology’s declarations of transcendence “dialectically” could see in the massive evidence of the manifestation of the world as ‘worldliness’ the advantage of its unmistakable character of immanence. What is foreign to the world, and appears to it as the paradoxical demand that it give itself up, was supposed to withdraw itself, in a new distinctness, from the entanglement and camouflage in which, perhaps for the sake of demonstrable success, it had become falsely familiar and acceptable. A theology of ‘division,’ of crisis, had to be interested in making clear the worldliness of the world rather than in overlaying it with the sacred. That is what gave the use of the term “secularization” its specific theological pathos.

The full calamity of the world—but precisely of the ‘world,’ in the full sense of the term—is required in order to secure evidence for the
expectation of a salvation that is 'not of this world'—however such calamity or salvation may (epochally or episodically) be defined. Once 'secularization' had become the cultural-political program of emancipation from all theological and ecclesiastical dominance, of the liquidation of the remnants of the Middle Ages, it could equally well be formulated as a postulate for the clarification of fronts, for the decisive and ineluctable division of souls (of 'the sheep from the goats') in anticipation of the final eschatological judgment dividing 'this world' from 'the next.' Thus what had in fact occurred in the process of secularization did not have to be protested as a loss of substance but could appear as an abandonment of encumbrances. The secularization that was thus expected to clarify fronts went over, in a not untypical process of reception—or, more harshly put, of the capture of terminology—from one front to the other. The case of 'secularization' is not the last one in which such a crossover has occurred.

What followed the theology of crisis (and its existential-theological forerunners) lay in the same tendential direction: a theological justification of secularization. From an unexpected direction—that of theology itself—came vindication of Feuerbach’s thesis that it could only be understood as a detour of anthropology. The patterns and schemas of the salvation story were to prove to be ciphers and projections of intraworldly problems, like a foreign language in which is expressed the absolutism of the world, of man, of society, so that all unworldliness would be a metaphor that had to be retranslated into literal speech. The problem in such a case, quite logically, is not secularization but the detour that made it necessary in the first place. For detours, of course, we do have the trusty schema of the consciousness that finds its way to itself, that achieves consciousness of its own identity. What is in order after this detour is no longer the division of sheep from goats, the clarification of fronts, but rather the unveiling of the identity of the one interest for the realization of which a God had to exist at most as an assistant in the process of its accomplishment. But would it not have been better then if He had not existed at all?

The philosophical observer of this scene of theology's self-interpretation recognizes the familiar pattern of all self-preservations: the pattern of the reduction of the endangered substance to an intangible core content, of accepting the supposedly or actually relevant role of rendering theoretical service for this or that practice, in the end of making oneself at home in the role of assistant to the most
up-to-date human interest. The strength of these secularization theo-
rems lies in the fact that they carry with them a supplementary theory,
which not only makes it possible to find good, after the fact, the loss
of respect and the forfeiture of meaning that has set in, but also
provides itself with a revaluation of this process as itself a providential
one. Thus a loss of power, influence, occupied positions, and cultural
ambience can be understood “as a providential process with a purifying
effect on Christianity.” Then the assessment of secularization as a
threat to the existence of religious forms and contents in the world,
as the decline of the respect accorded to theological statements and
to their pragmatic transpositions, is only (in its turn) a ‘worldly’ fear-
fulness, which is no more suitable to the trustingness implied by faith
than is a failure to understand the refusal of dominion that characterizes
the biblical figure of the kenosis, of the savior as servant. Secularization
itself is not refused but rather the service it is supposed to render as
an argument vindicating the ‘meaning,’ the ‘cultural value’ of Chris-
tianity within the world. Not only is the end of history held in reserve
for theology, but the historical process itself (contrary to all the apparent
failures of earlier claims, if not to conquer the world, at least to explain
it) is opened up to a comprehension that follows the schema of a
contemporary paratheory, according to which resistance to therapy
is the chief symptom of its progress toward its goal.

The world that in this way is not only accepted and tolerated but
systematically ‘provided for’ cannot resist such cooptation by providence
any more than it need do anything special in order to take upon itself
a role whose point is precisely not to understand itself. Then the
incomprehension of the historical or philosophical critic vis-à-vis the
category of ‘secularization’ would be exactly what was to be expected
of him. But at the same time this expectation cannot motivate him
to decide not to seek further, by means of his own authentic capacity
for comprehension, for what can be accomplished by means of the
term “secularization.”

The difficulty that begins here is due to the fact that everyone ‘still’
thinks he understands to a certain extent what is meant by the term
“secularization” and ascribes the sense he finds in it to the common
usage we are discussing. The query, what then it is meant to signify
and to assert, must reckon with a certain annoyance on the part of
the person to whom it is addressed. Is it not enough to admit that
quantitative statement about the lessening of an influence, the dis-
appearance of an imprint, the subsidence of an intensity, in order to
grasp the limiting case to which the formulation that describes
worldliness as the signature of the modern age refers?

It is not only a question of where a linguistic element properly
belongs, not only a question of words, but also a question of things.
It must be remembered that the signature of the modern age has
been described not only as the taking over and the expansion of the
world but also as its loss. The contrast provided by this thesis of
Hannah Arendt’s, a thesis that is directed against the dogma of secu­
larization, at least makes clearer what must be gained in the way of
precision in order to make the concept of secularization fit for use in
historiography.

Hannah Arendt speaks of an “unequaled worldlessness” as the
hallmark of the modern age. “Modern man, when he lost the certainty
of a world to come, was thrown back upon himself and not upon this
world.” The reality of the world over against which he saw himself
had at this very point begun to seem doubtful, in that direct contact
through the senses had been exposed by mathematical physics as a
presentation of only the superficial appearances of more substantial
realities. This thesis also presents the modern age as a continuation
of Christianity by other means, but as a continuation in the same
direction, a direction of world alienation [Entweltlichung]. Man has “re­
moved himself from the earth to a much more distant point than any
Christian otherworldliness had ever removed him.” However one may
assess the weight of these statements, they do in any case show that
the ‘worldliness’ of the modern age cannot be described as the recovery
of a consciousness of reality that existed before the Christian epoch
of our history. There is no historical symmetry according to which
this worldliness would be, as it were, a disposition for the return of
the Greeks’ cosmos. The Renaissance was only the first misunder­
standing of this sort, an attempt to forestall the new concept of reality
that was making its entrance by interpreting it as the recurrence of
a structure already experienced and manageable with familiar cate­
gories. The point is that ‘the world’ is not a constant whose reliability
guarantees that in the historical process an original constitutive sub­
stance must come back to light, undisguised, as soon as the super­
imposed elements of theological derivation and specificity are cleared
away. This unhistorical interpretation displaces the authenticity of the
modern age, making it a remainder, a pagan substratum, which is
simply left over after the retreat of religion into autarkic independence from the world. In any case one does not achieve a historical understanding of secularization by conceiving its implied 'world' as the recovery of an 'original' reality that had been lost with the entry of Christianity. "Whatever the word 'secular' is meant to signify in current usage, historically it cannot possibly be equated with worldliness; modern man at any rate did not gain this world when he lost the other world, and he did not gain life, strictly speaking, either; he was thrust back upon it...."

Hannah Arendt's thesis of 'world alienation' is not, as such, the subject of our discussion here; but what it shows is the dubiousness of setting up worldliness and unworldliness as a pair of alternatives that are tipped now one way and now the other in history, so that when transcendent ties and hopes are abandoned, there is only one possible result. As soon as one leaves the sphere of influence of the theological system of categories, the world to which the modern age appears to have turned its full attention can be an 'unworldly' world in regard to its concept of reality or to the nature of its intuition as compared to an immediacy ascribed to the ancients. Only where the category of substance dominates the understanding of history are there repetitions, superimpositions and dissociations—and also, for that matter, disguises and unmaskings.

The question how the term "secularization" is used in texts of contemporary historical theory is directed, above all, at the difference between descriptive and explanatory uses. One particular type of statement does not, in accordance with its own claims, come up for discussion in this context at all because no greater objection can be brought against it than that very little is asserted by it. Even if what is meant is not only the qualitative disappearance of features having a sacred or ecclesiastical derivation but also a type of transformation of this realm of derivation itself, that is, an "alteration in the social form of religion" in the direction of a 'cultural-religious' function, and thus a "tendency towards the inner 'secularization'" of religious institutions themselves, still this means only an obscuring of differentiations, an approach toward and an increasing resemblance to what is expected (or maybe only what is supposed to be expected) by the surrounding society. Someone might say that it would be purely arbitrary, and excessively demanding, to ask, on methodological grounds, for more than this descriptive finding. Nor do I ask for anything more;
rather I encounter claims to something more, and in fact find these claims indicated by a specifically different manner of speaking. There is after all a difference between, on the one hand, saying that in a particular state the "secularization of the countryside" is very advanced, and that this is indicated by the empirical decline of obligations owed by village communities to the church, and, on the other hand, formulating the thesis that the capitalist valuation of success in business is the secularization of ‘certainty of salvation’ in the context of the Reformation doctrine of predestination. For quite unmistakably, in this latter thesis—a model one for the secularization theorem—a certain specific content is explained by another one preceding it, and indeed in such a way that the asserted transformation of the one into the other is neither an intensification nor a clarification but rather an alienation from its original meaning and function.

Clearly the characterization of a relation as the historical dependence of an “alienated” formation on an “original” one is not enough to make it a case for the meaningful application of the term “secularization.” And here the question arises whether that which must still be added to complete the term’s meaning is not unavoidably a theological element. Does the concept of secularization then go beyond what can be accomplished in the comprehension of historical processes and structures by implying not only a dependence but something like an exchange of worlds, a radical discontinuity of belonging, together with, at the same time, identity of that which belongs? Does this concept not introduce into our understanding of history the paradox that we can grasp the modern age’s basic characteristic of ‘worldliness’ only under conditions that, precisely on account of this quality, must be inaccessible to us?

Hermann Lübbe has pointed out that “the use of concepts that are current in the ‘politics of ideas’ is not free of consequences” and that he who does not want to find himself unexpectedly in the front lines must be concerned about clarifying [Aufklärung] and neutralizing what is latent in concepts. Lübbe considers it “possible to delineate a strictly scientific use of the concept of secularization.” In fact, he suggests, this would be “in agreement with the insights and aims of the most recent theology of secularization.” Here one may question whether such a convergence of insight and interests must not encounter its limit at the point where ‘clarification’ [or ‘Enlightenment’: Aufklärung], which according to C. H. Ratschow’s definition is nothing other than
"acute secularization," proceeds to the secularization of the concept of secularization itself.

When the question is posed here of the possibility of a scientific use of the term "secularization," the criterion of scientific status is not identical with the postulate of science as the only status. This clarification is called for in view of the joyful solidarity that has recently broken out among those who believe they can share in the overcoming of the limitations of that scientific status by means of an enharmonic confusion of interdisciplinary with superdisciplinary work. The mere symbiosis of opposition to 'positivism' (or to whatever is taken for it at any given time) does not by itself legitimize all of the heterogeneous presuppositions that have been brought into this relation.

Translator's Notes

a. In German the terms Säkularisierung (literally: secularization) and Verweltlichung (literally: being made, or becoming, worldly) are used interchangeably because the Latin saeculum from which the Latin saecularisatio derives (and thus Säkularisierung and "secularization") refers to an "age," hence "the present age," "this world" (as opposed to the next), and ultimately "the world" as opposed to the transcendent. As English has no substantive term (such as "worldification") corresponding to Verweltlichung, "secularization" has been used to translate both words. The reader will better appreciate a number of the author's arguments if he remembers the equivalence of "secular" with "worldly" and bears in mind the connotations of the latter term each time he sees the word "secularization."

b. The reference to "theology of crisis" is to the theology of Karl Barth and his followers, also known as "dialectical theology." "Crisis" here is used in a sense relating to its Greek root verb, krínein, which means to separate, to divide, to choose, or to judge.

c. The point of this sentence depends on a special characteristic of the German philosophical vocabulary that cannot be reproduced in English. Die Aufklärung, the German term for what we call "the Enlightenment," has more useful connotations than our term because while in English we can only "enlighten" one another, in German one can aufklären (clear up, clarify) the subject itself. Aufklärung, then, designates not only a historical period (and a quasi-missionary activity: "carrying enlightenment" to other, benighted people) but also a type of activity directed at problems and subject matter generally, a type of activity that is epitomized in "the Enlightenment" but is understood to be possible and in order now as much as then. This is what makes possible the paradoxical situation in which Lübbe's attempted "clarification" (Aufklärung) of the concept of secularization would itself (according to Ratschow's definition of Aufklärung) be "acute secularization"—and the suggestion that a 'neutral' and uncommitted approach to the concept of secularization will be a difficult thing to achieve.
If one took the frequency of its application as evidence, there could be no doubt about the historical applicability of the category of secularization. Its productivity seems to be unlimited. To demonstrate the full extent of the phenomenon seems to me to be superfluous. The examples that I am about to present are only intended once again to create awareness of the way in which the concept is applied, so that the explanatory claim, as opposed to the merely quantitative statement and description of conditions, is not lost from view.

In modern epistemology the priority of the question of a guarantee of knowledge, of theoretical certainty, is said to be the secularization of the fundamental Christian problem of certainty of salvation. This connection is supposed to be made clear by the way in which the epistemological problematic emerged "from absolute doubt about reality as such"; that is, by the degree of absoluteness of the skepticism underlying the claim to certainty. It is further asserted of Descartes that the science he founded "will take over the function performed up to that point by church dogma, the function of a universal spiritual safeguard for existence." If that were so, then Descartes in his own case would already have fulfilled Ludwig Feuerbach's dictum: "Our philosophers up to now are nothing but mediated theologians, operating through the abstract concept."

Measured by the frequency of its repetition, the assertion that the modern work ethic is a "secularization of saintliness" and of the attendant forms of asceticism has made no less of an impression. But
the dandy too is supposed to be a secular descendent of the Christian saints, though he is also reminiscent—by Baudelaire’s formula, that he causes astonishment but cannot be astonished himself—of the Stoic ideal of the wise man. Finally, the recklessness of self-disclosure in literary self-presentations of the most various kinds is supposed to be nothing other than the “secularized self-examination” of pietism and puritanism, the candor of religious reflection raised to a quasi-scientific precision, just as earlier the Spanish picaresque novel is supposed to have arisen from the prototype of Augustine’s Confessions, and Defoe’s Robinson Crusoe from the spiritual journal of the puritan, kept for the purpose of gaining certainty of salvation—in which connection the sheer survival of the shipwrecked Robinson as demiurge has made immanent that transcendent certainty of salvation.

I intend no polemic here. I do not wish to dispute the argumentation in individual cases. My only purpose is to induce a kind of anamnesis by reminding the reader, by means of a few examples from the writings of unnamed authors, of the abundance of analogous assertions, which cannot have escaped him in the literature of recent years but which perhaps have already made themselves such a matter of course for him that the relations they posit, however daring they may be, hardly attract his attention any longer.

The postulate of the political equality of all citizens is supposed to have secularized the prior concept of the equality of all men before God, while the basic ideas of our criminal law “function like a secularized theology” and imply a “concept of guilt borrowed from the sacral relation.” In political theory it has been asserted, and frequently repeated, that “all the significant concepts of the modern doctrine of the state . . . [are] secularized theological concepts.” This assertion relates not only and not primarily to the history of concepts but also to the systematic structure in which such concepts function: States of emergency have an analogous position in politics and law to miracles in theology. A “secularization of the tidings of salvation” is said to have been carried out by Machiavelli, specifically in the form of the idea of propaganda, which “seeks to hold the absolute strivings and desires of men in the world fixed, in spite of changing circumstances, on such leading ideas of worldly salvation as, for example, the power and unity of their native country.” It has become almost a fashionable pastime to interpret expectations of political redemption, like those
typified by the *Communist Manifesto*, as secularizations either of the biblical paradise or of apocalyptic messianism.

Once one has come to understand the idea of progress as a transformation of a providentially guided ‘story of salvation’ [*Heilsgeschichte*], then either the infinity of this progress will have to be given out as the secularization of the omnipotence that had reigned over history previously, or an expected final stage of progress, a ‘golden age,’ ‘permanent peace,’ or ‘universal equality after the dismantling of the state’ will have to be a sort of ‘eschatology without God’: “What used to be known as ‘the fullness of time,’ perfection of the present in eternity, the locus of salvation, is now called by Saint-Simon ‘perfection of the social order,’ by Kant ‘the kingdom of pure practical reason,’ by Goethe, Schiller, and Hölderlin ‘humanity and new mythology,’ by Rousseau ‘return to nature,’ by Winckelmann ‘return to the ancients,’ by Wieland and Gessner ‘imaginative power of the poet.’ ” The world of the Middle Ages was finite, but its God was infinite; in the modern age “the world takes on this divine attribute; infinity is secularized.”

Finally, science—of which Hegel in his *Philosophy of Right* already said that in its claim to freedom of teaching it “develops itself like a Church into a totality with a characteristic principle, which can with considerable justice regard itself as taking over the place of the Church itself”—this science that wants not only to understand the world but also to deduce principles of conduct within it, as in Descartes’s program for his *morale définitive*, acquires such an “excessive competence” precisely because it is the “secularization of the originally Christian combination of world design and directions for action.”

So simple is it, apparently, to identify the substance in its metamorphoses, and to line up the metastases relative to their one origin, once one has found the formula. Naturally its easy applicability and the consequent frivolous multiplication of instances do not speak against the procedure itself; they only make the examination of its admissibility, of its rational presuppositions and methodical requirements, all the more urgent. For the procedure’s genuine efficacy, or the appearance of it, diffuse the light of a superficial plausibility even over applications that I can only describe as secularization “run wild.” It seems as though one need only make specific a highly general statement like Nietzsche’s: “How science could become what it now is can only be made intelligible from the development of religion.” One then obtains a series of
derivative theses such as that the concern of modern physics about the laws and the construction of nature can only be understood as "a variant of the idea of creation in secularized form"; or that the academic examination system is the secularized Last Judgment, or at least a secular variant of the Inquisition; or that "the scientist purified of all concrete history," epitomized in the 'professor,' is the product of a "secularized form of ancient purification and mortification rituals." And so it goes on. Every literary supplement shows that it still goes on.

What the examples collected here have in common is that they go beyond the quantitative/descriptive use of the term "secularization" and no longer have anything to do with the old lamenting confirmation that the world grows ever more worldly. The extension of the area of competence of worldly authorities and of types of life planning and regulation of action that are no longer founded on and directed by religion, the displacement of responsibilities in education and instruction, the development of rituals no longer derived from liturgy—all of this is still not secularization in a precise sense whose aim is the understanding of historical processes. The examples I have cited bring together phenomena that are separate in historical time in such a way as to assert that the later are the result of the secularization of the earlier, that the one results from the other. Thus a more or less precise concept of secularization picks itself out. "Secularization is not to be understood as a simple process of the dissolution of traditional religion, but as a transformation of the ruling value system into various institutional 'ideologies,' which still underpin the actual interrelated workings peculiar to the institutions." This is cited not as an authoritative definition but rather as an example of the kind of more precise formulation that lies between the designations "dissolution" and "transformation." For a usage defined in this way, what is called for is not only calculation of quantitative shares, analysis of comparative weights, or comparison of different total situations over time but also evidence of transformation, metamorphosis, conversion to new functions, along with the identity of a substance that endures throughout the process. Without such a substantial identity, no recoverable sense could be attached to the talk of conversion and transformation.

Against my critique of the concept of secularization, Hans-Georg Gadamer has asserted that this concept performs "a legitimate hermeneutic function." He describes this function of the secularization
concept as follows: "It contributes a whole dimension of hidden meaning to the self-comprehension of what has come to be and presently exists, and shows in this way that what presently exists is and means far more than it knows of itself." And he adds a sentence that is significant for his conviction of the epochal range of this category: "This holds also and especially for the modern age." A concept legitimizes its hermeneutic function by what it produces. What is to be produced is described by Gadamer as something that is hidden from the self-comprehension of the present, and thus of the modern age—indeed as a whole dimension of hidden meaning. This is a very strong assertion when one considers that hermeneutics in general has only to do with a surplus of meaning over and above what is granted and understood as self-evident, in accordance with the axiom of Matteo Mattesilano: "Semper mens est potentior quam sint verba" [The mind is always more potent than words]. "A whole dimension of hidden meaning"—after all that can only mean, in this context, that by the concept of secularization the self-comprehension of the modern age as worldliness has to be explained as a superficial, foreground appearance. It is revealed as a consciousness that is not transparent to itself in its substantial relations, a consciousness to which hermeneutics discloses its background. To that which has only been projected, by secularization, on the foreground of worldliness, this hermeneutic accomplishment first restores and makes plain its historical fullness. The genuine substance of that which was secularized is ‘wrapped up in’ [die Implikation des] what thus became worldly, and remains ‘wrapped up in’ it as what is essential to it, as when, in the model instance developed by Heidegger for the hermeneutics of his school, “Dasein’s understanding of Being” is essential to it and yet “in the first instance and for the most part” hidden and withdrawn from it. I am almost inclined to say that that was what I was afraid of.

I do not want yet to go into the question of how one is to conceive this dimension of hidden meaning after it has been rendered present once again. First I must ask how the hiddenness of the surplus in what is given, of the hidden meaning in what is overt, came about. For this will determine how the hermeneutic method can operate. No doubt it will proceed, after all, simply by relating the given to what preceded it by an unequivocal nexus of dependence. In the hermeneutic retrogression through secularization, the understanding must hit upon the conditions of the possibility of what it undertakes in this way to render
intelligible. Everything turns on the question whether the worldly form of what was secularized is not a pseudomorph—in other words: an inauthentic manifestation—of its original reality.

Without doubt, the concept of secularization in its "legitimate hermeneutic function" gains in pregnancy of meaning. It becomes still more difficult to oppose its application or to set limits to it. But the concept does not gain in solid methodical utility. It does not allow the product of secularization to detach itself from the process of secularization and make itself autonomous. The illegitimacy of the result of secularization resides in the fact that the result is not allowed to secularize the process itself from which it resulted. For the hermeneutic function remains legitimate only so long as it lays open to self-consciousness what is hidden from it, convicts it of having been subject to the illusion of autonomous presence, and thus binds it to the newly disclosed dimension.

I myself have made use of the license of hermeneutics to uncover an implication that is hidden from the contemporary understanding in referring, for the sharper definition of the concept of secularization, to its latent metaphorical content. This attempt neither was meant as nor presupposed a history of the concept, and it can be made neither meaningless nor meaningful by a demonstration that the use of the term "secularization" in the history of ideas does not take the term's political/legal or canon-law uses as its point of departure; it is entirely independent of such evidence. It is perfectly possible—in fact it is probably the case—that the concept of secularization was introduced in a purely descriptive sense and was only associatively and occasionally supplemented by a reference to the political expropriation of ecclesiastical goods. Only I believe that I am able to observe that this historical association impelled the development of increased precision in the term's use in a particular direction. And I do not think that this was accidental. The alienation of a historical substance from its origin, which it carries with it only as a hidden dimension of meaning, unavoidably raises the question whether this is a process of self-alienation or externally induced deformation. The difference here is the difference between the proposition that the attribute of infinity crossed over from God to the world because in its highest intensification the idea of creation simply cannot avoid this consequence and the alternative proposition that infinity was usurped for the world in order by this means to let the world take over God's position and function.
In the latter case the cosmological antinomies in Kant's Transcendental Dialectic, for example, would be the dead end to which we have come as the result of a sort of forcible violation of God.

Thus, contrary to all the assumptions of etymologically oriented conceptual historians, there is no need for a continuum of verifiable instances of the metaphorical content of “secularization.” Nevertheless the demonstration that this metaphorization is not verifiable early in the term’s history, that is, that “secularization” was not initially used in a sense modeled on the juristic concept, has had a reassuring effect if only because the application of a metaphor to the inner sacred values of Christianity was felt to be extremely disturbing. A metaphor is after all a rhetorical artifice, nothing serious and certainly nothing that can lead to any sort of knowledge. But I think that an account of the word’s literal history proves too little when the first hearer of the expression who was not entirely ignorant of history could have remembered its juristic meaning, and when a retroactive definition by orientation to the juristic concept would always suggest itself as soon as one felt a need to formulate the concept transitively, that is, to indicate a what and a whereto. For, to clarify it thus one more time, a ‘secularized’ bishop, something that scarcely calls for further inquiry, is very different from a ‘secularized’ saint or a ‘secularized’ eschatology, by which surely a question is meant to be answered and not just a moral qualification assigned, as in the case of the ‘secularized’ prelate. The eschatology that was secularized is still present, though hidden, in the horizon of an expectation of violent salvation in which, according to the secularization thesis, it is supposed to have been dissolved—or better: “suspended and carried forward” [“aufgehoben”]—as something that carries on or is carried on in the new phenomenon.

Thus the category of secularization need not have been derived from a metaphor initially; it is possible for it to have taken on the metaphorical orientation precisely for the purpose of conceptual definition. Only if one sees language as setting the pace for all concept formation will one be able to exclude the possibility of the later consolidation of a designation for an already accomplished concept. The juristic act of secularization as the expropriation of church property was so practiced and so named from the Peace of Westphalia onward. The canon-law use of *saecularisatio* designates the release of a cleric from the community and the obligations of his order into the status of a secular priest; this intraecclesiastical transposition, so defined since
the end of the eighteenth century, plays no role in the history of the formation of the broader 'secularization' terminology but rather remains "a special case, which stands in some relation to the historical and political concept of secularization but... did not further determine or define the character of the category of secularization that was derived from that concept in the philosophy of history." On the contrary, the example of the 'Final Resolution of the Reichstag's Special Commission' [Reichsdeputationshauptschluss] of 1803 established the term "as a concept of the usurpation of ecclesiastical rights, as a concept of the illegitimate emancipation of property from ecclesiastical care and custody." These defining elements make "the attribute of illegitimacy into a characteristic mark of the concept of secularization." One should not overlook here the fact that the French Revolution's seizures of church property, with their subsequent extension of 1803, were bound to appear as a consequence of the century of Enlightenment. The earliest explicit contact between philosophy and secularization, as far as I can determine, was constituted by the inclusion of the external procedure of expropriation in the a priori rational process of history. In his text of 1799 On my Scholarly Education [Über meine gelehrte Bildung], Berlin's Enlightenment critic Friedrich Nicolai ridiculed the wave of a priori historical speculation that had been set in motion above all by Kant's Quarrel of the Faculties and in the process referred among other things to a polemic set in motion in 1799 by a pamphlet entitled Reason Requires Secularizations [Die Vernunft fordert die Säkularisierungen]. In this pamphlet the measures were approved "on a priori grounds," whereas a counterpamphlet entitled Reason does not Require Secularizations [Die Vernunft fordert die Säkularisierungen nicht] disapproved this seizure of church property "on equally universal a priori grounds." Here, then, even before the Act of 1803, a connection is established between reason and secularization that unmistakably renders the transfer of property only an external episode and demonstration of the rule of rational progress, and that could encourage an expanded assault on the opposing forces on the other side. What was possible with external, legally transferable property would no doubt also be possible with less massive and still less protected spiritual residues. Not only did an extension of the realm of application of the basic notion suggest itself; it was practically enforced by a concept of history that placed every event in the context of the carrying out of a rational logic. The metaphorization of the Act of 1803 would then be only a linguistic postscript
to the fact that the juristic/political event itself was a merely symptomatic expression of a long-term—‘secular’—tendency. Marx employs the term in this way as late as 1843 in the introduction he wrote for his Critique of Hegel’s ‘Philosophy of Right’: “But just as emancipation is not limited to the princes, so the secularization of property will not be limited to the confiscation of church property, which was practiced especially by hypocritical Prussia.” The concept of secularization defines a transferable, analogizable process with regard to ‘property’ of whatever type, in whatever mode of seizure. I have been charged with deriving the criteria for the categorial usage of the term “secularization” from what is taken to be my prior assertion that that usage originated in a metaphor—and since that assertion was mistaken, so also were the criteria. But I have ascribed no original and foundational significance whatever to the metaphorical usage, but only a methodical-heuristic significance with respect to an explanatory achievement of the concept, to which after all a claim is put forward when a statement is made of the type that describes a particular phenomenon as the successor of another, determined by the other’s having gone before and intelligible only in relation to it. What must one answer for when one makes an assertion of that kind? How is the burden of proof to be determined?

The question whether secularization as a “category of interpretation” arose from a metaphor based on the historical legal concept of the expropriation of church property has been extremely thoroughly investigated by Hermann Zabel. The result, in terms of conceptual history, is impressive but negative. Zabel leaves no doubt that he pursued his concept-historical problem from the beginning with the intention of testing the justification of the conception of secularization that relates it to the legal concept and that he would be ready to admit an involvement of the legal procedure with the concept of secularization only if a genetic relation could be shown to exist between the designations for that act of expropriation and those for other historical secularizations. But is conceptual history the sole and sufficient legitimation of the status of a concept? Must one not also keep in mind that there exists a high degree of indifference between a concept and its history? By showing the testimony of conceptual history to be overwhelmingly contrary to a historical nexus between the legal concept and the “category of interpretation,” Zabel thinks he can also keep what the secularization concept requires in order to define real cir-
circumstances separate from the elements of the legal concept. I would not exclude this possibility altogether if it were the case that the conceptual history to which Zabel gives us access could yield other criteria of conceptual definition. But that is not the case precisely because the evidence brought forward makes a basic state of affairs exceedingly clear: The term “secularization” is used for a very long time with an ambiguity that admits of no obligation, and in an occasional manner directed at anything but precision. Zabel sees his conceptual history as a homogeneous whole, in the course of which it is only at the very end that anyone occasionally hears in the terminology the metaphorical background of ‘expropriation of church property,’ whereas most of the authors who are serious and are to be taken seriously want nothing to do with it, but rather employ a loose usage of a descriptive nature.

What is one to conclude from this evidence? At least not that the early phases of a concept’s history deserve precedence in a discussion of what can be accomplished by the ‘dressed-up’ function of the concept as a “category of interpretation,” once the special relation to the legal concept has been picked out of the background so that the determinateness and the production of determinateness that are constitutive of a concept are finally able to come into play. Zabel’s result seems to me interesting precisely because it makes it understandable why for such a long time, and in authors as important as the ones he cites, nothing substantial was accomplished when the term “secularization” was employed. Since concepts are something that we ourselves constitute, their history can be understood teleologically, so that conceptual history is not bound by the schema of degeneration, in which full weight and value are present only in the originality of the initial instant.

Thus investigation of the conceptual history of ‘secularization’ appears to have brought to light a contradictory result: On the one hand, it has dissected out a process that tends toward ‘terminologization,’ a process directed at removing any ambiguity of conceptual content, and thus toward methodical definiteness, while on the other hand, it describes the later phases of this process as phases characterized by a metaphorical usage. However, it is not the usage that is metaphorical but rather the orientation of the process of concept formation. A tightening up from a vague exhortative and lamenting usage to the definition of a typical process form makes the ‘recollection’ of the historical legal proceedings appear almost inevitable. This is an instance
of what I have tried to describe as "background metaphorics,"\textsuperscript{11} a process of reference to a model that is operative in the genesis of a concept but is no longer present in the concept itself, or may even have to be sacrificed to the need for definition, which according to firm tradition does not permit inclusion of metaphorical elements. One could also speak of implicative metaphorics. Undoubtedly the process of 'terminologization' is driven forward by inclusion of the expression in the relevant lexicons and handbooks, which on account of their need for definiteness beget standardization by declaring it. To cite right away perhaps the most influential example of this process: "Secularization, that is to say, the detachment of spiritual or ecclesiastical ideas and thoughts, and equally the detachment of spiritual (consecrated) things and people, from their connection to God."\textsuperscript{12} This formula already represents a late stage of the process of concept formation because it integrates both the historical and the canon-law processes of secularization as subsidiary special cases of a comprehensive movement including, above all, ideas and thoughts. The connection to the juristic process that stands in the metaphorical background seems to be softened, rendered harmless, or neutralized by the term "detachment"; though when in the end the correlate of this "detachment" turns out to be a "connection to God," then this expression's weight of meaning makes it evident that a sanction must be thought of as having been violated and that a character of forcible injustice must be included in the concept.

Such quasi-definitional formulas, as substitutes for the indefinite term "secularization," can bring with them their own indefiniteness to the extent that they give rise to specific additional questions. The fruitful concept of "detachment" ingeniously leaves open the question whether it is meant transitively or intransitively, that is, whether those ideas and thoughts, things and persons detach themselves from their connection to God or whether there is some agency present that carries out this detachment. I believe one must unfold the totality of these additional questions, omitted or impeded though they may be in a particular formula, as necessary parts of the process of concept formation. When we do so, an orientation toward the background metaphorics of the legal process gives us as our guide in the application of the secularization category the catalog of the characteristic features of expropriation proceedings: the identifiability of the expropriated
property, the legitimacy of its initial ownership, and the unilateral nature of its removal.

In regard to the satisfaction of these criteria, one should not allow oneself to be disturbed by theological talk that perhaps justifies the unilateral removal with the loftier idea of a selfless surrender of the divine to the world but by that means implants in the unaltered historical process a mystery that the theoretical onlooker cannot penetrate. The legitimacy of the primary ownership, in view of the special origin of these ideas and thoughts, is—not accidentally—formulated with less hesitation. "Today people tend to speak of secularization where ideas and knowledge are detached from their original source, from revelation, and become accessible to human reason under its own power. Secularization, then, affects spiritual processes that were originally made possible by faith but then begin to be carried out by man by means of the faculties at his disposal." 13 The paradigm in the background shows through even in the cautious formulation that speaks of "detachment" from the original source; and the human reason that acts under its own power seems in doing so to exercise only a sort of 'application.' The arbitrary interchangeability of 'detachment' and 'self-detachment' is the riddle of such a formulation when we are told, "At first it was historians who spoke of secularization, meaning the transfer of ecclesiastical and spiritual authority and property rights to worldly powers. Then the word was applied to a process in the history of ideas in which ideas and modes of behavior detach themselves from the religious context of their original establishment and are derived from universal reason." 14 Here the derivability of ideas and modes of behavior from universal reason appears unexpectedly right alongside their religious origin, so that strictly speaking only a convergence could be established, rather than a nexus, in the phenomenon of secularization.

Often one will only be able to tell from the consequences that are deduced from secularization what characteristics are ascribed to the process. What is the result when secularization has been confirmed and consciousness of it has been aroused? A further formulation in this regard: "Uncovering the process of secularization and making it conscious preserves the continuity between present and past. . . . Even in the negative relation of the present to the past, there is a continuity of the historical. . . . The reality in which we really live is veiled by misleading ideas." 15 Worldy reason's consciousness of its own au-
thenticity is a misleading veil over a reality that otherwise could not
overlook its continuous historical descent from that upon which it
denies its dependence. Indeed there is also a suggestion that the im-
putation of discontinuity is not disinterested, insofar as it allows the
present to deny its obligation to the past. The category of secularization
is meant to make it evident that the denial of historical dependence
is motivated by an epochal self-interest; it presents the alleged break
between modern rationality and its past as ideological. It makes
conscious—and that is the inevitable consequence of the theoretical
accomplishment to which it lays claim—an "objective cultural debt."16

If "the modern world can largely be understood as the result of a
secularization of Christianity,"17 then that must be demonstrable in
the historian’s methodical analysis by reference to the criteria of the
expropriation model. To define the burden of proof in this way does
not at all mean that one cannot also speak of ‘secularization’ in a less
precise sense. My only concern is to clarify how the claim can be
established that assertions about the constitution of the modern age
that are defensible, that at least point the way to possible confirmation,
are being made. The mere observation that the modern world in
which we live has in mind very little—and less and less, at that—
apart from itself would not justify bringing this ‘secularization’ into a
relation specifically with Christianity, which in such a case would only
accidentally and arbitrarily happen to occupy the position of ‘un-
worldliness’ in the past that is contrasted with this present. The prop-
osition that the modern world is to be understood as a result of the
secularization of Christianity is certainly not meant to convey so little.
But what must it say, if it is meant to say more?

Translator’s Notes

legis extensiva (Venice: 1557). His maxim, given here, is cited by (for example) Josef Esser, "Die

b. The author is referring to his argument that as a model, the expropriation of church property
contains the essential components of the contemporary concept of secularization: identifiability
of the expropriated property, legitimacy of the initial ownership of that property, unilateral
character of the expropriation. (See the fourth paragraph from the end of this chapter.) Here
the author is addressing criticisms of this argument that have been made since it was presented
in the first edition of this book, Die Legitimität der Neuzeit (Frankfurt am Main: Suhrkamp Verlag,
c. A Begriffsgeschichte. 'Conceptual history' [Begriffsgeschichte] has become a recognized scholarly discipline in Germany, similar to our 'history of ideas' but, as the name suggests, more closely associated with philosophy. It characteristically examines the histories of specific concepts from their first emergence up to the present. In the process of responding to 'concept-historical' criticisms of his account of the concept of secularization, the author makes some important points in the remainder of this chapter about the kinds of conclusions that are derivable from conceptual history and about the historical relations between concepts and metaphor.

d. The reorganization of the German territories—arrived at under the pressure of Napoleon’s annexation of the left bank of the Rhine—in which numerous bishoprics and other ecclesiastical properties were divided up among the secular princes.
Among the propositions that in the second generation can already be described simply as "well-known" is the thesis that modern historical consciousness is derived from the secularization of the Christian idea of the 'salvation story' [Heilsgeschichte] and, more particularly, of providence and eschatological finitude. Karl Löwith's important book, *Meaning in History. The Theological Implications of the Philosophy of History*, has had a protracted dogmatizing effect in Germany since its first appearance in 1949 (and in German, as *Weltgeschichte und Heilsgeschichte*, in 1953). Löwith takes German idealism's conception of its historical position and achievement as an objective thesis about the genesis of the modern concept of history. For Löwith, Hegel's theory of the "suspension and carrying forward" ["Aufhebung"] of the Christian and Reformation phase of history in the underlying structure of the modern spiritual and political world, especially in its constitutive consciousness of subjective freedom, degraded "sacred history to the level of secular history and exalt[ed] the latter to the level of the first." If the historical process were the self-realization of reason [as it was for Hegel], then according to its immanent logic, what presents itself externally as the discontinuity of secularization would have to possess internal continuity. Secularization would then be the process that brought theological pre-history to its logically necessary transformation and its final form. Seen objectively, the homogeneous reason in history is neither a factor nor a result of secularization except in part and from a special point of view.
Part I

Only if one considers Löwith’s philosophical work in the two decades since the publication of his principal work on the philosophy of history does his affinity to this concept of secularization become fully intelligible. The secularization of Christianity that produces modernity becomes for Löwith a comparatively unimportant differentiation as soon as he turns his attention to the unique epochal break that in one stroke decided in favor of both the Middle Ages and the modern age: the turning away from the pagan cosmos of antiquity, with its cyclical structure of security, to the one-time temporal action of the biblical/Christian type. For one concerned with the fateful disjunction of nature and history, the accent shifts from the beginning of the modern age to the end of antiquity; for everything that followed, this gave rise to something like a collective historical liability, whose sum total is progress as fate. ²

What is at issue is not Hegel. His concept of history only provides the argumentative instrument with which to regain the initial position that Löwith had reached in 1935 with his early work on Nietzsche: to set up the renaissance of cyclical cosmology, as proclaimed by Nietzsche in his doctrine of “eternal recurrence,” against the dominance of the linear historical consciousness. The autonomy of this historical consciousness as an ultimate category is exposed as its self-deception as soon as it is recognized, in accordance with the secularization theorem, as existing ‘by the grace of’ Christianity. Potentially, then, the finality of history is once again only penultimate, before the recurrence of unhistory. Seen from the point of view of secularization, the false conflict of the medieval and the modern can be reduced to the single episode of the interruption of the human connection to the cosmos. This impressive, though cautiously expressed, total conception found in Löwith’s later work explains both the vehemence and the delay of his response to the critique of secularization as a hermeneutic instrument. ⁴

But precisely because such a weighty function is assigned to the category of secularization in Karl Löwith’s thought, one that exceeds every other burden entrusted to it, one must be allowed to raise, if not the reproach of a lack of proof, at least the question of the proper burden of proof. In doing this, it is true, Löwith thinks I went too far when I included evidence of the identity of the secularized substance among the requirements of the burden of proof and at the same time
opposed any substantialistic conception of historical identity. I do in fact regard the secularization theorem as a special case of historical substantialism insofar as theoretical success is made to depend on the establishment of constants in history, much as in the approximately contemporaneous "topos research." This anticipation of what knowledge has to accomplish seems to me problematic: Constants bring a theoretical process to an end, where on different premises it might still be possible to inquire further. This point, the shutting down of the theoretical process by substantialistic premises, must be a concern of any critique to which constants are submitted as supposedly final results. No a priori statement whether there are substantial constants in history can be made; all we can say is that the historian's epistemological situation cannot be optimized by the determination of such stable elementary historical quanta.

To speak of secularization under substantialistic premises would only shift the difficulty to the question of when the historically constant quantity was originally 'desecularized,' an indispensable precondition of its being exposed to any subsequent resecularization. This consideration makes it clear that the theological talk of secularization can avoid the problem of constants only because it presupposes as beyond question an absolute and transcendent origin of the contents that are affected by it. If Karl Löwith legitimates secularization, insofar as for him it is still an intra-Christian and postpagan phenomenon—legitimate, that is, only within the overall illegitimacy of the turning away from the cosmos in favor of history—then he must already have 'secularized' the premise of the nonderivable originality of the whole system that has fallen away from the cosmos. Thus at one point or another the characteristic of unilateral removal crops up again even when the modern age is supposed to be legitimized precisely as the product of secularization.

The progress that is exposed as fate would then be the late (and in itself not illegitimate) consequence of an earlier illegitimacy, of the infringement of the right that nature has over man and that in antiquity was left to it and confirmed by a kind of thinking that for Karl Löwith would bear the imprint above all of the Stoa. For a change we can leave aside the question whether the transformation of the Christian story of salvation into the modern idea of progress is a legitimate, logical consequence or a unilateral deformation in order to test the evidence of the genetic nexus itself, which after all is not self-evident if only because other theses about the derivation of the idea of progress
are at least possible. The early modern age not only brought forth models of 'progress' itself but also found them already present, and for the first time explicitly identified them as such—for instance, that of astronomy, with the increased accuracy it gained as a result of the length of temporal distances. What signs are there that even suggest a likelihood that theological eschatology, with its idea of the 'consummation' of history by its discontinuance, could have provided the model for an idea of the forward movement of history according to which it was supposed for the first time to gain stability and reliability through its consummation or its approach to its consummation? How one assigns the values here is secondary compared to the question whether a relation of genetic dependence, if not demonstrable by pointing to the record of the original event, still at least can be made probable enough that further search for such 'records' would be justifiable.

There are entirely harmless formulations of the secularization theorem, of a type that can hardly be contradicted. One of these plausible turns of phrase is "unthinkable without." The chief thesis then, roughly put, would be that the modern age is unthinkable without Christianity. That is so fundamentally correct that the second part of this book is aimed at demonstrating this fact—with the difference, however, that this thesis gains a definable meaning only through a critique of the foreground appearance—or better: the apparent background presence—of secularization.

Much in the modern age is 'unthinkable without' the Christianity that went before it. So much one would expect in advance of any deep inquiry. But what does it mean in the particular case of the coordination of concrete characteristics? I rely on what seems to have become, if not universally, at least widely recognized. Regarding the dependence of the idea of progress on Christian eschatology, there are differences that would have had to block any transposition of the one into the other. It is a formal, but for that very reason a manifest, difference that an eschatology speaks of an event breaking into history, an event that transcends and is heterogeneous to it, while the idea of progress extrapolates from a structure present in every moment to a future that is immanent in history. Naturally the idea of progress did not generate the instances of progress that have always occurred in individual human lives, individual generations, and the combination of generations, as results of experience, will, and practice; 'progress'
is the highest-level generalization, the projection onto history as a whole, which evidently was not possible at just any point in time. We have to ask what it was that made it possible. My opinion is that it was novel experiences involving such a great extent of time that the spring into the final generalization of the ‘idea of progress’ suggested itself as a natural step. One such experience is the unity of methodically regulated theory as a coherent entity developing independently of individuals and generations. The fact that hopes for the greater security of man in the world grow up around this expansionism of progress, and that these hopes can become a stimulus to the realization of the idea, is demonstrable. But is such hope identical with Christian eschatology, now gone over into its secularized form? Eschatology may have been, for a shorter or a longer moment of history, an aggregate of hopes; but when the time had come for the emergence of the idea of progress, it was more nearly an aggregate of terror and dread. Where hope was to arise, it had to be set up and safeguarded as a new and original aggregate of this-worldly possibilities over against those possibilities of the next world. From a point of view that understands history as progress, the theological expectation of the final events impinging on it from outside—even if they were still hoped for—appears as a hindrance to the attitudes and activities that can secure for man the realization of his possibilities and the satisfaction of his needs. It is impossible to see how the one ‘expectation’ could ever result from the other, unless perhaps we were to represent the disappointment of the transcendent expectation as an agent of the immanent one. But then the time when the idea of progress first emerged and impressed itself on history would have to be moved forward by considerably more than a millennium.

The idea of progress and the utopian projections of its limiting cases have been seen as surrogates for a missing politics, surrogates that precisely as such enter into the function of expectations of transcendent salvation and thus transpose these into immanence. “Utopianism arose from an incapacity for political action that at first was historically conditioned but was then laid down as philosophy of history.” But precisely because utopianism is grounded in the political deficit of the Enlightenment’s moralistic critique of history—in its forgoing of contemporary applicability—it is questionable whether its relation to the future was laid down for it in advance by eschatology’s imprint on consciousness. And then there is not much to be said for the proposition
that it was "the process of secularization that transposed eschatology into a progressive history." Why should the divine salvation plan be "transformed" and "enlightened" when the relation to history had become that of a moralistic critique, which after all certainly does not want to imitate the function of a Last Judgment, in relation to which all of history becomes pure past, that is, the opposite of a process that can be influenced by critique?

In regard to progress, the advocates of secularization theory should have decided early on whether they were going to make the Last Judgment or Providence the terminus a quo because the inclusion of the Stoics' providence in Christianity was itself already an attempt to provide some insurance for a history that eschatology no longer provided for, or at any rate no longer saw as in need of regulation: The eschatological God of the end of history cannot at the same time be the God who makes Himself known and credible in history as its caretaker. A secularized eschatology may correspond to the tribunal before which a victorious revolution brings its enemies and of which the absolute act would no longer have anything to do with ethics: "When one had successfully carried out a revolution, one can hang its opponents, but one cannot condemn them"; but the idea of progress is precisely not a mere watered-down form of judgment or revolution; it is rather the continuous self-justification of the present, by means of the future that it gives itself, before the past, with which it compares itself. The post-Scholastic critique of the authority of Aristotle, to the extent that it did not consist merely of putting Plato in Aristotle's place, had continually to take care to justify itself, which it did by pointing to the progress of knowledge that the abandonment of Aristotle made possible. Self-comparison with the authorities of antiquity and reflection on method, thanks to which this comparison could be evaluated positively each time in favor of the present, were the most powerful beginnings of the idea of progress. In this process Descartes's Cogito, to which idealism retrospectively assigned a central role here, did not in fact function in a way that supports the idea that this punctiform act especially represented the absolute quality of a theological antecedent: "In the course of the unfolding of Descartes's Cogito ergo sum as the self-guarantee of man who has got free of religious bonds, eschatology turns into utopia. To plan history becomes just as important as to get a grip on nature."
But that is accomplished precisely not by the absolutism of the self-guarantee but rather by the idea of method, and indeed not by its organizing itself specifically for history in a different way than for nature but rather by making theoretical domination of nature the condition of the historical “marcher avec assurance dans cette vie” [to walk with confidence in this life]. The idea of method is not a kind of planning, not a transformation of the divine salvation plan, but rather the establishment of a disposition: the disposition of the subject, in his place, to take part in a process that generates knowledge in a transsubjective manner.

Just as partially as in the field of theory, the idea of progress makes its appearance in the field of the literary and aesthetic argument with the tradition. Here it is not primarily the establishment of a continuous sequence of surpassings of what at each point has already been achieved but rather the comparison between the literature and art of antiquity, with its canonized exemplary status, and the output of one’s contemporaries. Here the idea of progress arises from protest against the status of permanent prototypes as obligatory ideals. The querelle des anciens et des modernes [quarrel of the ancients and the moderns] is the aesthetic anologue of the detachment of theory from the authority of Aristotelianism. In the course of this argument, both the champions of the preeminence of antiquity and the advocates of modernity at first made use of a thoroughly “natural-cyclical conception” of the course of history, so that the nexus between a prior Christian stage and the concept of history emerging from the querelle is made problematic by this intervening neopagan stage. Thus H. R. Jauss is right to warn, against Werner Krauss’s thesis regarding the “origin of the historical world view” as well, that the beginnings of historical consciousness are “not to be grasped by means of the category of a secularization of the theological understanding of history or of Bossuet’s Christian philosophy of history.” The disadvantage of the aesthetic model of progress, as is already made clear by the fact of the querelle, is the contestability and the controversial status of possible or actual instances of progress in this area; its advantage is the uncontested premise that here it is man, and man alone, who produces the realities in the aesthetic sphere, and hence would also be the agent of any progress that might take place in it. Even the aesthetics of genius could only express this state of affairs emphatically. The transfer of the structural schema of aesthetic, theoretical, technical, and moral progress
to the collective idea of a unified history presupposes that man sees himself as the only one in charge in this totality, that he takes himself to be the one who "makes history." Then he can hold it possible to deduce the movement of history from the self-understanding of the rational, demiurgic, or even creative subject. The future becomes the consequence of actions in the present, and these become the realization of the current understanding of reality. Only thus does progress become the sum of the determinations of the future by the present and its past.

Man-made history has an appearance of predictability. Kant speaks of an "a priori possible description of the events that should come to pass" in it, just as he speaks of the "soothsaying historical narration of what is impending in the future," because here the theoretical subject is at the same time the practical origin of the objects of the theory: "But how is an a priori history possible? Answer: When the soothsayer himself causes and contrives the events that he proclaims in advance." The idea of a providence from whose disposition history proceeds would not perhaps have had to be destroyed specifically in order to make possible this foundation of the rationality of the historical totality as long as this 'providence' was the pure world reason of the Stoics and had not taken on the character of the impenetrable acts of sovereignty of theology's God. For the proposition that man makes his history, taken in itself, arouses no greater confidence in the course of history than does the assumption of a world reason that superintends it; but once 'providence' is drawn into the absolutism of an unfathomable will, then the actions of men—even if for each individual they are always those of all the others—are more reliable. The proposition that man makes history still contains no guarantee of the progress that he could bring about in making it; it is initially only a principle of self-assertion against the uncertainty imposed on knowledge by the overwhelming heterogeneous theological principle, the irrelevance of which to man's insight into his own works—and that means into his own history as well—is postulated. The principle, beyond that, that knowledge of history is the precondition of the rational and thus progressive making of history, so that the idea of progress is a regulative idea for the integration of actions, could no doubt only have been derived from the model of the integration of theoretical actions in the new science. No, it is not to be believed that "secularized as the belief in progress, Messianism still displayed unbroken and immense vigor."
It was certainly a result of the quick disappointment of early expectations of definitive total results that the idea of progress underwent expansion into that of 'infinite progress.' Descartes still seriously thought of the attainment during his lifetime of the final theoretical and practical goals of his program of method, that is, the completion of physics, medicine and (following directly from these) ethics. Thus the introduction of infinity here was hardly the winning of a divine attribute for human history; rather it was initially a form of resignation. The danger of this hyperbolizing of the idea of progress is the necessary disappointment of each individual in the context of history, doing work in his particular situation for a future whose enjoyment he cannot inherit. Nevertheless the idea of infinite progress also has a safeguarding function for the actual individual and for each actual generation in history. If there were an immanent final goal of history, then those who believe they know it and claim to promote its attainment would be legitimimized in using all the others who do not know it and cannot promote it as mere means. Infinite progress does make each present relative to its future, but at the same time it renders every absolute claim untenable. This idea of progress corresponds more than anything else to the only regulative principle that can make history humanly bearable, which is that all dealings must be so constituted that through them people do not become mere means. If eschatology or messianism were really the substantial point of departure of the modern historical consciousness, then that consciousness would be permanently and inescapably defined by teleological conceptions, by ideas of ends. This proposition cannot be converted into the assertion that where absolute teleological conceptions do appear, as in Descartes’s definitive ethics [morale définitive] or Francis Bacon’s recovery of paradise, this is already enough to demonstrate the presence of secularizations.

Translator’s Notes


b. *Toposforschung*, “topos research” is the systematic investigation of recurrent rhetorical *topoi*—‘topics’ or subjects—seen as underlying thought and writing in a given tradition. The classic work in this field is E. R. Curtius’s *Europäische Literatur und Lateinisches Mittelalter* (Berlin: A.

Instead of Secularization of Eschatology, Secularization by Eschatology

Unlike the idea of providence that was taken over from Hellenistic philosophy into the patristic literature, the biblical eschatology is an element native to theology; in Greek philosophy world cycles and world incinerations were immanent processes of nature, the self-consumings of the cosmic process, which have their corresponding self-restorations. So the preference for eschatology over pronoia [Providence] in the secularization theorems corresponds to a quite sound, though unexpressed, understanding of the criterion [for the use of secularization as a historical explanation] that an element must belong originally to Christianity if it is to be possible to speak meaningfully of its later being secularized. A sufficient reason why the idea of providence could not be secularized in a late phase of the history of Christianity is that it had already participated, at the beginning of that history, in the one fundamental secularization [Verweltlichung; becoming worldly] of Christianity that was accomplished by rolling back eschatology and recovering a respite for history. The fact that the world as a whole is well administered has significance, as a source of satisfaction, only if its duration is once more supposed to have a positive value.

So the criterion of original ownership [by Christianity] as a condition of the possibility of secularization cannot be set aside on the grounds that it would require a demonstration of absolute originality, which does not exist in history. If someone is inclined to regard speculative trinities and triads as consequences of Christianity's divine trinity, then
he has the criterion of genuine ownership on his side in a way that someone who wants to trace the drive of the various monisms toward rational unity back to the meaning of monothelism in Christianity does not. Perhaps it would be more accurate to speak of a high degree of specificity of the element suspected of being secularized rather than of original ownership. When Georg Simmel thought that he recognized the outbreak of World War I as the 'absolute situation,' it was not a lack of affinity to theological thinking that prevented this from having the appearance of a secularizing quotation but rather the absence of any specifically Christian homology, even if one allows that the absolute demands of the New Testament's Sermon on the Mount must have appealed to a kind of 'absolute situation.' That an idea belongs specifically within the theological horizon would be attested most clearly by a relation of ownership based on authorship, in regard to which an expropriation could then be very clearly demonstrated. However, this methodical ideal cannot deny its derivation from a standpoint within the modern system of reference. The idea of ownership of what one has originally produced, thought, and created is a modern idea. Even the justification of divine right by the Creation is not so self-evident as it seems to those who derive 'natural-law' conclusions from it. And one must also consider the fact that theology itself cannot in the strict sense claim authorship of its contents, to the extent that it traces these back to an act of 'bestowal' by revelation. On the other hand, the whole complex of secularization would never have contracted the odium of the violation of another's rights were it not for the (either open or secret) adoption of the premise that here something had entered the stream of history, from a unique, single, and unsurpassable source, that would otherwise have been withheld from that stream. The whole process of the historical criticism of the biblical contents has not been able to pry loose this presupposition of the secularization thesis.

Historical theology has represented almost every aspect of Christianity as the product of its Hellenistic environment. It is clear that the secularization thesis could only achieve its present-day significance in connection with the denial of this historical subordination, in connection, that is, with 'dialectical' theology and also with the separation of the 'kerygma' from the mythological conditions of its entry into the world. There is an implicit acknowledgment of the criterion of authentic ownership in all this. But at the end of the long campaign
of historicism, scarcely anything remains that satisfies this criterion. We especially have to bear in mind that the Hellenistic materials that were Christianized in the early centuries have once again become available, a millennium and a half later, to accomplish directly now, without the passage through Christianity, what then ‘appears’ as secularization. The rejection of Aristotelianism together with its Scholastic derivative forms allowed not only Platonism to become influential but also especially certain chief articles of the Stoic philosophy that had already made an impression on the Christian authors of the first centuries but that now took on an autonomous function. The extent of what Descartes, for instance, took from the Stoic tradition may well even now not have been fully identified: the precedence that it gave to ethics and its instrumentalization of physics for that end, its logic of hypothetical inferences, its anthropological model of the wise man as the invulnerable and inaccessible autarkic subject, the inaccessibility of consciousness to physical contingency and empirical uncertainty. Although Wilhelm Dilthey pointed to the importance of the Stoic tradition for the genesis of the early modern age’s “natural system,” this has not prevented an abundance of assertions of supposed secularization. When Auguste Comte speaks programmatically of “organizing providence,” then there is certainly no doubt to what his appeal addresses itself—namely, a diffuse religious trust in the fatherly regulation of the world’s affairs—but no one will be able to deny that the philosopher is employing a concept of which there is no trace in the New Testament whatsoever. Thus the question regarding the burden of proof is not only directed at the Christian tradition’s original ownership of contents that it might in fact merely have transmitted and turned over to worldly use, but it must also take seriously the fact and the function of the rediscovery of antiquity, which did not have to rely on the Middle Ages, and by which the original elements were set up alongside their Christianized correlates. What might appear to be a secularized reconstruction can always be the worldly original itself again, though admittedly now appearing in a function altered by the antithetical relation of modernity to the Middle Ages.

An instructive variant of the question of the burden of proof for the secularization thesis arises in connection with Rudolf Bultmann’s “demythologizing” project. In the midst of the New Testament texts’ historical conditioning and saturation with received ideas, Bultmann wants to rescue an irreducible and original core that resists all historicism
by means of its formal worldlessness. This “kerygma,” by virtue of its definition, cannot be secularized: It cannot ‘go over into’ worldliness; it can only ‘disappear’ in it. This must be borne in mind when Bultmann speaks of the “historicization of eschatology” that was begun by St. Paul and radically carried through by St. John. Theology always returns to its classical heresies: The doctrine of the kerygma is a variation of Docetism, and secularization repeats the (however conceptualized) Incarnation. Consequently it appeals to the theologian as a process with which he could not be more familiar: The deus revelatus [revealed God], historicized, becomes once again the deus absconditus [hidden God], as which He revealed himself. Secularization does not transform; it only conceals that which the world cannot tolerate and to be unable to tolerate which is its essential character. The advantage that Bultmann the New Testament scholar holds over Bultmann the philosopher of history is the way the onset of the process of secularization is moved forward to the beginning of Christian history; for secularization is already a foregone conclusion with that early “historicization of eschatology” between St. Paul and St. John. What pretends to be so formal is itself a Gnostic myth: The only things that escape the control of the world’s powers are the untouchable core of the pneuma, on the side of man, and the kerygma’s saving summons, on the side of God. The decision occurs in history, but not through it. But at the same time the early historicization of the essential contents of salvation consumes the substance that as a later secularization could have served to explain the modern age. How could something that on account of the transcendent nature ascribed to it was fated, almost from the moment of its proclamation, to be historicized, that as a cosmic eschatology had already lost its (in any case only reconstructible) authenticity, and that as a formless expectation of world catastrophe was handed over to the speculative calculations of the patristic and Scholastic literature and beyond—how could it be ‘secularized’ yet again? Just this is what Bultmann the philosopher of history seems to assume when he says that the idea of progress preserves the idea of eschatological fulfillment “in a secularized form,” or when he describes Kant’s attitude to history as “a moralistic secularization of the Christian teleology of history and its eschatology,” or finally when he writes that in Hegel “the secularizing of Christian faith is carried out . . . consciously and consistently.”
For Bultmann the cosmic eschatology of the world's destruction and the Last Judgment took over the position of the kerygma and its unmediated summons to 'existence.' Hence it is possible to trace it back to the worldly context of the cyclical cosmic speculations in which Hellenistic thinkers engaged, correlating it with a fundamental myth typified by the Stoics' continuous world renewal. In this connection it is characteristic of Bultmann that he interprets Jewish apocalyptics as merely a special case of this fundamental myth, one in which it is compressed into a single, unrepeated cycle. One may wonder whether it can be correct to describe the division between a cyclical course of the world process and a one-time historical decision as merely a quantitative contraction of that fundamental myth; it seems to me that here Bultmann overlooks the fact that the development of the cyclical cosmology had to be grounded in a positive evaluation of the cosmic pattern that was repeated throughout all time, that is, that it presupposed the specific relation to nature of the late Stoa.

Jewish apocalyptics contains no cosmological interest of this sort whatsoever; rather it compensates for the failure of the historical expectations of a nation by prophesying a fulfillment beyond history. It is a theodicy that vindicates the Old Testament God of the Covenant by devaluing the innerworldly history of the people to whom His favor was supposed to have been assured. No Hellenistic cosmology could take over this function of world devaluation. But in Bultmann's context this objection does not alter the fact that expectation of an apocalypse, as compensation for an interest directed at the world and at history, can itself only be 'worldly.' Still, these imaginings remain too distant and expansive to take on an immediate significance for the life of the individual man, a significance that influences and alters his behavior. This kind of significance results not from the contraction of the world cycles into one but rather from the further contraction of that one cycle into the lifetime of the generation that is told of the final events. This transformation into an 'immediate expectation' [Naherwartung] radicalizes both the exhortative and the normative urgency of the doctrine; it creates the horizon for the kerygma.

Let us pose the question differently for a change. Let us ask not what was originally 'unworldly' about Christianity but what the term "unworldly" could even have meant originally. Definition is necessary here because the Platonic/Neoplatonic concept of transcendence has
superimposed on genuine unworldliness the spacial schematism of an extraworldliness. We are bound by this superimposed schematism even in our understanding of the concept of secularization: What can be secularized (made worldly) is only what claims by virtue of its descent or specificity to be extraworldly. The schematism of transcendence presupposes a dualism of decision between simultaneously existing possibilities, intentions, directions. The unworldliness of the initial biblical situation implies a different schematism: An interest in the world is not just put in question by the presence of an alternative; rather it is robbed of all meaning because no time remains for the world. Only the fact that one cannot rely on a natural end of the world is sufficient to exclude the dominant naturalistic note that is implicit in the cyclical myth of the world process. But the world concept does not already lose its 'cosmic' character because the total process is assumed to occur only once, so that every event is unique. The sharpness of the difference lies in the New Testament's 'immediate expectation,' by which the promised events of the Parousia are moved into the actual life of the individual and of his generation. Expectations that extend into the future beyond the present generation are of a different kind, not only quantitatively but qualitatively; they do not displace people into a 'state of emergency.' 'Immediate expectation' negates every type of durability, not only the world's but also its own, by which it would refute itself. If it survives this self-refutation by means of the unnoticed reestablishment of a more distant expectation, of long-term indeterminacy, then its specific unworldliness is destroyed. In early Christian history another and a heterogeneous unworldliness, of the type of 'transcendence,' stood ready to reoccupy the vacant position.

So it is not the contraction of the cosmic cycles to a single one but the presence of the crisis of that one that creates what even apart from all theological interpretations is clearly 'unworldly' in the New Testament. Nature and history are equally affected by it. Acute 'immediate expectation' tears the individual free even from the historical interests of his people and presses upon him his own salvation as his most immediate and pressing concern. Assuming that this is the 'last moment,' demands can be made on every individual that are inconsistent with realism regarding the world and that would have the reverse of survival value were the world to endure. If one takes this to be essential to the original core of Christian teaching, then it has
nothing to do with the concept of history, or it has only one thing to
do with it: It makes an absolute lack of interest in the conceptualization
and explanation of history a characteristic of the acute situation of its
end. Self-assertion then becomes the epitome of senselessness. In the
subsequent history of Christian theology, people did indeed work with
heterogeneous ideas and conceptual means, but the logic of Christian
thinking drove it once again to deprive self-assertion of meaning
through the absolute intensification of concern for salvation. This will
be shown, in connection with the end of the Middle Ages and the
initial situation of the modern age, in part II.

Precisely then where the genuinely specific character of New Tes-
tament eschatology can be grasped, its untranslatability into any concept
of history, however defined, is evident. There is no concept of history
that can claim identity of ‘substance’ with immediate expectation. Even
if one were to say that it was a new intention toward the future, as
the dimension of human fulfillment, which was introduced by the
“historicization of eschatology,” that would directly contradict the fund-
damental process of the “contraction of the allotted time.” After the
Babylonian exile, the Jewish idea of the apocalypse was able to reduce
the impact of disappointed historical expectations by means of a more
and more richly elaborated speculative picture of the messianic future.
‘Immediate expectation’ destroys this relation to the future. The present
is the last moment of decision for the approaching kingdom of God,
and he who postpones conversion so as to put his affairs in order is
already lost.

The accommodation with the facts of the world that persisted in
existence simply was not accomplished by projecting into the future
what according to the promise should already have happened. On
the contrary, the “historicization of eschatology” in St. Paul, and even
more clearly in St. John, takes the form of a proclamation that the
events that are decisive for salvation have already occurred. It is true
that St. Paul still foresaw a final judgment, but ‘acquittal’ before the
divine tribunal was already granted to those who by baptism and faith
could subsume themselves in the death on the cross and thus lose
their sinful identities. Saint John takes the next logical step of saying
that the judgment itself has already occurred and that the believer
already possesses ‘life,’ the ultimate gift of salvation. Thus the tendency
in dealing with eschatological disappointment was not to explain away
the delay, to reintroduce indefiniteness, but rather to relocate the
events that were decisive for salvation in the past and to emphasize
(what was now only) an ‘inner’ possession of certainty deriving from that past. The future no longer brings something radically new, the triumphantly intervening victory over evil; rather it provides scope for the artificial transformations and speculative evasions that were needed in order to reconcile the inherited testimony of ‘immediate expectation’ with the unexpected continuance of the world and time.  

The eschatological future had not only become indefinite; it had also lost its connection with the blessings of salvation that had already been conveyed to redeemed mankind. Consequently the basic eschatological attitude of the Christian epoch could no longer be one of hope for the final events but was rather one of fear of judgment and the destruction of the world. If the original community of believers had still called for the coming of their Lord, very soon the Church was praying *pro mora finis*, for a postponement of the end. The concept of history that could be constructed from this basic attitude is at most one of an interval of grace, not of an expectation directed toward a future in which it seeks fulfillment. The final events become God’s secret proviso vis-à-vis history, which serves not so much to place human consciousness before its decision for or against its maker as to justify God for not excepting the Christians from the manifestations of His anger against the heathen, and thus making the Christians pay the price of the desired continuance of the *genus humanum*, the human race, in which the elect and the rejected are still treated alike.

Early Christianity found itself in what was, in view of its foundational documents, the difficult position of having to demonstrate the trustworthiness of its God to an unbelieving surrounding world not by the fulfillment of His promises but by the postponement of this fulfillment. “Since He has fixed the eternal judgment after the end of the world, He does not carry out the separation presupposed by that judgment before the end of the world. In the meantime He is the same both in kindness and in anger for all of humanity.” In order to demonstrate its usefulness to the surrounding world, which, while it is a source of affliction, is also itself afflicted, the ancient Church ‘secularizes’ itself into (takes on the worldly role of) a stabilizing factor. At the same time it ‘organizes’ its worldliness internally, most obviously in the Church’s jurisdiction over its individual members, which Tertullian calls “the highest anticipation of the judgment to come.” The prayed-for interim of grace for the world fills itself with surrogates for absolute righteousness, which is not thereby prepared for but rather rendered
superfluous as far as the force of the need for it is concerned. And Tertullian is no exceptional case. Karl Holl added to his essay on "Tertullian as a Writer" the handwritten marginal note, sounding almost disappointed, "No apologist hopes for an early return of the Lord!"

If one wished to characterize the process I have outlined as one of "secularization"—even though historically it does present itself in an unexpected place—then in any case it would be not the secularization of eschatology but rather secularization by eschatology. Its motive power could then be that the new intensity of the aspects of the world whose readmission was unhoped for had to contribute to the renewed interest in the world. Franz Overbeck wrote that to the Church, the end of this world seemed near only so long as it had not yet conquered a piece of it. But this conquest came too late to repress 'immediate expectation,' to compensate for the great disappointment. It must have been the other way around: The energy of the eschatological 'state of emergency,' set free, pressed toward self-institutionalization in the world. But this does not falsify Overbeck's statement of symmetry: "As long as the Church possesses this piece, it will continue to be interested in the continued existence of the world; if the last piece is ever really endangered, then she will join her voice in the old cry again."10

In spite of recurring waves of eschatological-chiliastic excitement, the Middle Ages carried on the tendency of taking the edge off of the biblical testimony of expectation of the end with allegorical interpretations, transposing it into expansive long-term speculations, and re-casting the declarations of an impending salvation into a system of the internalization of what had already been effected and ensured and turned over to the Church as an inexhaustible store of mercy for it to administer. Added to this was the way the doctrinal unit called eschatology was divided up: For the Middle Ages there was both a cosmic and an individual eschatology. This split made it inevitable that man's interest would be absorbed by the question of his own 'last things.' The late doctrine of a special judgment for each deceased person at the moment of his death gave to the Last Judgment at the end of time the role of a finale that could no longer really affect the consciousness of the individual. The dimension of the future and of hope, of which secularization theorems speak as a model to be taken over by the modern age, is no match in its pallor for the wealth of
realistic images of the saving deeds in the past. That does not justify making every aesthetic realism into a secularized descendant of Christianity’s Incarnation; but means of representation were unquestionably developed in relation to that remembrance, not in relation to hope (more nearly in relation to fear).

In the Christian tradition, paradise was never attractive; it was accepted as part of the bargain because it meant the avoidance of its opposite. This does not yet make the negation of the negation, or the negative dialectic, into a product of secularization. But it suggests the invaluable historical advantage of being able to say that the Messiah has not yet come. What has already been can only be disappointing. The chiliastic enthusiasts of both sacred and worldly peripeties have always understood that. The Messiah who has already appeared can only be treated dogmatically; one must be able to specify exactly who he was, how he identified himself, what he left behind him. The harmonization of what had already come about with what was still to come was the early Christian way of combining the advantages of unfulfilled messianism with the certainty of faith in an absolution that has already been promulgated.

Even if one could identify a genuinely biblical substance throughout the functional transformation of eschatology up to the threshold of the modern age, one would still have to inquire about the criterion of the unilateralness of the removal in order to secure the necessary precision for the asserted process of secularization. It must be admitted that the substantival formula “the historicization of eschatology” artificially avoids specification of who it is that historicizes eschatology, if it does not historicize itself. But it is precisely the quintessence of the state of affairs we have described that no foreign or external factor is at work here employing the authentic substance of eschatological ideas for its own purposes; on the contrary, eschatology historicizes itself—not, however, by transforming itself and continuing in a false ‘incarnation’ [Scheinleib] but rather by enforcing the reoccupation of its position by heterogeneous material. Here one gets into linguistic ambiguities. Certainly it can be said that the embarrassing situation of eschatological disappointment allowed the claims ‘of this world’ to come into play. There are forms of expropriation in which the surrender of substance, in anticipation of its removal, takes on the appearance of a free decision. Hermann Zabel has urged against my catalog of the criteria of secularization that the element of unilateral removal
was absent even in certain actual historical legal proceedings where the Church spontaneously secularized some of its property. Even if one is not prepared to grant in advance the omnipotence of material interests, one will still have to investigate in each particular case whether the situation of the surrender was not characterized by either acute or chronic coercion, which is still the case if it was a matter of prudent anticipation. In relation to the process of the early Christian "historization of eschatology," one might choose the formulation that the pressing or coercive situation of unilateral removal by a 'worldly' power arose solely through the persistence—inamissible according to the gospel announcement—of this very world in existence. But the historian must go one step further: What the term "world" signifies itself originated in that process of 'reoccupying' the position of acute expectation of the end. Only now does it become necessary to digest the fact that it was the created world that in the eschatological announcement was reduced to the status of an episode and doomed to destruction. Only the great Marcion could resolve this dilemma—dualistically, and thus mythically. The dualism between the sphere of salvation and the created world was so unavoidable that it had to appear even in the orthodox systems, though mitigated by the allegorization of the counterpower as a political entity, as in Augustine's twofold civitas [city of man, city of God]. Only after two legal subjects have come into being can the history of transfers of property in the strict sense begin, in which there will be both genuine and false gifts (and thus 'sacralizations') just as there are genuine and false secularizations. That one of the two institutions present in the world is henceforth explicitly designated as "worldly" is only the expression corresponding to the other's conception of itself as "not of this world." But the reverse of this relation does not hold.

Thus the possibility of talk of secularization is conditioned by the process that established 'worldliness' in the first place. There was no 'worldliness' before there was the opposite of 'unworldliness.' It was the world released to itself from the grip of its negation, abandoned to its self-assertion and to the means necessary to that self-assertion, not responsible for man's true salvation but still competing with that salvation with its own offer of stability and reliability. This true 'creation of the world' [Weltwerdung] is not a secularization ('becoming worldly') in the sense of the transformation of something preexisting but rather, as it were, the primary crystallization of a hitherto unknown reality.
Secularization as an encroachment already presupposes the historically perfected demarcation of the agencies responsible for salvation, on the one hand, and for welfare, on the other, and presupposes the possibility of transposing the accents assigned to each of them as well.

The worldly power that is pictured as operative in the process of secularization is for its part, and as such, just as much a product of the original inadmissible persistence in existence of the world, which could not remain what it had been before, as was its self-described "unworldly" counterpart. This fact removes the suggestion of an almost Gnostic dualism from the rivalry of powers that is presupposed in the concept of secularization. The identification of autonomous reason with the worldliness that originated in this way is a hasty interpretation, and no doubt one that is attributable to a desire to subject reason to the demonizing effect of the antithesis.

But if it is not 'demonic,' it certainly is overextended. Modern reason, in the form of philosophy, accepted the challenge of the questions, both the great and the all too great, that were bequeathed to it. It is not the autochthonous and spontaneous will to knowledge that drives reason to overexertion. The pretension of an absolute new beginning suffers from an appearance of illegitimacy on account of the continuity that derives from its inability to shake off inherited questions. The modern age accepted problems as set for it that the Middle Ages had posed and supposedly answered but that had only been posed precisely because people thought they already possessed the 'answers.' For this phase, where the canon is being expanded to include new problems, Nietzsche's thesis that one hears "only the questions to which one is in a position to find an answer" is correct; but it does not hold, for the subsequent epoch, which cannot simply discharge the unanswered balance of its inherited questions with the admission that it is not a match for them. The continuity of history across the epochal threshold lies not in the permanence of ideal substances but rather in the inheritance of problems, which obliges the heir, in his turn, to know again what was known once before. Every attempt at resignation with respect to the unknowable then meets with the reproach of being 'positivist,' or whatever other catchword for that reproach may be convenient at the moment.

Thus, as we know, the modern age found it impossible to decline to answer questions about the totality of history. To that extent the philosophy of history is an attempt to answer a medieval question
with the means available to a postmedieval age. In this process, the idea of progress is driven to a level of generality that overextends its original, regionally circumscribed and objectively limited range as an assertion. As one of the possible answers to the question of the totality of history, it is drawn into the function for consciousness that had been performed by the framework of the salvation story, with Creation at one end and Judgment at the other. The fact that this explanatory accomplishment exceeded the powers of its characteristic rationality was not without historical consequences.

Thus the formation of the idea of progress and its taking the place of the historical totality that was bounded by Creation and Judgment are two distinct events. The idea of 'reoccupation' says nothing about the derivation of the newly installed element, only about the dedication it receives at its installation. If one wishes to speak here of an alienation or expropriation, a reinterpretation or overinterpretation, then its object was not the theological substance of eschatology in its late, medieval forms; rather what was laid hold of was the independently generated idea of progress, the authentic rationality of which was overextended in the process. As an assertion about the totality of history, including the future, the idea of progress is removed from its empirical foundation in the extension of the reality accessible to and manageable by theory and in the efficiency of the theoretical methodology employed for that purpose, and it is forced to perform a function that was originally defined by a system that is alien to it. The transformation of progress into a faith encompassing the future requires not only that it should be a principle immanent in history—that is, that it can emerge from the reason that is operative in individual human actions—it also requires that this principle should in fact be active and continue to be so. Even Auguste Comte’s law of the three phases of history responds to the pressure to explain history as a whole by projecting a totality that from the perspective of the third, "positive" phase (in which after all this schema is proclaimed for the first time), and in the context of its critical restrictions, is no longer at all possible. This sort of philosophy of history perpetrates the contradiction of excluding itself from the rational criticism that it assigns to itself as the characteristic of its historical standpoint. Hegel’s philosophy of history too is a later, retrospective attempt to rejoin the Enlightenment’s model of history to the Christian conception of history and to relate them in such a way that the identity of the reason realizing itself in history can still be
seen to be confirmed by a subterranean constancy of the realized ideas. To the extent that the philosophy of history continues to be fixated on the definition of an overall structure of its object, it is burdened by no longer realistically fulfillable obligations toward the persisting 'great questions.'

One element did not play an important role in the early formation of the idea of progress: that of the intensity of the process, of acceleration. As soon as the new undertakings visibly began to exceed the dimensions of what could be accomplished in one generation and its immediate future, the question of speeding up the theoretical, the technical, and so far as possible even the moral processes had to become a matter of interest to those participating in and affected by them. This acceleration not only gave rise to and reinforced expectations; it also produced uneasiness, mistrust, negative utopias, fear of the future, visions of downfall, and so forth. But that does not lead to the limiting case of an accelerated running out of history that could efface the difference between the idea of progress and eschatology in such a way that the attitude to the future once again corresponds to the "belief in an imminent radical change in world history," that is, represents a secularized millenarianism. There are no grounds for saying that this acceleration is "in the first instance an apocalyptic category, which represents the shortened interval before the advent of the Last Judgment," and that this category was "transformed" after the middle of the eighteenth century into a "concept of historical hope." When Luther, according to Reinhart Koselleck's quotation from his "table talk" of 1552, takes exception to Melanchthon allowing the world a further endurance of four hundred years, and for his part insists on the biblical abbreviation of this term in the interests of the elect, then the difference is manifest between abbreviation of the world's remaining time and acceleration of the process that for the first time is supposed to make it pleasant to remain in the world. The biblical expectation, which Luther shares, of the shortening of the apocalyptic period, itself no longer has the unambiguous character of joyful expectation of the end that is brought still closer but exhibits instead a desire to decrease fear of the terrors to come. The significant evidence of 'secularization' here is on the side of Melanchthon, who is encouraged to speculate on the extended duration of the world by the fact that its end after all no longer affects the current generations and allows the *modus vivendi* with the world to continue as an advan-
tageous one. Melanchthon's four centuries do not contain the secularized theological element of abbreviation of the final times; rather they serve to exclude the reality of the end from consciousness and to direct attention to the possibility of assigning a higher value to time, and making fuller use of it, by compressing what occurs in it. It is precisely the disproportion between the natural lifetime and the emerging technical requirements of the modern program of progress that provides the rational motive for acceleration once the other course, which had been envisaged at an earlier date, that of adapting the duration of the life of an individual to the dimensions of the new world by means of the art of medicine, had proved to be impracticable.

The history of the factors promoting acceleration, which has yet to be written, should not restrict itself to the appearance of expressions of an increased tempo but should rather explore the earlier phase of the experience of impatience with the slowness of the process, and of both resignation and summoning up of courage with regard to progress's seemingly ever greater consumption of time.

**Translator's Notes**

a. "Dialectical theology" refers to the theology of Karl Barth and his followers. The "demythologizing" of the kerygma is Rudolf Bultmann's project.

b. "Historicism," here and throughout this book, is not what Karl Popper baptized with that name (in *The Poverty of Historicism* and *The Open Society and its Enemies*): the "holistic" claim to have found predictive "laws" of history. Instead, it is simply the endeavor of historical scholarship—especially since the early nineteenth century—to interpret any individual historical phenomenon as having a specific character that in each case is the product of a process of historical development rather than of a 'spontaneous generation' or a transcendent intervention (or of the repetition of eternally 'given' forms, archetypes, or whatever). This is the usual meaning of *Historismus* in Germany, the common core of the "historicisms" analyzed by Ernst Troeltsch, Karl Mannheim, Friedrich Meinecke, and Benedetto Croce. The "long campaign of historicism," in this sense of the term, is inimical to ideas of 'authentic ownership' inasmuch as it always seeks out earlier 'sources' or 'influences' that have produced the phenomenon in question through a process of development.

c. The author is referring here to his theory, adumbrated in the two previous paragraphs and presented at greater length in part I, chapter 6, of the continuity of history as a system of "positions" (in one respect, of "questions") that are "reoccupied" (with new answers) after changes of epoch.
If we define progress for once not as an increased quantity of goods but as a reduced quantity of ‘bads’ in the world, we can see more clearly what really differentiates the modern concept of history from the Christian interpretation and why, in the perspective of the latter, the former had to be illegitimate. The objectionable element is not the postponement by history, and dissolution in history, of a concept of transcendent salvation but rather the disruption of the function of a theodicy that operates with the argument that man is responsible for all that is bad in the world. According to the exemplary conception developed by Augustine, the physical defects of the created world are simply the just penalties for the evil that proceeded from human freedom. The inevitability of this train of thought in Augustine’s actual situation lay in the fact that it made it possible for him to avoid the Gnostic dualism of good and evil world principles.* To be sure, the converted Gnostic had to provide an equivalent for the cosmic principle of evil in the bosom of mankind itself. He found it in inherited sinfulness, as a quantity of corruption that is constant rather than being the result of the summation of individual faulty actions. While this sinfulness is inherited, it is at the same time a disposition to increase the actual evil and thus continually to reduce the chances of the good being realized—a negative concept of ‘progress’ that Kant would be the first to reverse. Augustine’s explanation of the bad in the world as the result of human wickedness, as a species-wide quantity, made it necessary for any subsequent notion of progress that would undertake
to diminish the bad in the world also to establish man’s ability to lessen his culpability by his own efforts. The idea of progress, as was to become evident much later on, requires a reversal of the causal relation between moral and physical evils; it is founded on the assumption that in a better world it would be easier to be a better person. But as had been laid down in Paul’s Epistle to the Romans, death came into the world through sin, and consequently the reverse could not be said—that man sins because he must die.

Hans Jonas has correctly related the possibility of the idea of progress to the position that is the antithesis of the Pauline/Augustinian doctrine of grace, namely, Pelagianism, which he characterizes as the “leveling of divine grace into an instructive power working toward progress in the whole of human history and increasingly bringing men to the consciousness of their freedom and responsibility for themselves.”

But to infer from this that the idea of progress has after all been traced back to a Christian origin would be mistaken. For though it is true that Augustinianism, and above all its late-medieval extreme forms, excludes the possibility of the conception of progress, it should not be assumed that Pelagianism represents the intratheological alternative to this position. It would be more correct to say that the naturalism of mere divine assistance holds to the young Augustine’s doctrine of freedom without his Gnostic trauma but consequently also without the function of theodicy—unless one were to regard it as a variant way of vindicating the Creator that the defects of His Creation are eliminated in the course of time by the zeal and diligence of His creatures. If one looked in the modern philosophy of history for an equivalent to that Pelagian position with its opposition to the Augustine who was reconverted by the Epistle to the Romans, that equivalent would be Lessing’s Education of Humanity.

‘Theodicy’ first became a literary reality under that name in the work of Leibniz. But although Leibniz did influence the development of the modern age’s concept of history by his establishment of the positive uniqueness of the individual, this was not a result of his Theodicy. Nor could it have been. For in this work any tendency toward a philosophy of history is excluded precisely because it asserts the world’s quality of being the best of all possible worlds. This leads to an optimistic statics of insurpassability, which denies man any significance in relation to the production of a ‘better world.’
An essential characteristic of Leibniz's argumentation, by which he is distinguished from Augustine, is the integration of the bad aspects of the world into the design of the Creation. Even the God who is to be vindicated by His work can Himself generate physically bad things to the extent that they are unavoidable in the accomplishment of the optimal overall goal. There is no longer any relation of retribution between these bad things and human actions. Leibniz's theodicy characterizes the bad things in the world no longer in moral terms but rather in instrumental ones. Leo Strauss saw the element of 'secularization' precisely in this, that not only has providence lost its mysteriousness for reason, but at the same time the claim to absoluteness of the divine laws has been overlaid by the justification of evil means by the grandeur of the overall end. The Theodicy paves the way for the modern concept of history to the extent that it demonstrates the rationality of absolute ends by the model of divine action. "In proportion as the providential order came to be regarded as intelligible to man, and therefore evil came to be regarded as evidently necessary or useful, the prohibition against doing evil lost its evidence. Hence various ways of action which were previously condemned as evil could now be regarded as good."²

Is the absolutism of ends the bridge by which the secularization of the concept of providence into the concept of history was accomplished? The Theodicy is anything but a theological work; it could not even be the secularization of such a work, for one unmistakable reason: The vindication of God is, for Leibniz, the means of securing the most radical principle of the autonomy of philosophy that could be conceived of, the principle of sufficient reason. There is only one possible application of this rational principle: Given the assumption that the best of all possible worlds has been realized, one can in principle deduce the answer to any conceivable question. This motive can be seen, for example, when Leibniz, in opposition to Newton, justifies the idealization of space and time with the argument that because of the homogeneous indistinguishability of their parts, they exclude rational explanations of actions that involve location in space and time. Everything is aimed at the goal of realizing the omnicompetence and independence of reason. And it is difficult to avoid the impression that this project was bound to succeed—if it had not been for the earthquake in Lisbon, Voltaire's ridicule, and Kant's demonstration that this in-
vestiture of reason could indeed establish the autonomy of theoretical, but not of practical, reason.

Finally Odo Marquard has attempted to apply Hegel’s understanding of his philosophy of history as ‘theodicy’ to the interpretation of the idealist philosophy of history as a whole. The latter supplies a solution to the problem of theodicy by radicalizing human autonomy in such a way that by means of it, following Augustine’s schema, it can accomplish the “radical demonstration of God’s innocence.” Does acceptance of this thesis mean that the richest and most ambitious version of the philosophy of history that we have before us is really secularized theology after all? Marquard does not employ this concept. But for him also the motive of theodicy provides the answer to the question whether there is “after all perhaps even a theologically plausible and honorable motive” for idealism’s “radicalizing autonomy, that is to say, human freedom over against God—in the extreme case even to such an extent that talk of God must cease.”

The occasion for and the accomplishment of this kind of theodicy can indeed be gathered from the example of Kant’s discovery of the problem of antinomy, and of the means of overcoming it, in the Transcendental Dialectic. The discovery that reason brings about its own greatest self-deceptions in obeying its knowledge drive surpasses even Descartes’s *genius malignus* [malicious spirit] because it no longer uncovers only a hypothetical consequence but rather the reality of the immanent movement of reason. But at the same time the intensification of the demonstration relieves God of responsibility, the God Who in His absolute sovereignty could still have been Descartes’s deceiving spirit, whereas Kant in the transcendental turning of his critique of reason not only sees but also has us overcome the source of deception in the rational subject itself. Though initially all that man takes upon himself here is the ‘blame’ for the theoretical aberrations of his uncritical use of his reason, still this could at the same time have presented itself as a formula for relieving God of responsibility for the tortures of history. One should not forget here that since Augustine’s turning away from Gnosticism, the concept of the ‘bad’ in the world had been displaced and continues up to the present to be displaced continually further and further: The bad aspect of the world appears less and less clearly as a physical defect of nature and more and more (and with less ambiguity, on account of the technical means by which we amplify these things) as the result of human
actions. To that extent, the philosophy of history already reflects a situation in which man suffers less and less from the defects of nature and more and more from the productions of his own species. That would have to produce a new variety of Gnosticism and, no less necessarily, a new conception of revolt against it. Following Marquard, the idealist philosophy of history would perhaps not be a secularized theology in its content and formal structure, but it certainly would be in its function. It would be a theology that expresses itself, out of concern for the vindication of God, as an anthropology, or better, as Marquard puts it, a "theology that prevents itself consistently and throughout." Happily I do not have to discuss here the question whether the philosophy of history is the cunning of theology practiced through theodicy, in which theology makes use of its dissolution into anthropology (as affirmed by Feuerbach) only for what is after all a more thorough and final exoneration of its God. The remaining question, then, is whether dependence on theodicy as a central motive would be the indirect secularization of an originally theological idea. This question cannot be lightly passed over, if only because the connection Odo Marquard asserts is at least as plausible as the thesis of the expropriation of eschatology. Marquard shares the skepticism I advocate in regard to the "usual derivation of modern philosophy of history from the Bible's eschatological conception of the future," but at bottom not because 'secularization' alleges too much substantial identity with theology but rather because for him it exposes too little of the genuinely theological function of this philosophy. For Marquard too, secularization becomes an appearance, which as such can be functionally explained: The philosophy of history would be, as it were, 'indirect theology,' which speaks again and again of man, so as not to tarnish the image of God—like someone who constantly avoids a particular topic of conversation because he knows that any word from him on that subject could give an indication of something that he wishes to avoid suggesting in any way. Theology is not a stage in the transformation of anthropology; rather it is the reverse: Philosophy's talk of history and of man is the perfected final phase of theology, in its humanly most 'refined' form as theodicy. Phenomena of secularization would then be due to a "methodical atheism ad maiorem gloriam Dei [to the greater glory of God]," which would be nothing less than "what may be the only promising form of theodicy."
My objection focuses on the—if not material, still at least functional—identity of theology and theodicy, to the extent that the latter makes an appearance in the form of the philosophy of history. The principle of autonomy, precisely if it is to be understood as a historical principle, can never be sufficiently radical to carry the burden of total responsibility that its function as theodicy would require. The philosophy of history never justifies the world as the created world but only as a world still to be produced. Marquard himself defines the philosophy of history by one characteristic only: It “proclaims a world history with the single goal and end of universal freedom.” But precisely if freedom is the goal and the end, it cannot be the means to provide what is supposed to be provided here: the absolute scapegoat for absolute goodness. After all, the only reason the schema functions for Augustine is that the single original and then inherited sin was committed precisely under conditions of perfect freedom and hence can carry with it total responsibility; mankind as the subject of the philosophy of history, which works itself free through history and out of it, has this freedom only as an idea, and thus at any given time the full blame that has to be allocated cannot yet be assigned to it. If philosophy of history, in the form of theodicy, is supposed to rescue God’s goodness, then it must deny His omnipotence. This insight, which Voltaire arrived at in his critique of Leibniz, is probably atheistic; not, however, in the paradoxical sense proposed by Marquard but rather in a destructive sense. For the defects of divine omnipotence are the possibilities and necessities of human self-empowerment in history. The question of who bears the responsibility pales into insignificance in the face of the question of power. Where power is absent, there cannot be responsibility either.

Voltaire’s quasi-theodicy of finite power is destructive because it does not satisfy the one interest that the modern age can have in a theodicy: an interest in the establishment of reliability. Of course omnipotence is not reliable as such, but only omnipotence is capable of reliability. In the modern form given it by Leibniz, theodicy is already outside any theological function; it does indeed belong to the “protest of the Enlightenment against the God of will and His potentia absoluta [absolute power],” but that is not the same as the assertion that in theodicy it is “no longer the ‘merciful God’ but rather the ‘righteous God’ Who is thematic.” In fact the Enlightenment’s interest in theodicy is certainly not primarily related to the question of righteousness; its
problem is that of a reliability that, going beyond the Cartesian *veracitas* [truthfulness], provides a guarantee of the autonomous lawfulness of the world process, undisturbed by miracles. The proof of the impos­sibility of a proof of God’s existence became possible for Kant at the moment in which the lawfulness of natural phenomena no longer needed to depend on this guarantee because it was supposed to be demonstrable as a transcendental condition of the possibility of nature. Here lies the connection that Marquard seeks between the Transcen­dental Dialectic and the problem of theodicy in the modern age.

Modern theodicy is an ‘indirect’ advocacy of human interests. If this thesis is correct, then a philosophy of history that arises from theodicy cannot be the ‘indirect’ advocacy of theological interests; it cannot be ‘the continuation of theodicy by other means.’ Even if the idealist thesis of autonomy were the vindication of a God Who did not indeed create the best of all possible worlds but Who instead equipped man with the compensatory capacity to improve continually the quality of the existing world, then this vindication would still only give rise to renewed reflection on history, in regard to the question whether its course does in fact show man to be a compensatory creature and does free his author from the suspicion of not being sufficiently reliable in honoring the autonomy of man and his world. But this suspicion leads not so much to methodical as rather to hypothetical atheism, which regards history as the sum total not of man’s effort to exonerate God but rather of the demonstrated—and bearable—possibility of doing without God. Without keeping its name, Marquard has reduced the secularization thesis to its most extreme and most effective form: What remains is no continuity of contents, of substance, of material, but only the naked identity of a subject, whose survival through changes in clothing and in complete anonymity, against all importunities, both gross and subtle, is assured. Theology’s incognito role as the theodicy in the philosophy of history is the perfection of Docetism. Marquard has described it as the cunning of my reason—so it is at least that of reason in some form—that with the functional model of history I provided the secularization thesis with the only possible chance of defending itself, once (and because) the theses of identity and theorems of continuity in history turned out to be untenable—in other words, still, in spite of everything, a philosophy of history once again, although it is precisely in the philosophy of history that the modern age miscarried, and by the philosophy of history that
it was put at risk “as in the pursuit of a supposedly risk-free speculation”:
“The philosophy of history is countermmodernity.” It would show lack of respect for an important train of thought to play Marquard’s state-
ments of 1965 off against those of 1973—who would not know more accurately since then what can be produced through supposed trans-
formations of theology? But I may be allowed to express my discomfort at being made the tool of a cunning of reason in that I supposedly prepared the final and most stable refuge for the secularization theorem while I was still attacking Marquard’s anonymous identity of theology in the theodicy of the philosophy of history. The thesis that it is a functional reoccupation that creates the appearance of a substantial identity lasting through the process of secularization is meant to explain phenomena of tenacious obstinacy, not to mitigate or to legitimate them. It is true that Marquard seems to incline toward the thesis that the modern age could only have succeeded if it had broken with the expectations and eliminated the residual needs that had been bequeathed to it. I can formulate this sharply as follows: Modernity could only have succeeded and defended itself against countermmod-
ernities if it had really begun just as absolutely from scratch as Descartes’s program prescribed. But this program too, as will be shown in part II, is only the answer to a provocation, and the answer was to become absolutist because the provocation was absolutist. But then modernity would be bound to miscarry because the very idea of beginning it was already involved in the functional continuity of prov-
ocation and self-assertion, and therefore in its origin ‘antimodern.’ This sort of paradox is unavoidable when one sees even in the functional model of history the cunning of reason in its determination to become a philosophy of history once again.

I want to get at the root of this difficulty that Marquard causes himself and me. I think I have found it in a much earlier context. Marquard wrote in 1958 that there are two conceptions of the dis-
appearance of the theological definition of reason: the theory of lib-
eration and the theory of the Fall; but perhaps, he wrote, this disjunction of liberation and apostasy is not exhaustive. Perhaps these alternatives can be overcome by “attention to genuinely theological motives for the emancipation of reason.” And then there follows a sentence that as a premise makes it possible to deduce even the reinterpretation, so much later, of the functional model of history as a countermmodern salvage attempt: “Emancipation is neither liberation nor apostasy when
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theology itself provokes it.” Here Marquard is inventing the cunning of reason that a decade and a half later he will find in the functional model. For it is only an artifice to want to see neither the achievement of freedom nor the Fall in an action because it was provoked by theology itself and received not only its logic but also its consecration from that source. Of course if one imputes to the self-assertion of reason a need for an external sanction, then one will only be able to seek that sanction in the agency that made the self-assertion necessary. To explain a phenomenon by referring it to a provocation is not to justify it. Talk of the “legitimacy” of the modern age makes sense only to the extent that that legitimacy is disputed.

Translator's Notes

a. This account of Augustine's doctrine of free will is presented at greater length in part II, chapter 1.

b. Of the Critique of Pure Reason. [Marquard's first book was entitled Skeptische Methode im Blick auf Kant (Freiburg: Karl Alber, 1958).]

c. This phrase is a variation of Hegel's famous “cunning of reason,” according to which 'reason' accomplishes purposes in history that its 'rational' human agents do not intend.

d. For a general statement of this 'model' see part I, chapter 6, paragraph 8ff.
The Secularization Thesis as an Anachronism in the Modern Age

The considerations presented up to this point have been intended to contribute to deciphering a methodology for the application of the category of secularization in historiography. This attempt to extract a more precise meaning from a term hitherto mostly used with an innocent confidence that it must mean something has caused a number of its users to step forward and protest that that was not what they meant by it. My question in return is not so much what in fact they did mean by it as what would have to have been meant by the term "secularization" to make it capable of the productivity it has been thought to have in the comprehension of historical relations. The methodological burden of proof that I have laid out may not be immediately convertible into theoretical performance; such difficulties are found in the methodological history of all historical disciplines, whose source material was not laid down and conserved with an eye to the satisfaction of theoretical interests. Much that methodology would lead us to anticipate discovering will have to remain obscure here. But in regard to the secularization theorem it is possible nevertheless to gain an overview as to whether the high expectations that were suggested by preliminary conjectures and brilliant aperçus can ever be consolidated into well-founded judgments. And it still seems more like a case of terminological metastasis. The prospects for acquiring more secure insights must be tested carefully in cases where what appears to be such a productive expression is used as though it represented a long-recognized state of affairs.
The suggestion of secularization was not ‘cooked up,’ after the modern age had long enjoyed undisputed standing, in order to accuse it of and exact recompense for its “cultural debt.” The availability of the category of secularization for ideological employment is not a result of the cunning—already invested in that category—of any reason or (for that matter) unreason. There is such a thing as the possibility of mobilizing implications after the fact, and the fact that the use of the expression “cultural debt” in this context can be documented is a symptom of this, and no more. The insinuation of the primordial trickery of priests was one of the weaknesses of the Enlightenment because it thoughtlessly ignored the background of needs underlying the phenomena and the institutions at which the Enlightenment’s critical attack was aimed. The superficiality of this sort of reckless exposure of supposed hidden backgrounds should not be repeated by a rationality of humane consideration.

Even if the relevant phenomena do not satisfy the criteria we have developed—the criteria of identifiability, authentic ownership, and unilateral removal—and if consequently their character as ‘secularizations’ must be explained as an appearance, not a reality, still this appearance has a real foundation, a demonstrable role in a historical logic. The only reason why ‘secularization’ could ever have become so plausible as a mode of explanation of historical processes is that supposedly secularized ideas can in fact mostly be traced back to an identity in the historical process. Of course this identity, according to the thesis advocated here, is not one of contents but one of functions. It is in fact possible for totally heterogeneous contents to take on identical functions in specific positions in the system of man’s interpretation of the world and of himself. In our history this system has been decisively determined by Christian theology, and specifically, above all, in the direction of its expansion. Theology created new ‘positions’ in the framework of the statements about the world and man that are possible and are expected, ‘positions’ that cannot simply be ‘set aside’ again or left unoccupied in the interest of theoretical economy. For theology there was no need for questions about the totality of the world and history, about the origin of man and the purpose of his existence, to be unanswerable. This explains the readiness with which it introduced titles into the budget of man’s needs in the area of knowledge, to honor which was bound to be difficult or even impossible for any knowledge that did not appeal, as it did,
to transcendent sources. Its strength could only be the weakness of its heirs. If this has the appearance of a reproach, it might be compared to the reproach that Leibniz advanced against Descartes, that through the radicalness of his doubt and the questionable perspicuity of its elimination he had introduced into the world a demand for certainty, which on account of the rigor of its requirements could not be fulfilled by him or by anyone else, but which could not be revoked and rejected merely on account of the impossibility of satisfying it.

The modern age’s readiness to inherit such a mortgage of prescribed questions and to accept as its own the obligation to pay it off goes a long way toward explaining its intellectual history. There is an element of tragedy in the way in which this effort, as generous as it was hopeless, finally ends with the more or less explicit insinuation that the inheritance came about in a dishonest way. What mainly occurred in the process that is interpreted as secularization, at least (so far) in all but a few recognizable and specific instances, should be described not as the *transposition* of authentically theological contents into secularized alienation from their origin but rather as the *reoccupation* of answer positions that had become vacant and whose corresponding questions could not be eliminated. I have represented this too one-sidedly as being due to a lack of critical intensity and have not referred often enough to the importance, noted elsewhere, of ‘residual needs.’

The excessive longevity of a system of questions that extends across a change of epoch, and its influence over the answers that are possible given the premises of the new epoch, is not a phenomenon that first appears in relation to the beginning of the modern age. Christianity itself in its early days was subjected to a comparable ‘problem pressure’ in its confrontation with questions that were originally foreign to it. The embarrassment that is already evident in Philo of Alexandria and then in the patristic authors in their efforts to set up something on the basis of the biblical story of the creation that would be comparable to the great cosmological speculations of Greek antiquity, and the quantity of allegory that had to be found in order to comply with this externally imposed compulsion, show us the pressure of the ‘carry-over’ of questions to which an answer was held to be possible.

We are going to have to free ourselves from the idea that there is a firm canon of the ‘great questions’ that throughout history and with an unchanging urgency have occupied human curiosity and motivated the pretension to world and self-interpretation. Such a canon would
explain the changing systems of mythology, theology, and philosophy by the congruence of their output of assertions with its content of questions. The problematic of the carry-over of questions is above all a problematic of the epochal thresholds, of the phases of more or less rapid change in the basic rules for the procurement of very general explanations. The reproach that a theoretical system accomplishes too little for man’s self-understanding taken as a whole is less often expressed than it appears in fact to be present in the consciousness of the founders, and above all of the epigonic advocates of such systems, when they believe the time has come to undertake to demonstrate their system’s comprehensive ability to deal with problems. It is not so much the modern age’s pretension to total competence as its obligation to possess such competence that might be described as a product of secularization.

Questions do not always precede their answers. There is a ‘spontaneous generation,’ from the authority of nonrational announcements, of great and acutely active assertions such as those of eschatological immediate expectation, the doctrine of the Creation, or original sin. I have retained the expression “spontaneous generation” [Urzeugung] here, although it has proved to be open to misunderstanding. I have already tried to show, in connection with Augustine’s doctrine of original sin, the only way in which the expression can be meant to be understood: that the content of the doctrine is not determined by the systematic requirements of justifying the Creation that the converted Gnostic had to satisfy, since a different content from that of an inherited guilt could certainly have been found. The generatio aequivoca consists simply in the fact that the combination of the concept of freedom and the doctrine of original sin could be codified at this specific location into the ‘answer’ to a ‘great question’ that was yet to be accurately stated. When the credibility and general acceptance of such answers dwindle away, perhaps because inconsistencies appear in the system, they leave behind them the corresponding questions, to which then new answers become due. Unless, perhaps, it turns out to be possible to destroy the question itself critically and to undertake amputations on the system of world explanation. That this cannot be a purely rational operation is a lesson of history, if it is a lesson of anything. Even the dwindling and (especially morally) discredited mythology of the Greeks ‘prescribed’ to the nascent philosophy what questions it had to assume responsibility for and what systematic scope it had to
possess. Far beyond its initial phase, philosophy, as the embodiment of the early theoretical attitude, continues to bear the imprint of the effort to measure up to this supposed standard of its achievement and to postpone or to gloss over the disappointments that could not fail to appear. Analogies to the later secularization theorem are already found where the beginnings of science are in competition with the older offerings that they have to replace. Pliny passes on a story about Hippocrates according to which he copied down what he read on the votive tablets in the temples, where the means employed in the successful healing of sick people were indicated, and this was how he invented medicine. Jakob Brucker, the early historian of philosophy to whom most philosophers in his century owed their knowledge of the history of philosophy, introduces this anecdote and makes the double comment that Hippocrates would not have been tolerated or honored in Greece if this were true and that the anecdote must have originated from “an invention of enemies of his and of doctors in general.”

Christianity also encountered, in the Hellenistic world into which it was expanding and to which it offered its annunciation as a motive for joining it, questions that it was not originally equipped to answer and for which it lacked the conceptual equipment that it would be called upon to produce in the arguments in which it was beginning to get involved. In this situation what emerged as the basic process of adjustment to the preexisting formal system of world explanation was the conversion of what were originally values for salvation into explanatory values. This process was to prove to be irreversible, however often attempts might be made to revoke it, most radically by the theology of the Reformation in a historical situation in which the developed system of these explanatory values, in the form of Scholasticism, had entered its crisis. If this hypothesis is correct, then the Reformation’s reduction of Christianity to its value for salvation was at the same time an attempt to eliminate the ‘problem pressure’ that was the result of its early ‘secularization’ as a system of world explanation.

In acute situations of immediate expectation, the promised salvation can remain extremely undefined; everything is going to be different, and he who asks how has already lost his chance to participate. The status of the change as beyond interrogation is a result of the intolerability of the existing state of affairs. Acute eschatology is the equivalent of the obsessional neurosis whose universal effect Freud described
with the phrase, "... at last the whole world lies under an embargo of 'impossibility.'" Salvation then can take whatever form it likes. Only the precise demands of the Hellenistic world, stamped as it was by philosophical ideas, made it necessary to overcome the uncertainty in the formulation of the goal of salvation, which can be sensed throughout the New Testament, in favor of definitions. When one considers, for example, how deeply our tradition has been influenced by the idea of immortality, one is startled to find that this idea is not to be found in the biblical texts that originate before the Babylonian exile. But at the same time the corpus of revelation as a whole was very inadequately equipped for providing answers to the questions that were being posed regarding the recently promised "life." Greek philosophy was able, for various reasons, to specify more precisely what conditions had to be satisfied in a condition of "happiness." These conditions presented themselves to the Christian authors of the early centuries as an obligatory systematic program. No doubt any system will have to say something about happiness, but how one can talk about it will depend on very many variables in the way the formal system of positions is filled, until finally the subjectivity of the very concept of happiness becomes a systematic element. In the world of Hellenism, Christianity found its function and the scope of the answers required of it prescribed to it as an empty frame to be filled. Its claim to be heard and to take part in the competition of doctrines promising salvation and explanation of the world could only be made good by the acceptance of this function. In a certain respect it was a strong point of Christianity that it had not committed itself to certain concrete contents of salvation in its acute initial situation, because now it could formulate them for the first time. Even if what this formulation promised was a transcendent expectation, it still had to borrow its content from antiquity's philosophical definition of eudemonia: The salvation content of immortality becomes theoretical contemplation, the \textit{visio beatifica} [beatific vision]—fundamentally a philosopher's bliss.

In the patristic formation of Christianity, for the first time a system of propositions presented itself as the \textit{final} form of philosophy. Christianity produced this characteristic claim by formulating its dogma in the language of ancient metaphysics and claiming to solve the enigmas of that metaphysics concerning the world. The patristic authors habitually use the formula that the founder of their religion answered all the questions of ancient philosophy. Christ had brought not only
a summons and annunciation from and about another world but also
the true and final knowledge of this world including all the problems
de rerum natura [concerning the nature of things]. Thus the modern
phenomenon (interpreted as secularization) of the reoccupation of vacant
answer positions is not bound specifically to the spiritual structure of
this epoch. The Christian reception of antiquity and the modern taking
over of explanatory functions of the Christian system have largely
analogous structures as historical processes. Just as patristic Christianity
appears ‘in the role of’ ancient philosophy, so modern philosophy
‘substitutes’ to a large extent for the function of theology—admittedly
for the function of a theology that on account of that process that
occurred two millennia earlier is at least terminologically adapted to
such substitution. Even when modern philosophy conceives itself as
in the sharpest possible contradiction to its theological prehistory,
which it considers itself to have ‘overcome,’ it is bound to the frame
of reference of what it renounces.

Once men had begun “to know so amazingly much about God,”
as the young Hegel wrote, even an atheism or a renewal of the pagan
cosmos was possible only insofar as it was able to fill again the space
laid claim to by what it negated. If we consider for once not Hegel,
the “theologian for the sake of philosophy,” but Nietzsche’s “struggle
against latent Christianity,” then we find not only that “he was unable
to express the recurrence of the world of Heraclitus in any but anti-
Christian language”—which might be a very superficial phenomenon
of provocativeness that goes no deeper than the language employed—but,
much more precisely, that “the questions that arose for Nietzsche
from the ‘death of God’ were each related to the lapsing of a theological
answer.” The “active forgetfulness” of which Nietzsche speaks, the
forgetfulness of the child, for which he makes Zarathustra long, seems
not to be easy to introduce into history. The divine art of forgetting,
which is invoked in the fragments of the “Dionysus Dithyrambs,” is
not the art of human history, whose irreversibility implies memory.
In history the price we pay for our great critical freedom in regard
to the answers is the nonnegotiability of the questions. This does not
exclude the possibility that these questions derive from a human interest
that lies deeper than the mere persistence of the epochal carry-over;
but it does make clearer how much more difficult it is to demonstrate
the universality of a human interest than simply to point to the fact
that it has been able to survive a few centuries.
In regard to the origin and structure of the problems connected with the secularization thesis and the criteria of its applicability, it is instructive to observe that the notion of an original property in ideas, and the accusations that derive from it, are already employed in the polemics and apologetics that accompany the reception of ancient ideas by Christianity. To assert and defend the legitimacy of its ownership of ideas is the elementary endeavor of what is new, or claims to be new, in history; to dispute this legitimacy, or to prevent or at least shake the self-consciousness that goes with it, is the technique of defending the existing state of affairs. Early Christianity not only laid claim for itself to the legitimate ownership of its truths, by virtue of revelation, but also disputed the legitimacy of the ancient world's possession of the ideas that they had in common or that it had taken over from that world. The trick of representing the ancient philosophers as having secretly learned from the Bible recurs again and again in the patristic literature and denies even the most obvious instances of dependence by reinterpreting these as the restoration of property that had been alienated much earlier.

In relation to the Stoic doctrine, which had been assimilated to the point of seeming self-evident, that the cosmos exists for the sake of man, Ambrosius of Milan poses the rhetorical question, "Unde hoc, nisi de nostris scripturis, dicendum adsumpertum?" [''From what source have they claimed that this must be said, if not from our scriptures?"'] Augustine formulates the Christian claim quite generally, as follows: "But if those who are called philosophers, especially the Platonists, say something that is true and consistent with our faith, not only do we have no need to be afraid of this, but we may take over the property in this truth from those who are its unrightful possessors. . . . What they possess as their silver and gold they have not produced for themselves; they have derived it, as though from a mine, from the shafts of divine providence, which rules everywhere. But then they have perverted it, employing it wrongly in the service of evil spirits. When the Christian severs himself in spirit from the unhappy community of the pagans, he must take these treasures from them and use them righteously for the proclamation of the gospel." The theft of the gold and silver vessels from Pharaoh's Egypt is Augustine's allegorical prototype of behavior with respect to the iniusti possesores [wrongful possessors] of the truth, already supplemented here with the fiction that at bottom the heathen themselves would have had to
intend the transfer of the goods to the legitimate usufructuary. This formula of *debet ab eis auferre christianus* [the Christian should take it from them] is one of those unbelievable licenses that are supposed to justify the possessors of the truth in putting to their own use everything held by those who cannot or will not know anything of this truth. It is the prototype of the morality of the genius, of the superman, and of the functionary who serves the only truly justifying interests.

Tertullian, two centuries earlier, had linked the category of legitimacy to the question of truth even more radically. Regarding the nature of the soul, he says, it is not a question of the truth of a proposition as such but of the evidence of its origin. It would be better to remain ignorant about such a question if God did not choose to reveal anything about it rather than to learn anything about it from men who presumed to be able to grasp it unaided and in that way succeeded in taking possession of the truth. Evidence of legitimate ownership of the truth is demanded because the assertion of a religious revelation at the same time implies that that revelation is the sole competent authority for the realm to which it applies, since a God Who reveals something that men already know in any case, or could know, puts in question the necessity of His revelation and thus its exclusive value for His believers. For this reason alone it cannot be the case that philosophy at any time brought to light authentically and by its own means anything that had ever been ascribed to revelation. Thus there must be secularization—both the anticipatory secularization that is ancient philosophy’s sacrilegious use of the contents of the Bible and the posthumous secularization that is German Idealism and the materialism that grows up under its influence.

It seems to me that in the background of the early Christian demand that ancient philosophy demonstrate the legitimacy of its possession of a share of the truth, there stands a Platonism: What is true is so by virtue of its derivation as a copy of an original truth that is identified with God. The dependence of an image on its original is already for Plato something that cannot be bracketed out and disregarded. Its status as an image must be taken into account as an internally determining element in an appearance as well as in any copy of it. This is the only way in which the derived reality of nature can be traced back at all to a sphere of absolutely intelligible realities. In the same way, in reverse, the Ideas have not only a content of absolute truth but also at the same time an implication of what ought to exist, which
motivates their duplication, materialization, conversion into nature, as can be seen in the myth of the demiurge. The early Christian authors lay claim to the truth that can be found in the ancient philosophers (and that has now been ‘confirmed’) in order not only to integrate it into their system as something that has now become available to everyone—as what we would call “objective” truth—but also to return it to its truth in a stricter sense of the term by reestablishing its genetic reference. Henceforth for the whole epoch of the Middle Ages, there is an authority responsible for guaranteeing the truth as well as the reality of the world, which no longer has its own obvious and immediate evidence, and never regains it.

A similar residue of Platonism is still involved in the implication of blame in ‘secularization’: Just as the image not only represents the original but can also conceal it and allow it to be forgotten, so the secularized idea, if left to itself and not reminded of its origin, rather than causing one to remember its derivation can serve instead to make such remembrance superfluous. The work of the historian or philosopher of history in uncovering secularizations reestablishes anamnesis and leads to a kind of restitution through the recognition of the relation of debt. Admittedly, in Tertullian’s argument regarding the legitimate use of the truth, this Platonic background has already disappeared almost entirely in the legalistic style of apologetics, in the process of forensic *praescriptio* [exception, exclusion], which denies the opponent the formal qualifications required for entry into argument about the subject of the dispute. Thus Tertullian forbids the heretics to cite Scripture in support of their position in a dispute, since only the rightful owner may make use of an object. And legitimate ownership arises through acquisition from the hand that has disposition over the object.

Thus the connection between the concept of truth and the idea of ownership was not established for the first time in the modern age on the basis of ‘bourgeois’ attitudes; rather it arises from the overlapping of formal identity and material discontinuity in the epoch-making changes in our history. It is true that this connection changed fundamentally in the modern age. One of the developments that constituted this epoch produced the axiom that the legitimate ownership of ideas can be derived only from their authentic production. This is important if only because it renders the idea of a legitimate secularization paradoxical, while at the same time it gives the criterion of genuine ownership its specific importance for the first time. Intellectual
acquisition through any kind of 'carrying-over,' in the broadest sense, has become suspect. This also belongs in the context of the self-assertion of reason, which in this way opposes itself to the extreme emphasis on the element of divine grace in theology and its philosophic equivalents (from illuminatio [illumination] to concursus [concursus divinus: divine 'coproduction' or agreement]). Its postulate is that of the self-inherence of truth as guaranteed by its self-generation. Knowledge derived from mere teaching becomes a derivative form of a possession of truth that every rational subject is supposed to be able to appropriate to itself by itself carrying out the work of knowledge. This appropriation is radically different from every type of transfer of ownership. The appeal of the idea of 'method' rests on this assumption, that it makes the equipment that is necessary to the work of knowledge available potentially to everyone.

Leibniz raises against Descartes's voluntaristic account of the truths of reason the simple objection, which, however, is felt to be decisive, that if there were such a dependence on the divine will, then even the properties of a geometrical object would hold only velut privilegium [by privilege]. There is a double meaning in the background of this argument: Neither would the object possess its properties by virtue of internal necessity, nor would the knowing subject possess its truths by insight into such necessity. Truth has ceased to be analogous to theology's rule of grace. The idea of endowed and conveyable property in ideas thus loses its basis. And the accusation of illegitimate appropriation takes on an additional anachronistic quality because the process that is said to have taken place would have had to destroy the conditions under which the alienated property had its value.

Here it becomes evident that the change, in the presuppositions of the idea of spiritual ownership not only has a determining effect on the criteria for the applicability and effectiveness of the historical category of 'secularization' but, even more radically, has a destructive impact on the possibility of constructing such a process of spiritual expropriation and debt. The claim that the use of this schema promotes historical understanding involves a premise that is foreign to the modern age's self-understanding and that is 'secularized' in its own right. Reflection on history falls into this same circle of presuppositions even when it does not join in the evaluation suggested by the concept of secularization, that is, in either the regret over the loss of spiritual property or the gratification with regard to the purer essentiality of
the remainder of transcendence once it has been freed of everything that can devolve upon 'the world.' When historical understanding makes use of this category, it enters into religion's self-interpretation as a privileged access to truth. It takes over the assumption, which is necessarily bound up with the claim to have received a revelation, of a beginning that is not historically explicable, that has no immanent preconditions. This beginning introduces not only a new but also the final historical formation. Any historical self-consciousness that believed itself capable of making, or believed it had already made, another new beginning, a beginning that was supposed to constitute a 'modern age' (Neuzeit: literally, new age) as a scientifically grounded and therefore final epoch, was bound to come into conflict with this Christian claim to novelty and finality. The finality in the Christian self-conception was bound to try to assert itself against this by denying the possible authenticity of any such founding act in history and at the same time accusing it of having had to make illegitimate use of the truth that belongs to Christianity.

Let me prevent any misunderstanding from arising or persisting here: The claim that the modern age made an absolute beginning through philosophy is no more correct than the claim that the latter half of history had an absolute beginning in the events to which the Christian era traces its origin. In historical analysis, the claims of both beginnings to the status of supposedly unconditioned givens have gone up in smoke. However, these claims are not identical in nature. The philosophical program for the beginning of the modern age 'failed' because it was unable to analyze away its own preconditions. This statement is not one that is brought to bear from outside but rather is a conclusion that must be reached in order to maintain consistency with this beginning. The philosophical inception of the modern age is itself a subject for philosophy, and thus has become just as continually surpassable, where the insufficiently radical character of the Cartesian Cogito is concerned, as it is integrable into the declining Middle Ages, where the historical conditioning of its need to 'make certain' is concerned. These difficulties have served to arouse an understanding, which was still lacking in the Enlightenment, of the historical conditioning of the foundation of the institution of Christian theology. On the other hand, one must regard the secularization thesis as an indirectly theological exploitation of the historiographical difficulties that have arisen with regard to the philosophical attempt at a beginning of the
modern age. The secularization thesis makes these disturbances of the attempt to carry out something free of all preconditions appear as a sort of providential resistance on the part of what is indispensable. But the modern age does not have recourse to what went before it, so much as it opposes and takes a stand against the challenge constituted by what went before it. This distinction, which will have to be substantiated in part II, makes worldliness the characteristic feature of the modern age without its having to be the result of secularizations.

Translator's Note

a. A process of 'bringing forth' that is equivocal (i.e., neither univocal nor analogous), in the Aristotelian sense, because it produces a new kind of entity, contrary to Aristotle's principle that "man brings forth man." A traditional term, therefore (interchangeable with "spontaneous generation"), for the original production of life from inorganic material.
Nevertheless the problem remains and reasserts itself: to understand how, in spite of this state of affairs, the idea of secularization could become plausible and even fascinating to historical thought as a possible way of understanding connections in the history of ideas. I have tried to point out the basis of the appearance of secularization in the structure of 'reoccupation.' But this is still not enough to explain the density and seeming impenetrability of the relevant phenomena. The difficulties of historical identity have other aspects besides that of question and answer. The reoccupation of a pregiven system of positions was one pressure of the change of epoch; the other was the pressure to conceal the competition that resulted from the pretension—after the phase of history following the death of Christ, which understood itself as final and unsurpassable—to be 'epoch-making' once again. It was only the launching, now, of a human finality and unsurpassability that gave the "Middle Ages" the intermediate and mediating position that is implied by the name. They were lowered to the rank of a provisional phase of human self-realization, one that was bound to be left behind, and were finally disqualified as a mere interruption between antiquity and modern times, as a "dark age." But the new claim, once made, shrinks from its consequences, and does so especially by means of style. The early centuries of the modern age exhibit a 'spirituality,' or at least an aversion to the world, that is strained, often convulsive, and that sometimes—in appearance—puts everything medieval in the shade. It is above all a world of expressions that persists here. The
sphere of sacral language outlives that of the consecrated objects and is anxiously conserved and used as a cover precisely where philosophically, politically, and scientifically new thinking is being done. But the deficiency of language, the *egestas verborum* [poverty of words] of which Cicero complained in connection with putting Greek philosophy into Latin, must also be considered as a factor necessitating recourse to the traditional stock of means of expression in constructing a secular terminology. The new political theory is perhaps the most significant evidence of this process. Whether the rhetorical possibilities that had resulted from drawing on these linguistic sources were looked for in each case or only found afterward is a question that will seldom be decidable on the evidence available.

I do not regard the longevity of the linguistic elements that bear a sacral imprint as a quasi-mechanistic phenomenon of inertia but rather as an instructive and interpretable state of affairs. The reoccupation of systematic functions during the change of epoch conditions linguistic constancy in a variety of ways. Not only the great questions but also the great words require historical 'preparation.' This process resembles more than anything else the process of ritualization: An ingrained traditional mode of activity has lost its motivating content of ideas and thus also its intelligibility, so that the schema of the activity is available for a retrospective interpretation and integration into a new context of meaning, which in the process makes use of and secures, above all, its sanctioned status as something that is beyond questioning. In the same way the persistent linguistic element stemming from the sacral sphere also marks a position as one that is not to be disturbed and that possesses both familiarity and consecration for consciousness.

But the same phenomenon has also been described as a sort of migration of an attribute that has become homeless on account of the disappearance of its original bearer. This mode of speech initially neutralizes the implication of secularization; it leaves open the question whether the uprooted attribute forces itself onto a new bearer or is drawn to a new need. One will be able to overcome the inadequacy of the metaphors that are used to describe these processes only in the favorable case where such a process can be concretely documented. The way, for instance, in which Giordano Bruno applies the attribute of infinity to the world is based on the logic of his concept of creation, which requires the equivalence of creator and creation and thus facilitates precisely this 'migration' of one of the most essential attributes
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of God over to the world. If anything deserved to be called secularization, it would be the way this divine attribute comes to be embodied in the world; judged by its intention, this would undoubtedly be an act of expropriation, if the difficulties that arose in the heart of Christian theology as to how to distinguish between the intradivine generation of the Second Person of the Trinity and the act of creation had not paved the way for the ‘reoccupation’ of the Trinitarian position of the Son by the universe to the point of making it inevitable. Bruno wanted to alienate the most powerful attribute of the Christian tradition, but what he accomplished was only a consequence of the impossibility of integrating that attribute into the medieval system.

In view of this state of affairs, can we say that in the modern age the world “takes over” this attribute from God? To begin with I would like to cite the context in which C. F. von Weizsäcker employs this expression for the secularization of infinity and the consequences that follow from it: “In modern times, the world takes over this attribute of God: infinity becomes secularized. Under this aspect it is most remarkable that our century has begun to doubt the infinity of the world. I believe that in our time a critical examination of secularization is beginning at exactly the same time as secularization is achieving a consistency hitherto unknown.” This is an exemplary text for the whole syndrome of the theme of secularization. For the role of natural science in the scrutiny of secularization for which the time is supposed to have come can only relate to its once again detaching the secularized attribute of infinity from the world, and thus being in a position to make ready its restitution. Now I think that here the question arises, if it has not already arisen, whether such a restitution would really benefit the original owner. This is not so obvious as the long-standing association of divinity with infinity makes it appear.

Infinity is an element of extremely worldly metaphysics that found its way into patristic and Scholastic thought by way of Plotinus’s speculations. It burdened the medieval concept of God with a quantity of paradoxes that itself can only be described as infinite. The ancient metaphysics of the cosmos was consummated precisely by the success of Plato and above all Aristotle in eliminating the problem of actually infinite space and infinitely numerous worlds. The reappearance of infinity, now in a positive form, was destructive for the medieval Scholastic system above all through its combination with the concept of omnipotence, and had to be so if only because this system was
essentially bound to presuppositions of ancient metaphysics in the form given it by Aristotle. If it were correct that the modern infinity of the universe represented a secularization of this attribute, then it would have set itself free for this transition by its work as an enzyme in the destruction of the medieval system. Not all divine attributes might have become homeless on account of the contradictions that they had produced; in the case of the attribute of infinity, however, there is no question that it had already brought about once before—in Christian dogmatics—the kind of inescapable contradictions that make Kant’s transcendental dialectic conclude with the termination of all dogmatic philosophy. Thus one will have to examine somewhat more closely what the “taking over” of infinity can mean in the context of the constitution of the modern age.

For the concept of infinite space in particular, we have the paradigmatic observations that we can make in the case of Newton and that give rise to doubt about the idea of a ‘transition’ of the attribute from one subject to another. The correspondence between Leibniz and Clarke at the beginning of the eighteenth century, with its dispute about the meaning of Newton’s concept of absolute space, leaves behind it the impression that this concept has a primarily metaphysical foundation. This impression has been strengthened by the fact that the concept of absolute space possesses no characteristic that renders it accessible to objective scientific inquiry and consequently can seem—to the modern observer, who considers superfluous whatever is not quantifiable through observations—like a foreign body, brought in from some extraneous source. Precisely because this concept of space appears as a redundant metaphysical element in the foundation of Newton’s physics, it lends itself readily to connection with the secularization theorem, all the more so as Newton gives absolute space the mysterious designation—which has the appearance of a theological fossil—of a divine organ of sensation. Whether the expression *sensorium dei* [God’s organ of sensation] in Newton is to be understood only as a metaphor or in a strict sense is precisely the object of dispute in the Leibniz-Clarke correspondence. In fact this metaphysical fitting out of the concept of space is a secondary motive for Newton, however it is to be interpreted. For it can readily be seen that absolute space, which Newton needed for the definition of the principle of inertia, is described as “God’s organ of sensation” precisely because physical infinity seemed to Newton to be in dire need of justification through
union with the Deity; as His instrument. Space, if one may put it this way, tolerated the attribute of infinity only with difficulty because as an overwhelmingly empty space it was bound to give rise to metaphysical problems. The infinite is, even and not least in medieval mysticism, more nearly an abyss than the sublimity that it was to become. In the tradition, empty space was not only abhorred by nature; it had also been the distinctive dogma of Epicurus’s atomism, one which corresponded to his theology of powerless gods, if only because the idea of having an effect across this empty space was unthinkable even for an antimetaphysics. So for Newton there was a strong motive, as soon as he believed that he had to introduce absolute space into his metaphysics, for connecting it with the reality and efficacy of his God, by taking it to be the “infinite extent of the divine presence,” as Kant was to put it in his *Universal Natural History and Theory of the Heavens*. Newton had stood between his need in constructing his system to introduce absolute space into the principles of his mechanics and the intolerability of any absolute other than the one absolute and had sought to mediate between them by means of the concept of the *sensorium dei*. And here it must not be forgotten that Newton’s space is no longer the space of atomism because the emptiness of this space, on account of the development of the theory of gravitation, no longer had to be the abyss of inefficacy. The unity of the world could be maintained even of the assumption of a plurality of world systems. So for Leibniz also it was not the question of the compatibility of absolute space and divine power that made the reality of this space intolerable for him; rather it was the inapplicability of the principle of sufficient reason to indistinguishable locations in space. The “critical examination of secularization” would have begun here, in the controversy between Leibniz and Clarke about the reality of space, if the infinity of the world had ever been a product of secularization. But Leibniz idealizes space not in the interest of God’s omnipresence but rather in the interest of reason’s omnicompetence.

Incidentally both Clarke and Leibniz were in the right in their dispute about Newton’s formula of the *sensorium dei*. Each of them had before him a copy of the first edition (1706) of Newton’s *Optics*, and yet in the disputed passage about space they did not have the same text before them. As we have only recently learned, while the first edition was still being produced or delivered Newton had the sheet carrying page 315 replaced and introduced into the text a metaphorical weak-
ening of the “divine sense organ” by means of a preceding “tanquam” [as it were]. Newton’s alarm at being forced to work with the concept of absolute space and thus to make infinity an attribute of the world had at first induced him to relativize the world metaphysically as an organ of divinity, which in its turn had doubtful consequences that caused him to retract the formula, almost at the instant of publication, into a noncommittal metaphor. The rapidity of this move to weaken the phrase seems to leave little doubt that not much profundity and perhaps even less conviction were involved in the disputed formula. This makes it so much the easier for the reader later on to fall into the temptation to import some profundity of his own and to search absolute space for traces of the dispossessed God.

As far as absolute time in Newton is concerned, we should remember that for him the physical world is just as much an episodic event in infinite time as are the systems of matter in space. For him we are separated from the beginning of the world only by the span of time that can be calculated from the Bible, as we know from his work on the chronology of the ancient kingdoms, and its end appears equally conceivable to Newton the speculative theologian in his treatise on the prophecies of Daniel and the apocalypse of John. One could almost say that the infinities of space and time do not, in themselves, imply anything about the reality of the world, and this observation also makes Leibniz’s objection to the irrational absence of proportion between the world event and the indifference of space and time very plausible. Thus Newton would not have understood why the Berlin physicist Walter Nernst became irate at the idea, proposed to him by the young physicist Weizsäcker, that for reasons having to do with energy the world might have only a finite duration. Weizsäcker interprets the physicist’s ire as the expression of his alarm “in the face of the thought that this world might come to an end.” Absolute time, differently than for Newton, had become a characteristic of the world itself. Weizsäcker sees in this experience evidence of a “deeply irrational trait of scientism”: For Nernst the world had “taken the place of God, and it was blasphemy to deny it God’s attributes.” This was a sort of prototypical experience of the evidence of the concept of secularization: Weizsäcker noticed here for the first time that “scientism contained an element that I now would call the secularization of Christian religion.” The reported scene took place in 1938, when Weizsäcker the theoretical physicist had discovered the “carbon cycle” as the source
of the energy of the stars; the exhaustibility of the energetic processes in the cosmos immediately presented itself to him as an obstacle to the infinity of the world and as an authoritative standpoint from which to criticize a “secularized” science whose result had been that in the “frame of mind” of the physicist of the previous generation “the everlasting universe had taken the place both of the eternal God and of the immortal soul.” As a biographical hypothesis this cannot very well be denied. But when Nernst, according to Weizsäcker’s report, objected that the idea of the universe having a finite duration was no sort of natural science because the infinite duration of time was a fundamental element of scientific thought, he did not need to secularize anything Christian for this purpose. He needed only to have read Aristotle, who derives the characteristics of his God, by a sort of ontological argument, from analysis of the concept of time; that is, while he does not express it, he does prepare the way logically—by a sort of ‘desecularization’—for infinity to become a theological attribute. Aristotle considers it to be incompatible with the concept of time to conceive of its alteration, its beginning or its end; consequently, time, owing to its concept and apart from any empirical considerations, required an eternal and absolutely regular measure-movement, which in its turn required a metaphysical guarantee in the form of an unmoved mover. Aristotle too would have become irate at the idea of the end of the world because that would involve what he regarded as the self-contradictory and consequently unthinkable end of time. Newton was able to think differently on this subject because for him the end of the world did not carry with it the end of absolute time, which was independent of the world.

As an attribute of progress too, ‘infinity’ is more a result of embarrassment and the retraction of a hasty conclusion than of usurpation. Early conceptions of progress rely, as Giordano Bruno’s does, on the finite model of the ages of man and the growth of experience and maturity that their succession brings with it, or they make the projected scientific progress terminate in a state of systematic completion, as in Francis Bacon and Descartes. In contrast to this, the idea of infinity [Unendlichkeit: literally, endlessness] is initially a mode of resignation: the nonarrival of any evident state of maturity, of the completion of theoretical knowledge and practical norms based on it. Significantly, it is Pascal who first speaks of the infinity of progress. But it is precisely for Pascal that infinity in space and time signifies not the ‘rendering
worldly' of a divine attribute but the epitome of metaphysical renunciations and the ambivalence of man between his greatness and his misery. In the fragment of a preface that he wrote for a *Traité du vide* [Treatise on the Void] in 1647, Pascal connects the metaphor of the human life span with the idea of an “homme universel” [universal man], who can be thought of as a single ideal subject extending across the sequence of generations, “comme un même homme qui subsiste toujours et qui apprend continuellement” [like a single man who subsists forever and learns continually]. This prepares the way for the basic thought that man was made for infinity: “N’est produit que pour l’infiniètre.” This anthropological definition does not harmonize well with the metaphor that compares history to an individual growing to maturity and fulfillment at the high point of his life, then aging and dying. Infinite progress renders perpetual only the first half of the overall process depicted by the organic metaphor: “... tous les hommes ensemble y font un continual progrès à mesure que l’univers vieillit, parce que la même chose arrive dans la succession des hommes que dans les âges différents d’un particulier” [All men together make a continual progress in accordance with the universe’s growing older, because the same things happen in the succession of men as happen in the different ages of an individual]. In Pascal’s language infinite progress is not the movement that would compensate for the difference between the finite and the transcendent infinite and would finally, after all, secure for the totality of mankind what it denies to the individual. Rather, this infinity in process is the painful actualization of the unalterable disparity between the status of a point, which is all that anything finite possesses vis-à-vis the infinite, and the destiny of man, which finally, despite the fruitlessness of his exertions, allows him by a process of grace to participate in the transcendent infinite, the need for which he comes to know through his experience of the infinitude of progress.

Pascal’s conception makes it clear that it is precisely the rationality of progress that withholds the attribute of infinitude from history, inasmuch as man finds his vocation for the infinite to be unfulfilled in history. The whole of humanity, the *homme universel*, is after all only a fictive subject of history. “Humanity as a whole,” Goethe wrote to Schiller on February 21, 1798, could indeed comprehend nature, but because humanity is “never together” in one place, nature is able to “conceal itself” from man. The hypostatizing of the fictive subject of
history as its 'absolute spirit' appears as a logical result of this irreducible backwardness of each individual and generation in comparison to the totality of history. Ludwig Feuerbach described this metaphysical device, by means of which the unattainable is after all overtaken, as descended from the 'creation from nothing' and thus as the result of a secularization, which, however, is negatively evaluated here insofar as the point of departure of the process is an object of nothing but scorn: "Our philosophers have turned the absolute nonsense of a creation from nothing, or of a being that creates the world from nothing, into the absolute spirit." In fact, however, every speculative subject of history must be seen as compensation for the disappointment resulting from the fact that the individual does not enjoy the benefit of the asserted rationality of history, but on the contrary, this asserted rationality for the first time makes the contingency of his temporal position in an infinite process really unbearable.

Infinity is more a predicate of indefiniteness than of fulfilling dignity, more an expression of disappointment than of presumption. If the attribute had migrated after getting free of theology, at any rate it could not have done so without changing its function and forfeiting its positive quality. As an expression of indefiniteness it serves the economy and critical self-limitation of reason more than its search for a metaphysical surrogate. Descartes had still explained the capacity of human self-consciousness to conceive of itself as finite as a result of the negation of an idea of the infinite that, while it was innate, was not derivable from experience in the world, distinguishing in this way between the immanent function and the transcendent origin of the concept. In opposition to this view, Hobbes had maintained that the concept of infinity contains no positive characteristic whatsoever: "And although this word infinite signify a conception of the mind, yet it follows not that we have any conception of an infinite thing. For when we say that a thing is infinite, we signify nothing really, but the impotency in our own mind; as if we should say, we know not whether or where it is limited." The infinite serves from this point onward less to answer one of the great traditional questions than to blunt it, less to give meaning to history than to dispute the claim to be able to give it meaning.

Our discontent with progress is discontent not only with its results but also with the indefinite character of its course, the lack of distinctive points, intermediate goals, or even final goals. The recovery of the
finitude of history by means of the idea of a final and conclusive revolution that brings the process of history to a standstill is made attractive, as an antithesis to infinite progress, by that very progress itself. The logic of this countermovement is perfectly comprehensible without any need to have recourse to the instrument of secularization, whether of paradise or messianism. What matters here is perhaps less the genesis of ideas than the readiness to receive them. The idea of a final situation like that proclaimed by the Communist Manifesto cannot simply translate impatience and dissatisfaction with infinite progress into the demand for definitive historical action; it must also be accompanied by a theory of the possibility of such action. In this case that theory consists in the combination of the positive and unlimitable progress of industrialization with a negative progress of immiseration, which is its necessary correlate, but which in accordance with the logic of self-preservation can only be finite. The combination of the two concepts of progress, the infinite and the finite, in one conception means that they could not be products of secularization, whether of an infinity usurped by history or of an eschatology transplanted into it.

Besides, the superficial similarities obscure deeper differences. It does not matter whether a situation of paradisaic satisfaction is worldly or unworldly; the crucial question is still whether this situation is to be brought about immanently or transcendentally, whether man can achieve it by the exertion of his own powers or has to rely for it on the grace, which he cannot earn, of an event breaking in upon him. Language encourages us to overlook this difference. Here, as elsewhere, it creates the appearance of secularization. There is nothing in which language is more productive than in the formulation of claims in the realm of the intangible. As Hobbes, again, put it, the most insubstantial arguments are sufficient to awaken hope, and even things that the mind cannot conceive can become objects of hope as long as they can be expressed in words.\(^{10}\)

While the basic principle of all hermeneutics has to be that more can be thought than can be expressed (and still more in afterreflection than in forethought), we must assume at least in the case of the concept of happiness that its historical potency is due merely to what is evoked by the means by which we express it. Kant indicated the reason for this when he laid it down that ideas of existential fulfillment cannot be objective. The fact that there is no objective concept of happiness
[objektiven Begriff vom Glück] is lucky [ein Glück] for us. It protects us from those who, on the pretense of its being objective, think that they can force everyone else to be happy. When Christian theology was confronted with the Hellenistic world's demand that it formulate its promises more precisely, it projected the philosopher's happiness of bliss-conferring 'contemplation' into its new 'next world.' This conception could have anticipated the later subjectivity of the concept of happiness—something that the context of the medieval system, however, did not permit. What was created was a concept of happiness that could not be disappointed by concrete experience; hence the possibility of the reoccupation of the position of a concept of fulfillment that was originally immanent to the world and bound up with the ideal of the life of theory. Even a radically altered conception of individual and social existential satisfaction could formulate, not indeed its content, but the urgency of its claim in the same language in which this had been done previously. The constancy of language is an index of a constant function for consciousness but not of an identity of content.

Translator's Notes


b. *Ausschauung*: 'thoughtful observation,' the nearest modern term to *theoria*. 
The reoccupation that is the reality underlying the appearance of secularization is driven by the neediness of a consciousness that has been overextended and then disappointed in regard to the great questions and great hopes. The decisions that were once made outside this world in the absolute acts of divinity and are now supposed to be accomplished in and through man, as moral, social, and political actions, did not, as it turned out, permit a successful transition to self-disposition. But even apart from its significance for historical explanation, the persistence in language of a stratum of expressions also has the consequence that what had already become metaphorical can again be taken literally. Such misunderstandings have their own kind of historical productivity.

Certainly it would be an exaggeration to say that the absolutisms of political theories all result from this process of taking secularized stylistic means literally. It would be equally plausible to suggest that for the consciousness of people at the time, the language of theological absolutism served only to bring the cause of political absolutism into the sphere of what was familiar and sanctioned and hence to be accepted fatalistically. Here I would no longer speak of the "Trojan horse" of a stratum of expressions; this demonizes the natural disposition of traditional linguistic means into a cunning of the reason employing them, which cannot be asserted without stronger evidence.

There is no need at all for such artful analyses when one bears in mind that theological absolutism had provided the 'experimental'
demonstration that it was humanly unbearable in the political effects of the multiplication of its religious denominations. While Thomas Hobbes, in the middle of the seventeenth century, could still proceed from the assumption that the unity of a state religion, as a way of neutralizing the effect of religious energies on political reality, was not only possible but also enforceable, by the end of the century Pierre Bayle already saw religion as the state’s insoluble problem. This insight led Bayle to the postulate, which he alone articulated, that only a state made of atheists could be a good and a satisfactorily functioning one. While it is true that Bayle’s argument influenced Hume, Gibbon, and Feuerbach, for the interpretation of the historical process it is only an illustration of the mirror-image correspondence of political to theological absolutism. In fact, what happened was that the intolerability of the factionalization of absolute positions within the state was counteracted by the transfer of the category of the unconditional friend/enemy relation to the conflicts between the national states that were in the process of integrating themselves. This was why it could become a special feature of the modern age as seen by historians that the acuteness of an internal crisis could be overridden by the absoluteness of an external one. This procedure belonged among the tools of political practice up to the moment when the settlement of external crises began to put in the shade anything of which internal crises were capable in terms of lethality, and thus disqualified itself as an alternative. But the process of overriding internal conflicts by external ones had had the consequence that the conflicts that had become absolute in the religious schisms could be subordinated to, and even made useful for, the primacy of interests that in their turn laid claim—above all through the consecrating effect of sanctioning attributes—to represent the absolute. The symmetry of the development of internal conflicts between absolute positions and the setting up of an absolute agent may be describable as an “inducing” process but hardly as the transfer of specific attributes from the one realm to the other. The point of departure of this process had been defined by the absurd situation that Christianity’s claim to the status of an absolute had become a politically tangible reality for the first time in the extremely confined space of the plurality of its denominations. In this situation, the surrender to the state of privileges previously reserved for religion was more nearly a necessary renunciation than a coerced removal, if Hobbes’s account of the rationality of the contract of subjection is
supposed to have any reference to reality at all. For the phenomenology of worldliness it may not matter whether that worldliness came into being through self-surrender or through removal by a foreign agency, but for the consciousness of legitimacy that is possible in the resulting situation this makes all the difference. I have been criticized on the grounds that “questions of legitimacy are essentially foreign to science,” that science is exclusively concerned with (and that in fact I am too little concerned with) the truth. Even if historians had not always concerned themselves with questions of legitimacy to the extent that they appear as determining elements in the historical process, the use of that concept would in any case be secondary here in relation to the concept of secularization; and in regard to the alternatives the latter sets up, the only question that arises is the question of truth or falsehood.

Three centuries after the national state took on the pseudomorphic qualities of the absolute authority, it becomes evident that the projection of the category of enmity onto the relations between states is no longer a viable procedure, and even its further intensification in the all-encompassing antithesis of the East/West dualism has only been a short-lived interlude. It is not impossible that this may cause internal conflict to take on a new and (this time) nondivertible intensity—unless it turns out that the experiment of absolute authorities has been played through to its conclusion. When it is no longer possible to believe that the decision between good and evil is going to occur in history and is immediately impending, and that every political act participates in this crisis, the suggestiveness of the ‘state of emergency’ [Ausnahmezustand] as the normal political state disappears. Expectations of unlimited self-sacrifice and of the total summoning up of strength and possessions lose their conjuring power to the extent that they can no longer appeal to the absolute character of the perils to which the state and the form of life of its citizens are exposed. The end of the primacy of the political can be seen in the widespread assertion of its omnipresence. For that primacy does not consist in the fact that everything is political but rather in the fact that the determination of what is to be regarded as unpolitical is itself conceived of as falling within the competence of politics—alogously to the earlier theological determination of what would be left to the ‘worldly’ authority as its sphere of competence.
The proposition that “all the significant concepts of the modern doctrine of the state are secularized theological concepts” was first laid down by Carl Schmitt in 1922. Both in the factual assertion that it contains and also in the deductions that it inaugurates, it is the strongest version of the secularization theorem. What is remarkable, methodologically, about Carl Schmitt’s “political theology” is that it finds any value at all in this secularization nexus since (as it seems to me) it would have been more natural, in view of the intention of this “political theology,” for it to establish the reverse relation of derivation by interpreting the apparent theological derivation of political concepts as a consequence of the absolute quality of political realities. The recourse to the sanctioned vocabulary [of theology] would be an expression of an acute concern to make comprehensible the exigencies that it was meant to help express. For that there can no longer be any such realities and exigencies is the position antithetical to Schmitt’s, a position which he sees as the result of the Enlightenment: “The rationalism of the Enlightenment repudiated every form of the exceptional case.” For the Enlightenment, the repudiation of the ‘exceptional situation’ [Ausnahmezustand] was primarily related to the laws of nature, which, no longer conceived as legislation imposed upon nature but rather as the necessity issuing from the nature of things, could not allow any exception, any intervention of omnipotence, to continue to be possible. The idea of the equality of men before the law was constructed, as was the idea of the inviolability of a constitution, by analogy to this idea of the law of nature, with its complete freedom from exceptions. It is undoubtedly true that the contours of the reality of the state become obscured to the extent that what it has to guarantee is taken to be a rational matter of course.

From this point of view it is certainly correct to say that an emphasis on limiting cases and exceptional situations insists on a function of the state that must take as its point of departure the failure of the Enlightenment; but that need not necessarily mean that it has to go back to the species of concepts that preceded the Enlightenment and repeat that species in its ‘secularized’ form. It seems to me, then, that what lies behind the proposition that the significant concepts of the modern doctrine of the state are secularized theological concepts is not so much a historical insight, as Carl Schmitt asserts when he explains that these concepts were “transferred from theology to political theory,” as it is a dualistic typology of situations. Consider, for example,
the proposition that “the omnipotent God became the omnipotent lawgiver.” If this assertion were correct, then the other could not also hold, according to which after the failure of the Enlightenment the conservative counterrevolutionary writers attempted “to support the personal sovereignty of the monarch ideologically by means of analogies drawn from a theistic theology.” Analogies, after all, are precisely not transformations. If every metaphorical borrowing from the dynastic language treasures of theology were ‘secularization’ in the sense of transformation, then we would immediately stand before a mass of products of secularization that would have to be entitled “Romanticism.”

In this situation the choice of linguistic means is not determined by the system of what is available for borrowing but rather by the requirements of the situation in which the choice is being made. When Carl Schmitt characterizes De Maistre’s political philosophy as the “reduction of the state to the element of decision, and consequently to a pure non-reasoning and non-discussing, non-self-justifying absolute decision, that is, a decision created from nothing,” then this is not the secularization of the creatio ex nihilo [creation from nothing]; rather it is a metaphorical interpretation of the situation after the revolutionary zero point. The revolution itself had made its appearance in historical disguise, using the rhetoric of the great traditional legitimations—which are not necessarily a vehicle for substance—in order to perform “the task of [its] time in Roman costume and with Roman phrases, the task of unchaining and setting up modern bourgeois society.” In relation to the subject of secularization in particular, it is important to observe that in making their history, it is possible for men to use the gesture of a creatio ex nihilo ‘Romantically’ and in such a way as to establish historical continuity; and on the other hand, it is possible for them to use historical mimicry in the service of innovation. “And just when they seem engaged in revolutionizing themselves and things, in creating something that has never yet existed, precisely in such periods of revolutionary crisis they anxiously conjure up the spirits of the past to their service and borrow from them names, battle cries and costumes in order to present the new scene of world history in this time-honored disguise and this borrowed language.” Accordingly, what underlies the phenomena of linguistic secularization cannot be an extensively demonstrable recourse to theology as such; rather it is a choice of elements from the selective point of view of the immediate
need, in each case, for background and pathos. The Revolution needed not only a reservoir of political expressions but a pagan one; its strongest effects, indeed, were achieved in the nakedly laconic style of the great statements typified by the secularization decree of the National Assembly in 1789: “Tous les biens ecclésiastiques sont à la disposition de la nation” [All church property is at the disposition of the nation]. It is quite plausible that the Restoration could only see itself here in the role of a creatio ex nihilo. This functional way of viewing the matter makes it improbable that the process of secularization can be divided into phases following the analogy of Comte’s schema of the three stages.5

Is “political theology” only the sum of a set of metaphors, whose selection reveals more about the character of the situations in which use is made of them than about the origin of the ideas and concepts that are employed in dealing with such situations? In a book entitled Politische Theologie II. Die Legende von der Erledigung jeder Politischen Theologie (Berlin, 1970), Carl Schmitt has undertaken to resist “the legend that all political theology has been definitively disposed of.” The most important question that arises in relation to this reopening of a subject first raised half a century earlier is the question whether the interpretation of “secularization” that is employed has changed or remained the same. What is perhaps the most instructive testimony relating to this question is located in a footnote: “All my statements on the subject of political theology have been the assertions of a legal scholar about a systematic structural kinship between theological and juristic concepts that obtrudes itself both in legal theory and legal practice.”7 This formulation reduces the secularization thesis to the concept of structural analogy. It makes something visible—and is consequently by no means without value—but it no longer implies any assertion about the derivation of the one structure from the other or of both from a common prototype. When, for instance, the monopolization of power by the state or by a particular political authority is said to be structurally comparable to the theological attribute of omnipotence, then this now relates only to the coordination, within a systematic context, of positions that are distinguished by the fact that they both carry the universal quantifier “all power. . . .” But is this already sufficient to justify talk, on the side of political theory, of a “political theology”?8

Nor is the development that can be seen in the great example of Hobbes—the deprivatization of religion as the mark of the new omni-
presence' of politics—something that might have been done by theology 'through politics.' This can clearly be seen when Hobbes finds as the basis for a public religion only the lowest common denominator of Christian confessionalism, the more laconic than expressive formula that "Jesus is the Christ." This sort of theology corresponds functionally, though not of course in the names and words that it employs, to the techniques that Voltaire employed in propagandizing for tolerance with the recommendation that we not take theology in general (and thus also the differences between theological doctrines) too seriously, and that we defend God's goodness by no longer asserting His omnipotence. The implication of the functional interpretation is that Hobbes already meant the same thing, though he did not say it. For Carl Schmitt, conflicts of the sort that Hobbes extirpates (rather than settles) by reducing them through the harmonizing formula (which is just as political as it is theologically insignificant) to the lowest common denominator of a public religion—"extirpates" because what is decisive is not the content of the formula but rather the decree that promulgates it, which the content only makes it easier to put into effect—such conflicts, for Carl Schmitt, cannot be reduced to opposing substantial poles. Militancy is not a function of substance. I do not know whether the following statement is also the legal-theoretical assertion of a legal scholar, but for the problematic of secularization it is very significant: "A conflict is always a contest between organizations and institutions in the sense of concrete orders, a contest between 'competent authorities' [Instanzen], not between substances. Substances must first have found a form, they must have organized themselves, somehow, before they can even confront one another as agents capable of a contest, as parties belligérantes." Thus secularization cannot be the result of a withdrawal of substance either; it is, again following the model of Hobbes's thinking, the integration of the religious interest into the public interest for the purpose of reducing the number of authorities 'taking part' in consciousness. The principle that there is no such thing as a conflict between substances is fundamental to the conception of a "political theology": the latter's job is to distill out what can then be decreed, so that it can be made a punishable luxury to want to keep for oneself something more as the realm of competence of [private] conviction. It is not a secularized theology but rather the selection from theology of what will be tolerable in the world, which then in its turn can be given out as the norm governing the content of what
is decreed. Conflict disappears for the almost scandalously simple reason that there cannot be two absolute authorities, even if, since Gnosticism, there has been the paradigm of two absolute substances. Truth belongs on the side of substance; it cannot be altered at the level of authorities, though it can indeed (to the extent that it is not publically disruptive) be integrated and thus made less dangerous as something to which appeal could be made to justify insistence on private autonomy. To that extent truth is not functionalized, but neither does it become a legitimizing power: Auctoritas, non veritas facit legem [Authority, not truth, makes the law], but precisely not Auctoritas facit veritatem [Authority makes truth]. The old consensus omnium [consensus of all] is no longer the criterion of truth because the teleology of human reason manifests itself in it but because in view of the particularism of interests and convictions, the possibility of agreement represents something like their solid and indispensable core. Since worldliness is a form for the reduction of antagonistic positions, the title of a "political theology" becomes the equivalent of that which does not indeed become worldliness itself but guarantees its continuance. It is the summation of the premises of self-assertion, and hence designates as an absolute enemy anyone who asks for even a supposedly harmless addition.

At this point a terminological difference can be instructive that came to light when Carl Schmitt objected that I did not deal at all with the "legitimacy" of the modern age but only with its "legality." The idea that underlies this correction is that the rationalism of the Enlightenment is a sort of code of reason, from which what was 'lawful' in the epoch would be ascertainable, without allowing the contingency of this system's validity to be exposed. I understand this criticism very well: Legitimacy for Schmitt is a diachronic—historical or horizontal—relation of foundation, producing the inviolability of systems of order out of the depths of time, as it were, whereas legality is a synchronic structure, read vertically, which supports a finding by its relation to a norm, a norm by its relation to a higher-level norm. By this logic the modern age would be legitimate if it was still the Middle Ages, though of course continued 'by other means.' The objection that under the title of legitimacy, what I was concerned about was only legality, puts in question the status of the book's problematic and its thesis as historical. As a criticism this could hardly be stronger.
But the legitimacy of the modern age that I intended is a historical category. It is precisely for that reason that the rationality of the epoch is conceived as self-assertion, not as self-empowerment. It is very different, on the one hand, to say that a rationalism has no need of historical justification, that it constructs itself autonomously from within itself and is indifferent to the conditions prevailing at the time when it is put into effect—which only corresponds to its self-definition—and, on the other hand, to insist that the doubtful and in fact disputed claim made by this rationality to have substituted a standardized process for the contingency of history has a specific historical function of self-assertion. Here, I think, Carl Schmitt has not done justice to the argument when he says, "Its immanence, which directs itself polemically against a theological transcendence, is nothing but self-empowerment." Legitimacy becomes a subject of discussion only when it is disputed. The occasion for talk of the legitimacy of the modern age does not lie in the fact that this age conceives of itself as conforming to reason and as realizing this conformity in the Enlightenment but rather in the syndrome of the assertions that this epochal conformity to reason is nothing but an aggression (which fails to understand itself as such) against theology, from which in fact it has in a hidden manner derived everything that belongs to it. In regard to what reason can accomplish, the occasion for its undertaking these accomplishments can be a matter of complete indifference; but in regard to what it does in fact accomplish, the radicalness of requirements and challenges, of disputes and problematics cannot be ignored. Self-assertion determines the radicalness of reason, not its logic. An extreme pressure toward self-assertion gave rise to the idea of the epoch as a self-foundation—which is simply not to say a self-empowerment—a self-foundation that emerges from nothing. It must seem paradoxical to Carl Schmitt that the legitimacy of an epoch is supposed to consist in its discontinuity in relation to its prehistory, and this paradox prevents him from thinking that anything else could be at issue but mere legality vis-à-vis a hypostatized reason that decrees positive laws.

Here is the heart of the difference between us: For Carl Schmitt, the political theorist, secularization is a category of legitimacy. It gives access to the depth dimension of history for the benefit of present moments endangered by their contingency. It produces historical identity, and here it matters little that this occurs precisely 'by other means.' The products of secularization are epitomized in "political
theology" itself, the designation of which, however integratively it might have been intended in relation to the tradition, really only veils the fact that what is meant is 'theology as politics.' It is almost inevitable a priori that a juristic positivism must ally itself with the historical factor that puts the contingency of positive institutions beyond the reach of observation. This is why decisionism derives its relation to legitimacy from the negation of voluntarism—because voluntarism is, as it were, the institutionalized instability of absolute power, while decisionism 'lives' from the fact that the 'decisions' have always already been made, that they appear in the form of historical authorities [Instanzen], just as for Hobbes the contract of subjection can never be one that is yet to be sealed but is only one that is inferred to have gone before. However much positivisms tend to behave as if they were unhistorical, their logic requires one again and again to establish connections with a ground that is beyond question. This is what makes the secularization theorem attractive for the 'decisionistic' political theorist: What has the appearance of illegitimacy when seen from the point of view of the participants holds a promise of legitimacy when seen 'from a higher point of view.'

Carl Schmitt has complained that I gave "an inducement to misunderstandings" by deciding to "lump together" his theses on secularization "with all sorts of muddled parallelisms of religious, eschatological, and political ideas." This reproach is justified. It was the second (1970) Politische Theologie's working out of the conceptual differences in relation to 'legitimacy' that made clear for the first time what had been the basis of the preference for the concept of secularization in the first (1922) Politische Theologie.

But perhaps one can or must go yet one step further. From the point of view of all kinds of requirements for legitimation, not only did rationalism make a disturbing and destructive entrance, but when the ground had been cleared and leveled, it proved to be sterile as far as new conceptions were concerned. The meagerness of what was left as a plan of construction in the wake of the great critical accomplishments of the Enlightenment left to Romanticism the sublime opportunity for a creatio ex nihilo. Carl Schmitt sees this not as the result of a failure of the Enlightenment but rather as the unexpected form of what rationalism, following Descartes's program, had originally claimed for itself but had been unable to carry out. For Schmitt also characterizes the concept of history employed in The Legitimacy of the
Modern Age as one that implies, instead of a creation from nothing, “the creation of nothingness as the condition of the possibility of the self-creation of a perpetually new worldliness.” But this book’s concept of rationality is neither that of an agency of salvation nor that of a creative originality either. On the analogy of the principle of sufficient reason [Prinzip des zureichenden Grundes: Leibniz], I would like to entitle this concept that of a sufficient rationality [einer zureichenden Vernunft]. It is just enough to accomplish the postmedieval self-assertion and to bear the consequences of this emergency self-consolidation. The concept of the legitimacy of the modern age is not derived from the accomplishments of reason but rather from the necessity of those accomplishments. Theological voluntarism and human rationalism are historical correlates; thus the legitimacy of the modern age is not shown as a result of its ‘newness’—the claim to be a modern age [Neuzeit: new age] does not as such justify it. Consequently my use of the word “legitimacy” cannot “simply turn on its head” its classical use, by designating this time, contrary to every rule, “a justification based on newness, instead of a justification based on duration, antiquity, historical extraction, and tradition.” It is true that in part II of this book an attempt is made at presenting a ‘historical’ justification accomplished by other means than appeal to quantity of time and to continuity. If it turned out to be possible to produce historical arguments as well for the rationality of the rationalism of the modern age, this would, in view of the whole structure of the argument, not amount to a demonstration of any competence beyond that required by the modest finding of self-assertion.

The connection between the concepts of secularization and legitimacy has been made clearer by Carl Schmitt’s counterargument, and precisely by the way in which he has recently cast obscurity over his theory’s need for the secularization pattern as an ‘expedient’ in the context of the question of legitimacy. Here one must not lose sight of the difference between rationalism and voluntarism, insofar as it comes through in the philosophy of history. Rationalism has the advantage that it can base its mode of operation on impersonal ‘mechanisms,’ that is, it need not rely on rational subjects—even of the ‘world spirit’ [Weltgeist] type—and their rationality alone. Even Darwinism is still a derivative of rationalism: It causes perfection to be produced with the dependability of a blind mechanism. Voluntarism is necessarily dependent on a subject, be it only a fictional one. Hence
it requires 'persons,' be they only 'legal persons.' Decisionism cannot function without a 'sovereign,' be it only a metaphorical one. Thus this position in political theory has a need for metaphor, and it connects that metaphor to its problematic of legitimacy by means of the assertion of secularization. In fact, though, what this dogmatics requires from the old theology is only a single element, with which it takes its stand against every form of deism and pantheism: that of the absolutely sovereign God-person. The feat of deducing from the necessity of will in the state the necessary existence of the willing person had already been attempted by Hegel. He made the "will's abstract, and to that extent ungrounded self-determination in which finality of decision is rooted," be embodied as the "absolutely decisive moment of the whole" in one individual, the monarch, so that the initially abstract will can "consolidate" itself and thus gain a concrete content in history.11

Hegel himself compared this inference from the concept of that which "has an absolute beginning in itself" to the existence of this latter, "which reabsorbs all particularity into its single self, cuts short the weighing of pros and cons between which it lets itself oscillate perpetually now this way and now that, and by saying 'I will' makes its decision," with the "ontological" proof of the existence of God, and no doubt found the incomparable dignity of the argument confirmed by this comparison.12 But precisely this reference to the argument of Anselm of Canterbury makes it impossible that this train of thought could contain an element of secularization. For the medieval inventor of the argument himself distinguishes between the God of his proof, than Whom nothing greater can be thought, and the God of his revealed faith, Who is greater than anything that can ever be thought. In other words, Hegel's appeal to the ontological argument cites what (if it succeeded) would be the showcase example of the kind of rational accomplishment of which every conceptual realist can only dream: to infer from a concept the existence of the thing corresponding to it. But Hegel does not thus by any means implant a key element of the Christian tradition in idealism. For legitimacy does not come from the uncaused beginning, the necessity of which is supposed to lie in the concept, either; rather it comes from that "consolidation" that fills the abstract with concrete contents.

The ontological deduction of the existence of the sovereign is a device that Carl Schmitt does not imitate, if only because the absolutism of sovereignty prohibits arguments even about its concept: "About a
concept as such there will in general be no dispute, least of all in the history of sovereignty...." In any case an 'ontological' argument could hardly take a 'limiting case' concept as its point of departure since there is no authority competent to decide "who decides on the existence of a state of emergency." This difference from Hegel's argumentation, which although it operates with the concept of the will is entirely rooted in the rationalism of the ontological argument, enables us to understand Carl Schmitt's 'need'—admittedly, an unfulfillable need—for secularization. The extent of this difference is the extent to which "political theology" is intended as theology. Because a person is required, there must be secularization to produce him, and indeed to produce him from the resources of the very tradition to which the concept of a person belongs as an indubitably autochthonous element. One has to be surprised, in any case, that among the many recorded instances of the secularization thesis, the concept of a person plays no special role, indeed hardly appears at all. But in the case of Carl Schmitt the reservation is necessary that the bearer of what is "in the highest sense decision" can be a person only in a metaphorical sense—and must not be one literally because at the same time that he provides the capacity for decision, the 'person' must also provide legitimacy for the decision. "Political theology" is a metaphorical theology: the quasi-divine person of the sovereign possesses legitimacy, and has to possess it, because for him there is no longer legality, or not yet, since he has first to constitute or to reconstitute it. The enviable position in which the 'political theologian' places himself by means of his assertion of secularization consists in the fact that he finds his stock of images ready to hand and thus avoids the cynicism of an open 'theological politics.'

It was the utopian Campanella who first described Machiavellianism as the result of Aristotle's having promoted the idea of religion being "tantum politcam inventionem" [only a political invention]. The historical attitude has made Campanella's imputation superfluous. The assumption of secularization allows the 'political theologian' to find ready for use what he would otherwise have had to invent, once it turned out after all not to be something whose existence could be deduced.
Translator's Notes


b. The term "sanction" itself embodies, etymologically, the process of transition that the author is discussing here. It derives from the Latin *sanère*, to render sacred or inviolable, and (hence) to ordain, decree, or ratify.

c. In legal and political theory, *der Ausnahmestand* denotes what we usually call, in English, a "state of emergency," that is, a situation that cannot be dealt with by normal legal processes and requires that extraordinary measures be taken.


e. *Selbstermächtigung*: giving oneself authority. This term (which, as will be seen, was applied by Schmitt to the author's conception of modern rationality) implies a self-willed refusal to submit to the historically established process whereby authority is conferred. To those who are steeped in this sort of terminology, then, it has the connotations almost of a 'seizure of power,' the antithesis of political/legal 'legitimacy.'

f. *Dezisionismus* is the doctrine, promoted in Germany by Carl Schmitt, that legal validity resides ultimately in decisions rather than norms. (These decisions are of course normally thought of as the decisions of 'competent authorities,' identified as such by reference to norms, but there can be no authority competent to 'decide' who is the ultimate decision maker—who is the 'sovereign.'
The Rhetoric of Secularizations

In the realm of expressions suggestive of possible secularizations that can be subjected to the methodical analysis that I have recommended, we are undoubtedly dealing also with rhetorical effects and hyperboles. The complex of "political theology" that has just been analyzed bears the marks of secularization as a specific intentional style. One reads in Carl Schmitt that "the 'omnipotence' of the modern lawgiver, of which one is told in every textbook of public law, derives from theology in ways that are not merely linguistic." Hearing this assurance, one may hesitate: not merely linguistic? Then the same would hold for the stage god that Carl Schmitt introduces in order to characterize the ultimate concepts and arguments of the literature of public law as they relate to the character of the interventions of the state, which it carries out "now like a deus ex machina deciding by way of positive legislation a controversy that the free act of juristic knowledge was not able to resolve in a way that was generally acknowledged to be correct, now as the benevolent and compassionate agent who demonstrates his superiority over his own laws through pardons and amnesties." Thus this lawgiver can even be a deus ex machina as long as he is not himself the "monteur [setter up] of the great machine" since this metaphor is reserved by tradition for the Enlightenment's retiring divine sovereign. It is a matter of establishing a rhetorical distance, where in order to avoid the metaphor of the mechanism, with its fixed historical associations, even the reduced level of seriousness of the metaphor of the theater is acceptable: To the observer from a
distance, the total picture of the contemporary conception of the state presents itself as "a great cloak-and-dagger piece... in which the state acts under numerous disguises but always as the same invisible person."

This example shows how in the broad field of the linguistic phenomena that could provide evidence of secularization, each case requires the methodical protection provided by an analysis of its function. Talk of the "omnipotence" of the lawgiver is itself clearly a 'power play' of political theory, for which an allusion to the strongest possible point of comparison is almost automatic. Secularization as an intentional style consciously seeks a relation to the sacred as a provocation. A considerable degree of continuing acceptance of the religious sphere in which the language originates has to be present in order to make possible such an effect, just as 'black theology' can only spread its blasphemous terror where the sacral world still persists. In the Middle Ages mysticism and courtly love worked together, lending back and forth the linguistic treasures and the rules of heavenly and earthly love. For the most part, if one considers only the most magnificent source—the Song of Solomon—content was only being brought back from the sacral language that the profane had earlier turned over to it; but an element has been added that makes the theft and carrying over seem daring and risky. This daring skirting of the boundary of the permissible is itself one of the forms of proving love, and also part of the linguistic gesture (a means of impressing an audience) that returns again and again in the various forms of secularization: the presumption of doing what has never, for any other purpose, been dared but is nevertheless undertaken in this unique—and thus 'absolute'—case. The symmetry of erotic elements in mysticism and mystical elements in eroticism need not plunge analysts into depths of obscurity; though it may not yet be a matter of limiting concepts, this certainly is a case of skirting the limits. The Middle Ages had found that just about every content was capable of spiritualization, and thus had opened up a wealth of expressive possibilities, of which anything could partake secondarily that seemed to need and to be capable, perhaps no longer of that spiritualization, but still of the obligatoriness that went with it.

The phenomena of linguistic secularization extend all the way from the conceptual function of resolving the problem of an acute lack of means by which to express a novel state of affairs to the rhetorical
function of evoking effects along the spectrum between provocation and familiarity by means of an emphatic display of the terminology’s marks of derivation. Nietzsche was reaching for the most incisive formula of usurpation imaginable when he made the “I am that I am” [Exodus 3:14] into the utterance of an invalid who suffers precisely from being the person that he is. The self-designation of Yahweh is put in the mouth of the diametric opposite of the self-identical pride of life: “I am who I am: how could I ever get free of myself?” For another example, one would only have to trace the use or misuse of the nomenclature of Christmas in order to have before one the affective ambivalence of such ‘quotations.’ For Heinrich Heine, Shakespeare, whose dramas he wants to call “the worldly gospel,” was born “in the northern Bethlehem that was called Stratford-on-Avon.” But also: “Zweibrücken was the Bethlehem where the young freedom, the saviour, lay in its cradle and bawled the world’s salvation.” At almost the same time Goethe, who had been reading Galileo, wrote in his diary that Newton was born in the year in which Galileo died (which, in spite of calendar confusion, is still not quite correct) and added, “Here lies the Christmas Day of our modern times.” Somewhat earlier, in his revision of Zelter’s article on Haydn’s Creation, Goethe had described the composer’s birth as follows: “Finally there appeared unannounced, on the border between two nations, in the manger of a wheelwright’s shop, the new Wunderkind, born into earthly poverty, who was to deliver our art from leading strings and from foreign systems of form. . . .” More than half a millennium earlier the Hohenstaufen, Frederick II, whom Nietzsche was to describe as the first European to suit his own taste, in a letter written as an excommunicated heretic in August 1239 to his native town of Jesi on the borders of Ancona had chosen the defiant and haughty formula that this town, “where our divine mother brought us to light,” was “our Bethlehem.”

Precepts of rhetorical daring make the result of linguistic secularization, from allusion to frivolous comparison, a basic element of literary style. The notion of ‘renaissance’ also belongs here, which frequently makes literary appearances in the vestments of sacral ideas of rebirth and the related cult symbols. The point of such acts of daring may be exhibited in an anecdote that we are told about Francis Bacon: In the garden of the earl of Arundel, who had on display a large number of ancient statues of nude men and women, Sir Francis comes to a
sudden halt and proclaims his amazement with the exclamation, “The resurrection.”

An objection has been lodged against my association of this Bacon anecdote with the rhetoric of secularization: “Perhaps what speaks here is not at all, or not only, a rhetorical daring that is conscious of its use of a frivolous equation as a technical expedient, as Blumenberg imagines, but rather genuine disconcertedness.” A fine and welcome correction, if there was need of one. But then follows a further definition of the context of that “disconcertedness,” which is supposed to be kept open as to what Bacon might have felt: “Who knows whether at this moment the ancient world’s ‘being,’ at rest in itself and perfect, did not dawn upon Bacon in a Christian perspective: in the eschatological image of mankind resurrected and awakened to its perfection.”

But that is too fine to be true. Bacon’s recovery of paradise is not connected with a resurrection of any kind. The identity of the hypostatized subject of science, in which individuals and generations are completely dissolved, is at the same time the identity of a mankind achieving the future perfection of domination over nature. There was no need to assure justice for those whose decease preceded that perfection. Bacon’s idea of paradise is not eschatological, because it is pagan. It presupposes a strict symmetry in history: The future reproduces the beginning in the form of the paradisaic domination of nature by means of the sole power of the word. Because Adam had given the beasts in paradise their names, he was able to call them by their ‘true names’ — and “call” for Bacon is the equivalent of “command.”

Bacon has entirely separated his idea of paradise as man’s exercise of power through the word from the tradition of the ideal of theory as the highest fulfillment, and from the tradition of the next-worldly visio beatifica [beatific vision] that was derived from that ideal. His paradise is closer to the undercurrent of magic, and would be the secularization of that, if it had need of secularization. Now all of this may not alter my critic’s view of the scene in the garden of Arundel; but Bacon’s language, with its repeated use of the medium of artificial secularizations, should give him food for thought — above all the conversion of the terminology of the novissima tempora [newest times]: The final times of the prophecy of Daniel have become the ‘new’ age [die ‘Neuzeit’: the modern age] that for us is the final age — and the German translator J. H. Pfingsten renders this as the “neueste Zeiten” [newest times]. Of course, “Even where irony is involved, Christianity’s rep-
Bacon does that too, especially for a public for which the code of the prophecies is 'broken' in a new way; but the description of these stylistic means as rhetorical—and, in that character, as provocative or trust inducing—does not impugn their seriousness in relation to their repertoire of images. Such repertoires are interchangeable, and Bacon also uses the old *topoi* [themes] of autumn and the world's growing older, not, however, in the sense of an anticipation of winter and death but rather in the sense of the phase of the year and of life that brings with it ripeness and the harvest. His concern in the application of both the biblical prophecies and the metaphor of organic growth to his own times is to make the accumulation of new discoveries and inventions appear trustworthy and promising as symptoms of the state of the world as a whole.

Both the self-conception of the artist and the theoretical interpretation of the artistic process by means borrowed from theology, all the way from creation to inspiration, have been abundantly documented. The discovery of the capacity for creativity is part of the self-articulation of modern consciousness, however much it may initially have been connected with the formulas (used initially with a pious intent) of the *alter deus* and *deus in terris* [second god, earthly god], which had served at first as hyperbolical paraphrases of the biblical idea that God made man in His own image. *Invention,* which under the rubric of *inventio* in the traditional rhetoric was only a part of the process of the linguistic transmission of thought (first its accidental, then its methodically directed unfolding and exploitation), becomes the essence of the artistic process and the criterion by which its products are to be evaluated, as, for instance, when Scaliger and Sidney assign preeminence in the art of poetry to epic poets and dramatists because their activity most closely resembles the model of divine creation. But the later opposition to this aesthetic ideal itself still requires the register of a secularized language—thus, for instance, when Marcel Proust, with his "poésie de la mémoire" [poetics of memory], rebels against impotence in relation to the past and against the mere "mémoire des faits" [memory of facts] in order to proclaim the unsurpassable station and the absolute responsibility of the aesthetic act not only as memory but also as the final court of judgement: The artist makes of his work not only a piece of the highest reality but also the "true Last Judgment." It would be a mistake to think that the idea of art, of its seriousness and
its existential significance, was produced at some time or other by a transformation of the dogmas of creation or judgment. But these concepts certainly do designate claims to meaningfulness and finality that had remained empty after the disappearance of the theological substance and that were both capable and in need of corresponding "reoccupations."

Some of the most comprehensive testimony to the aesthetic potential of secularized language is offered by Jean Paul's *School for Aesthetics*. It exploits the language of the Christian tradition in every possible way and according to every rule of art, from rhetorical ornament to playing with blasphemous frivolity. Jean Paul discovers the ironical disposition of this terminology as a means by which to expose finite facts by comparison with the infinite ideal. Such consciousness of utilization means that any suspicion of a significant immediate relation to a source is bound to be mistaken.

Creation and incarnation are Jean Paul's favorite metaphors for the poetic process, not only in order to assign a higher metaphysical value to it but also to exhibit its insuperable embarrassment face to face with its absolute prototype. The poet is bound neither to the imitation of nature nor to a norm of his motivation; he, who "like a god, poses his world on the first day of creation without having further reason than that of the omnipotence of beauty," may also "repeat the free creative beginning even in the middle of the work, where nothing old is answered for or set aside." The first chapter of a novel is the "omnipotent or 'ascent' [underived or independent existence] chapter." The poet's relation to the inner laws of his creations resembles God's relation to man's freedom. The epic "spreads the enormous whole before us and transforms us into gods contemplating a world." In contrast to the dramatist, the epic poet has at his disposal "the infinite abundance of possible worlds."

But the poetic metaphor wants only to be taken at its word, not made into a concept; otherwise it would lead into the "annihilating idealism of philosophy; ... we are not made to have created everything." It is true that metaphors are "linguistic incarnations of nature into humanity" and "transubstantiations of the spirit" and as such are expressions of the process in which nature "for man is forever caught in the act of becoming incarnate as man"; but at the same time this metaphorical accounting for metaphor contains something of the annihilating idea of humor, which means to expose, by the use
of secularized language, an infinite discrepancy: "When man looks
down, as theology did in the old days, from the supernal world to
the earthly world, then the latter seems to drag along, small and futile;
and when he measures the small world, as humor does, against the
infinite world and sees them together, a kind of laughter results which
contains pain and greatness." 20

Poetry as incarnation means for Jean Paul not only the elevation
of the natural to the realm of the ideal but also the constant exhibition
of how the ideal cannot be realized. This ambivalence is meant to be
deposited in the products of linguistic secularization. "Poetry, like
everything divine in man, is chained to time and place and must always
become a carpenter's son and a Jew." 21 On account of this ambivalence,
the judgment of good and evil devolves upon the poet in his work of
idealization: "The poet—even the comic poet—cannot take any real
character from nature without transforming it, as the day of judgement
does the living, for hell or for heaven." 22 Both humor and wit have
their locations in this metaphor of the Last Judgment. 23

The poet in the role of judge—that is, to be sure, already a modi-
fication of the Enlightenment's metaphors of judgment, which saw
reason in the position of the judge. The element that induces such
metaphors of judgment is the common theoretical and aesthetic end
product of the 'verdict,' whether of fact or of taste, toward which
reflection orients itself. Lichtenberg saw in the Enlightenment's primacy
of reason the reversal of the Inquisition, especially in its anti-Copernican
activity: "The class of people by whom reason was so often subjected
to inquisition now in the reverse order finally finds itself and its con-
temptible procedures brought before the inquisition tribunal of reason.
Of course the ultimate punishment assigned to them will not be chains
and dismal dungeons but what will nevertheless be an irksome ob-
ligation for them—the obligation to become wiser." 24 It is subjects of
theory and lapses in theory that are judged before the tribunal of
reason. For Lichtenberg the moral subject is withdrawn from the
purview of public judgment, and his passionate rejection of 'physiog-
nomy' is based on a defense of the protection that bodiliness furnishes
for the ego. It is not the secularization but rather the reversal of the
basic idea of eschatology: The world exists only thanks to the im-
possibility of passing judgment within it. "If God made known men's
secrets, the world could not continue." 25 From reason's judgment over
rational processes two radically different paths lead onward: one to
history and art as the new tribunals, the other to the transformation of reflection into sitting in judgment of oneself. As a stylistic means of making self-representation credible, a linguistic form has been developed that is meant to provide a literary equivalent for the absence of reservation that religious thought ascribes to God's knowledge and understanding of man. The prototype of Augustine's *Confessions* is not sufficient to explain this phenomenon. Augustine still believed that God knew more of the human soul than it knew of itself and consequently that God's judgment could not be anticipated by self-representation. Thus when Rousseau consciously imitates Augustine's *Confessions*, that is not a legitimation of autobiographical recklessness by appeal to religious and literal authority; rather it is a rhetorical reinforcement of the credibility of reckless self-disclosure: "I have unveiled my inmost self even as thou hast seen it, O Eternal Being."

Rousseau does not merely appeal to the divine judgment as the last resort that will ultimately verify his claims; rather, in his literary self-revelation he takes under his own direction the revelation of man before God. The forum of mankind, to which his confession is addressed, does not just temporarily and metaphorically take the role of the judge; the decision that he requests from this tribunal replaces the appeal to the Last Judgment, which loses its essential relevance once a verdict has been brought in by what is now the final court of appeal: objectivity. Rousseau expressly emphasizes that the time when the divine judgment takes place has become a matter of indifference to him—the trumpet may sound whenever it likes. Self-knowledge has become the equivalent of divine knowledge, the subject's liberation from subjectivity, and its truth quite simply the naked truth. Iconologically it is significant that the book has changed its position in the judgment scene; whereas in the entire apocalyptic literature it is represented as the book of the sins of mankind, which is kept before the throne of God and opened before the assembled world of men, in his case Rousseau writes the book himself and bears it, as he says, in his hand before the tribunal with these proud words (which are also significant in the sequence of the objects referred to): "This is what I have done, what I have thought, what I was." Linguistic secularization has become an instrument of the literary sensationalism of undisguised self-presentation and of the vindication to which it lays claim. No distinction of the relative precedence of moral or aesthetic judgments has yet been arrived at. Half a century later, in Ludwig Feuerbach,
the productive subject decides only on the literary immortality of his thoughts, not on his own immortality: “In writing man holds the final judgment over himself, over his ideas and sensations; here he separates the sheep from the goats, consigns some to eternal oblivion and nothingness, others to eternal life.”

Probably nothing in the terminology of aesthetics is as instructive in regard to the problematic of secularization as is the concept of a ‘symbol.’ This relevance is not only due to the diversity of its aesthetic aspects and transformations but is already present in the potential that the term “symbol” brings with it from its prior history. It is true that before Goethe this term had as yet no specifically aesthetic significance, and in theology, particularly in the Protestant doctrine of the sacraments, it played a narrowly defined role in a technical language. This semantic narrowness corresponded pretty accurately to the initial situation in the word’s history, and no doubt also in factual history. Freud has pointed out that in magical behavior the symbol comes into existence by being ‘appointed’ to serve as an image, no doubt originally as the result of an incapacity to make a realistic image of the object affected (or to be affected). The profane history of the word shows that the inability to create an adequate image is revalued positively as signifying also the impossibility of such adequacy. Kenneth Burke says that the status of a word as symbolic consists in the fact “that no one quite uses the word in its mere dictionary sense.” The way in which a constant reference to an identical object can be established, despite the impossibility of depiction, is exhibited in the profane history of the ‘symbol’ as the credential of a person who makes himself known by the possession of an improbable sign produced by a process of accident: half a tablet, whose broken edge precisely fits the other half and identifies its possessor as a legitimate agent for a legal transaction or as the bearer of a mandate. Of course the object endowed with this significance need not always be so unspecific; the sema [sign] can bring with it and retain its own characteristic meaning, and by its history it can obscure the fortuitousness of its adoption for its present role. But the difference between a symbol and an image or a metaphor or an allegory always consists in the symbol’s unspecific adoption, in its being understood as a result of an agreement, an alliance or an antecedent relation of hospitality as a support for resulting rights.
It was natural that theology, in elaborating the idea that was basic to both of the covenants of man with God, should hit upon this instrument that lay 'ready to hand' as a means of making known and identifying those who have a part in the covenant relation and in the associated rights to salvation. Circumcision in the Old Testament, the breaking of bread in the New Testament, were signs of the covenant, which assured one of divine benevolence and the community of initiates. The institution of the sign by the party who proposes the covenant is the manner of origin of the sacraments, and also of the articles of belief by whose avowal the sworn initiates into the mystery and those entitled to salvation recognize one another. The sign represents the absent God, of whom no image may or can be made.

Logically, then, the need to appropriate the term "symbol" for the terminology of aesthetics appears when the ideal of imitation is suppressed. From the technical embarrassment caused by one's inability to imitate, or from the sacred prohibition that does not allow one to imitate, there emerges the aesthetic dignity in which one goes beyond the simplicity of mere mimesis to creation. That the term could be employed against the ideal of imitation had little to do with the significance it had acquired through its history within theology; in the cases of Lessing, Winckelmann, and Herder, one can assume that its original meaning was at least perceived along with the accretions. Whether or not that can be demonstrated, in any case the term "symbol" still had enough of its original formal function to be capable of the new ambiguity and thus of the employment that it was to have in aesthetics. An ideality that no longer holds to the Platonic correspondence of originals to images but rather is aimed at what is not represented in reality has to make itself dependent on the exclusiveness of the symbol. For the new definition of the aesthetic object that wanted and had to turn away from the traditional definitions and classifications, "symbol" presented itself as a term that, while it did derive dignity from the sacramal phase of its history, had not acquired any additional meaning that would be important where it was now needed—except perhaps for the spread of indefiniteness, which continues to the present day to make the 'symbol' the terror of its struggling interpreter.

Our critical considerations concerning the methodical caution and material differentiation that are advisable in connection with the category of secularization have at the same time led us quite a distance
away from the vicinity of “topos research,” whose problematic borders closely on that of the secularization thesis. Both the former and the latter presuppose the existence of constants in the history of ideas, and thus are based upon a substantialistic ontology of history. So the simultaneous appearance of “topos research” and the secularization thesis is hardly accidental. Our concern here is not at all to advocate another ontology of history in place of a substantialistic one; on the contrary, our purpose is only to set over against the unquestioned preference accorded to a certain implied philosophy of history the possibility of other lines of inquiry that it does not allow for. Here a philosophy of history (insofar as such a thing is still at all possible) will always have to take epistemological considerations into account to the extent that it has to maintain access to the historian’s repertoire of questions. Thus in the case of “topos research,” it must certainly be accepted that the establishment of constants is an entirely rational procedure; but at the same time it must be recognized that this procedure always involves a renunciation of possible knowledge, a renunciation that cannot simply be accepted as inevitable. Given the kind of cognitive capacity we possess, anything that cannot be further reduced or inquired into has the status of a contingent fact. The fascination that the natural sciences find in the possibility of discovering and employing constants is not due to their making natural processes more comprehensible for us but rather to the way in which they increase the reliability with which they enable us to analyze events. This satisfaction is exaggerated when it is interpreted, as it was for the first time in ancient atomism, as meaning that because constants bring the theoretical process to a halt, they must also be identical with the sought-after principles, complete knowledge of which would explain everything that happens. Precisely where science believes it has hit upon—or requires itself to reduce phenomena to—‘atoms’ in the broadest sense of the term, it turns out that the expected satisfaction fails to appear.

In the natural sciences there is at least the reward I have described in return for the end to further interrogation that results from the discovery of constants; in the human sciences the production of constants must be understood to be a theoretical resignation without any corresponding gain. It is perfectly possible that insurmountably contingent facts may be arrived at; what concerns us here is not this kind of constraint but rather the expectation with which it is met: that with
the standstill of the theoretical process, the need for theory would be satisfied. This is the source of the weakness of substantialistic preconceptions in the theory of history. "Topos research" belongs to the tradition of assuming eidetic preformations, which begins with the ancient theories of the elements, atoms, Ideas, and forms and continues through 'innate ideas' to dream symbolism, archetypes, and 'structures.' Each time we try to resist the excessive multiplicity of a historicism of mutually incomparable facts, our history threatens to contract into the simplicity of something that is always the same, as though all that mattered was never to allow understanding to satisfy itself.

The result of our reflections on secularization as a stylistic technique can be summed up in Schleiermacher's aphorism: "Christianity produced language. From the very beginning it was a genius that raised language to a higher power, and it still is..." The phenomena of secularization derive to a large extent from this linguistic genius, from the familiarities that it produced, the transferable material that it left behind it, and the residual needs that are associated with its materials. Lichtenberg imagined this in one of his contributions to the *Göttingisches Tagebuch* in consciously secularized language as the pagan morning prayer of a natural scientist in praise of the "great sense of security" that he owed "only to the degree of insight into nature which he had achieved... What if one day the sun should not return, Amintor often thought when he awoke in a dark night, and he rejoiced when he finally saw day dawn again... Also, this inner recognition of order was nothing other than just this order itself, including the one who was observing it; and therefore it was always the source of his highest spiritual pleasure." The Kantian conceives of the mental calm conveyed to him by nature's regularity as the work of his own reason but calls the act of bringing it consciously to mind his "reconciliation with God." The language and the ritual are secularized, the concept and the subject of science occupy the traditionally designated positions: "Generally many biblical expressions appeared in his speech. In this connection, he said that it was nearly impossible to tell the same history of the human spirit without at times hitting upon the same expressions and that he believed we would understand the Bible better if we studied ourselves more. The shortest way always to live up to its sublime teachings would be to try once to reach its purpose in another, independent way, paying due regard to time and circumstances."
Chapter 9

The totality of the phenomena that give rise to consideration of secularization as a historical category, and whose possible broadening lies in the formula that speaks of an “objective cultural debt,” can be interpreted on the basis of a reversal of the relation of debt. At this point this is only a hypothetical suggestion, whose validity cannot be determined on the basis of the material relevant to ‘secularizations’ alone. The arguments of part II are also indispensable for that purpose. This hypothetical proposal is based on the volume of expectations and claims—unsatisfied, disappointed, and made insistent—that a religion of the universal historical stamp of Christianity produces and leaves behind it. In his *Philosophy of Money*, Georg Simmel advanced a theory of the way in which vital needs become independent, even outliving their fulfillments, so that from a longer-run perspective they are simply unfulfillable. Thus, he says, through Christianity man, who had hitherto always had a relative value, and consequently one that could be translated quantitatively into exchange and money values, had acquired an absolute value—a magnitude of pretension that, while it does propel the process of reality continually forward, can never be realized in it.29 The idea that everything could someday be as though Christianity had never existed is in no way involved in the critique to which we are subjecting the secularization theorem; but precisely because Christianity’s intervention in European history (and through European history in world history) penetrated so deeply, the idea of secularization also carries with it an implication of harmlessness, that at bottom, in spite of all apparent changes, things must remain the same as they were made by that intervention—so that even a post-Christian atheism is actually an intra-Christian mode of expression of negative theology, and a materialism is a continuation of the Incarnation by other means.

A religion that, beyond the expectation of salvation and confidence in justification, came historically to claim to provide the exclusive system of world explanation; that could deduce from the fundamental notion of creation and the principle that man was made in God’s image the conclusion that man’s cognitive capacity was adequate to nature; but that finally, in its medieval pursuit of the logic of its concern for the infinite power and absolute freedom of its God, itself destroyed the conditions that it had asserted to hold for man’s relation to the world—such a religion, as a consequence of this contradictory turning away from its presuppositions, inevitably ends up owing to man a
restitution of what belongs to him. What I am describing by this anticipatory statement of the main thesis of part II is not the entire history of Christianity but only its crisis at the end of the Middle Ages, which is to say, the preconditions of the formation of modern rationality.

A concept of history that resulted from appreciation of tradition has committed us to seeing obligations above all in the relation of each age to what went before it and the sources of the values handed down to it. In the process the ability to see the debt that history owes to succeeding ages has been weakened. Of course such formulations should not encourage moralizing about history but can only show how problematic it is to interpret historical connections with the aid of legal concepts. After all, the question of the legitimacy of an epoch does not arise immanently in the study of history. While it is true that one who has never before been accused of being 'in the wrong' can in fact be in the right, the problem of legitimacy only articulates itself when righteousness is in dispute and has to be contended for.

Indeed the problem of legitimacy is bound up with the very concept of an epoch itself. The modern age was the first and only age that understood itself as an epoch and, in so doing, simultaneously created the other epochs. The problem of legitimacy is latent in the modern age's claim to carry out a radical break with tradition, and in the incongruity between this claim and the reality of history, which can never begin entirely anew. Like all political and historical problems of legitimacy, that of the modern age arises from a discontinuity, and it does not matter whether the discontinuity is real or pretended. The modern age itself laid claim to this discontinuity vis-à-vis the Middle Ages. Consequently the continuous self-confirmation of its autonomy and authenticity by science and technology is brought into question by the thesis that "the modern world owes its uncanny success to a great extent to its Christian background." The extent of the success determines the extent of the injustice committed by forgetting, denying, or not wanting to recognize its true preconditions.

The terms "forgetfulness of Being" [Seinsvergessenheit] and "repression" [Verdrängung], deriving from very different sources in the thought of our century, represent a common underlying circumstance, namely, that what is past and forgotten can have its own sort of harmful presence. The idea of secularization belongs in this context too, within which its function becomes intelligible. If the modern age was, in its historical substance, a product of secularization, then it would have
to understand itself as the embodiment of "what 'in reality' ['der Sache nach'] should not exist." The formula makes it clear that it is not meant to convey a moral rebuke; but neither is it meant to be a mere historical finding that one could simply let pass, like the determination of the individuals responsible for wars in the ancient world. That "objective cultural debt" belongs, more than anywhere else, to the type of situation to which the rubric of "the undealt-with past" is applied. I have said that the category of secularization contains at least a latent ideological element. This formulation has brought me the odium of an 'unmasker of ideology' [Ideologiekritiker], which is not at all to my taste. For it is precisely the kind of 'cultural criticism' derivable from the concept of secularization, which hands out "guilty" verdicts in its search for the most distant possible object to which to attach responsibility for a feeling of discontent with the present, that ought to be called to account for irresponsibility in relation to the burdens of proof associated with what it presupposes.

Besides their potential for being cited as grounds for blame, besides their implication of a category of guilt, conceptions of illegitimacy like that of secularization also recommend a therapy for acute discontent that would involve a broad-scale conscious 'working through' of past circumstances. Talk of the "undealt-with past" has concentrated in recent decades on the sins of omission of what has now become the generation of the fathers—in fact it has concentrated (increasingly) less on those who set the machinery of destruction in motion than on those who neglected to destroy it in good time or to prevent its schemes from being implemented in the first place. One should not fail to notice how such structures of reproach become plausible: They are integrated into a familiar schema, which through its capacity for variation continually gains in apparent conclusiveness.

I need only remind the reader how, beginning with his first ethnological application of psychoanalysis, Sigmund Freud constructed history-wide objective relations of guilt, from the murder of the father of the primeval tribe in Totem and Taboo (1912) to the hypothetical murder of the religion founder in Moses and Monotheism (1939), of which the presupposition—long ago inferred from the histories of individuals—is that "each portion which returns from oblivion asserts itself with peculiar force, exercises an incomparably powerful influence on people in the mass, and raises an irresistible claim to truth, against which logical objections remain powerless...." Freud traced the
Christian idea of original sin, as an expression of a historically undealt with and growing consciousness of guilt and "as a precursor of the return of the repressed content," back to the murder of the primeval father. At the time when Christianity was establishing itself, the disposition to accept a doctrine of original sin had taken on worldwide dimensions: "The sense of guilt of those days was very far from being any longer restricted to the Jewish people; it had caught hold of all the Mediterranean peoples as a dull malaise, a premonition of calamity, for which no one could suggest a reason. Historians of our day speak of an ageing of ancient civilization, but I suspect that they have only grasped accidental and contributory causes of this depressed mood of the peoples."

At the same time that Freud was working on his essay on Moses, Edmund Husserl was working on what was likewise to be his final work, *The Crisis of the European Sciences and Transcendental Phenomenology,* in which the proposed diagnosis and therapy for the "crisis of European humanity" rests on the same premise, that past generations have been guilty of neglecting crucial steps required by rational candor and that the present can only regain health by means of a thorough analysis of these malignant defects. For a final example of the recurrence of the schematism of this type of theory let me mention Max Weber's thesis of the historical origin of capitalism from Puritanism. While the response of historians to this thesis was predominantly negative, that of theologians was predominantly positive, for the latter perceived the thesis through the medium of a self-denying affirmation of responsibility for Christianity's eschatological complicity, which did not hesitate to verge on a magical negation of the world. In considering the prevalent openness to theories of 'capitalism,' one cannot fail to notice not only that there always seems to be a need for a causal formula of maximum generality to account for people's discontent with the state of the world but that there also seems to be a constant need on the part of the 'bourgeois' theorist to participate in the historical guilt of not having been one of the victims. Whether people's readiness to entertain assertions of objective guilt derives from an existential guiltiness of Dasein vis-à-vis its possibilities, as Heidegger suggested in *Being and Time,* or from the "societal delusion system" of Adorno's *Negative Dialectics,* in any case it is the high degree of indefiniteness of the complexes that are described in these ways that equips them to accept a variety of specific forms. Discontent is given retrospective self-evidence. This is
not what gives rise to or stabilizes a theorem like that of secularization, but it certainly does serve to explain its success. The suggestion of a distant event that is responsible for what is wrong in the present—a suggestion with which the secularization theorem also presents us—is (not the only, but) an additional reason why the category of secularization is in need of a critique.

Christianity arose from a self-surrender, in that it “equipped itself with a theology only when it wanted to make itself possible in a world that, strictly speaking, it denied.” Therefore, Theology itself is, in Overbeck’s significant use of the term, “nothing but a piece of the secularization [Verweltlichung; rendering worldly] of Christianity, a luxury that it permitted itself but that, like any luxury, was not to be had for nothing.” The logical consequence of this state of affairs is that theology tries to understand the self-surrender of which it is the result as the external removal by which an “objective cultural debt” [or “guilt”: Schuld] is established. When Overbeck, in his “Polemical and Peacemaking Book,” describes the most extreme case of the loss of the original world-denying attitude, in other words, the perfection of secularization, he still thinks of Christianity “as the religion of which one can make what one likes.” For Overbeck the theologian, whose subject was the end of theology, it was his theological colleagues who had driven Christianity into the absurd position of an impotent substrate; but it is as clear as daylight that they could not put up with their most radical insider’s assignment of the responsibility for this state of affairs. To that extent the secularization theorem, insofar as it can be understood on the basis of theological premises alone, is (in its position in history) something in the nature of a final theologumenon [theological dictum] intended to lay on the heirs of theology a guilty conscience about their entrance into the succession. The intransitive grammar of the talk of “transformation” allows a specific subject to be interpolated at any time, which at least blurs the logic of self-surrender. Not only does the secularization thesis explain the modern age; it explains it as the wrong turning for which the thesis itself is able to prescribe the corrective. It would be the exact reverse of the claim that the young Hegel had described as the task of the critique of religion in his time: “Despite earlier attempts, it has been reserved for our times especially to claim as man’s property, at least in theory, the treasures that have been squandered on heaven; but what age will have the strength to insist on this right and to take actual possession?”
But this idea too, that man only has to retrieve from transcendence what he has projected into it, contains the unquestioned presupposition of substantial contents that can appear now on one side of the hiatus, now on the other, and regarding whose original ownership a critique would again have to arrive at a conclusion. But these alternative assignments of original ownership provide no orientation for historical comprehension. “The only thing that has a history,” wrote Ludwig Feuerbach in 1830, “is a thing that is itself the principle of its alterations, that underlies all of its alterations as an omnipresent essential unity, and the alterations of which are therefore internal, immanent, determined by itself and identical with itself. The stone that travels from the hand of a beggar to that of a king, from America to Europe and from there to Asia, still does not have a history...”

It is not only ideas of unilateral guilt that become questionable without the support of substantialisms. The administration of justice in history, or what is looked upon as such, also becomes more difficult, harder to seize in striking images. Two diary entries, not far removed from one another in time, may at least indicate this state of affairs. On July 18, 1840, Søren Kierkegaard wrote in his journal, “One day the moment arrived at which mankind said to God, like the son to the father in the gospel: Come on, share with us, let us have the inheritance that belongs to us.” On November 18, 1846, Varnhagen von Ense noted, “In their departure from doctrine, into the world, the Christians forgot and left behind—no doubt also abandoned as too cumbersome—most of their property, and continued under the name only, which of course is easy to carry. Honest, well-intentioned people have snatched up the lost packs and bundles and carry them panting after the Christians, but the latter pay no attention to their cries, thinking they have everything that belongs to them. Rousseau, Pestalozzi, Fichte, Saint-Simon, every new theory—socialism, communism—all are only trying to restore abandoned Christianity!”

Translator’s Notes


b. See translator’s note b to part I, chapter 3.

c. Die unbewußigte Vergangenheit. This is an expression that has often been used in Germany in the last three decades to describe, in particular, what is seen as continuing failure to come to terms with the “Third Reich.”
d. *Die Legitimität der Neuzeit* (Frankfurt: Suhrkamp, 1966), p. 73. There the author defined an “ideological element” as an “interest that is foreign to theory but can be actualized in the context of the definition of the objects of theory.”


f. *Fremdentzug*: the third “characteristic feature” in the author’s model of the process of secularization, as given in part I, chapter 2.
II

Theological Absolutism and Human Self-Assertion
Among the weapons with which the legitimacy of the modern age is attacked, the idea of secularization is only one. Its effectiveness depends especially on the fact that the potential attack that it embodies need not be made as explicit as a demand for restitution. It allows all sorts of soft modulations of its claim. There are less indirect statements, harsher anathemas. In the application of the category of secularization, it is admitted, and has to be admitted consistently, that the modern age is an epoch of an original character; it is only denied that this is on its own account, by virtue of the rational authenticity it claims for itself. The plausibility so broadly conceded to the category of secularization (even by those whose attitude to its implications is disinterested) rests clearly enough on two things: It appears to do justice to the high degree of individualization of all the components in our historical consciousness; and making a moderate use of its consequences, it requires nothing like a 'return to the origin,' but merely an acknowledgment of dependence.

A more massive and direct attack is made through applying the sorts of categories that are meant to exhibit the epoch as a failure of history itself, as simple regression. Naturally the range of defenses that the elementary claim of the new secured for itself by appeal to the authority and validity of what had been before provided plenty of evidence for charges that it was a mere pagan reaction. But hardly anyone can still be inclined to join in the Renaissance's misunderstanding of itself as a reappearance of the old and thus a return to the inalienable norm. For the constitution of the modern age, it is not
the Renaissance that is exemplary; on the contrary, it is the opposition encountered by the fundamental Renaissance thesis of the unsurpassability of ancient literature, from the seventeenth century onward—indeed, even before it was learned how little the ancient world had been understood by those who promised to renew it. That the modern age is neither a renewal of the ancient world nor its continuation by other means no longer needs to be argued.

More on target than the accusation of a relapse into paganism is that of a relapse into Gnosticism. The Gnostic trauma of the early centuries of the Christian era is buried deeper than the trauma of the bloody persecutions that contributed to the glory of testimony to the new faith. He who says that the modern age “would be better entitled the Gnostic age” is reminding us of the old enemy who did not come from without but was ensconced at Christianity’s very roots, the enemy whose dangerousness resided in the evidence that it had on its side a more consistent systematization of the biblical premises. Independently of the question whether the description of the modern age as a renewal of Gnosticism is representative of the full range of the attempts to contrast it as a Christian heresy to the substance of Christianity, the Gnosticism formulation deserves some consideration as the most significant of these attempts, and the most instructive in its implications. I am not particularly interested in determining what the author in fact meant by this phrase; even if like most culture-critical commonplaces it was only dropped in passing—which, however, I do not suggest was the case—it would still have to provoke reflection in view of what it can contain. The problem with which we are occupied derives contour from it.

The thesis that I intend to argue here begins by agreeing that there is a connection between the modern age and Gnosticism, but interprets it in the reverse sense: The modern age is the second overcoming of Gnosticism. A presupposition of this thesis is that the first overcoming of Gnosticism, at the beginning of the Middle Ages, was unsuccessful. A further implication is that the medieval period, as a meaningful structure spanning centuries, had its beginning in the conflict with late-antique and early-Christian Gnosticism and that the unity of its systematic intention can be understood as deriving from the task of subduing its Gnostic opponent.
The problem left unsolved by the ancient world was the question of the origin of what is bad in the world. The idea of the cosmos, which dominated classical Greek philosophy and was the basis of the preeminence of the Platonic/Aristotelian and Stoic tradition, determined that the question of the bad would receive a secondary, systematically peripheral position. Ancient metaphysics is not even cosmodyicy, justification of the world, because the world neither needs nor is capable of justification. The cosmos is everything that can be, and the Platonic myth of the demiurge guarantees that in the world the potential of everything that could be and of every way in which it could be is exhausted by the reproduction of the Ideas. The crucial systematic juncture is at the point where, in the process of the world's formation, rational planning and blind necessity, archetype and matter collide. This juncture is bridged by a highly characteristic metaphor: Reason brings necessity under its authority "by persuasion." The Greeks' belief in the power of speech and persuasion is here projected into the cosmos; the process that decides the quality of the nature that is coming into being within the dangerous dualism of Idea and matter is perceived in accordance with the model of the political. The Platonic demiurge is not omnipotent; he is confronted with matter, which he must employ in his work as a formless substrate of unknown origin; he must rely on the power of the reason to which he has delegated his work. The danger to which the process is exposed at this point is not felt in the text. There remains a residue of undefined incoherence,
and on this rests the entire burden of the explanation of the fact that in
this world there are also bad things.

However, in the tradition of Platonism itself the systematic shift of
accent enters at this point. The fundamental Platonic equivocation,
that the world of appearance is indeed the reproduced image of Ideas
but cannot attain the perfection of the original, is resolved by Neo-
platonism in favor of the second aspect: The world appears as the
great failure to equal its ideal model. The metaphysical factor in this
failure has been prescribed since Plato; it is the *hyle* [matter]. The
difference between idea and substratum, between form and stuff, is
increased in the Neoplatonic systems; to the *theologizing* of the Idea
corresponds the *demonizing* of matter. What could at one time be
conceived of as the subjection of necessity to rational persuasion,
namely, the formation of the world, is now the confinement of the
world soul in the womb—or better: the prison—of matter. For Plotinus
the world comes into being through the fall of this world soul, which
is deceived by matter and lost in it. So the world does not come into
being through the power of the antidivine principle of matter alone.
This distinguishes Plotinus’s system from the absolute dualism of Gnos-
ticism. The soul’s fall into the world is an act of disorder, which still
presupposes a cosmos in which everything that exists occupies the
position that befits it. This order can be reestablished if the world soul
reverses the process in which it ensnared itself. All of this is still within
the realm of discourse laid out in Plato, even if it does, as it were,
exaggerate the metaphysical ‘distances’ in the original ground plan.
What is bad in the world continues to be the nonfulfillment of the
obligatory order.

Gnosticism bears a more radical metaphysical stamp. Where it em-
ishes the Neoplatonist system, it is nevertheless not a consistent ex-
tension of that system but rather a reoccupation of its positions. The
demiurge has become the principle of badness, the opponent of the
transcendent God of salvation who has nothing to do with bringing
the world into existence. The world is the labyrinth of the *pneuma*
[spirit] gone astray; as cosmos, it is the order opposed to salvation, the
system of a fall. Gnosticism has no need of theodicy since the good
God has never had anything to do with the world. Even the bringer
of salvation, sent by the good God to deliver the lost *pneuma* through
knowledge, can only appear to assume a human body in order to
deceive the demiurge’s watchmen. The downfall of the world becomes
the critical process of final salvation, the dissolution of the demiurge's illegitimate creation.

This outline, which I have given here only in order to show what is really 'Gnostic,' need not concern itself with the broad range of speculative variants. My interest is in the challenge that this system had to represent for both the ancient tradition and the Christian dogmatics formulated on the basis of that tradition. With respect to the ancient world it disputed the status of the cosmos as the embodiment of all reality that is binding in itself; with respect to Christianity it disputed the combination of creation and redemption as the work of a single God. That there could be beneficial consequences for Christianity in the separation of God the creator from God the redeemer was grasped, with the passion that can be aroused by a theological system that is consistent in itself, by Marcion, the greatest and most fascinating of the Gnostic thinkers, who was excommunicated in Rome in 144 A.D.

The fundamental thought that underlies Marcion's Gnostic dogmatics is, I think, this: A theology that declares its God to be the omnipotent creator of the world and bases its trust in this God on the omnipotence thus exhibited cannot at the same time make the destruction of this world and the salvation of men from the world into the central activity of this God. Marcion saw Christianity, in the process of its dogmatic formation, in just this dilemma, in view of the heterogeneous contents of its fundamental documents, which spoke on the one hand of creation and history and on the other hand of redemption and a Last Judgment. "One stands amazed," writes Adolf von Harnack, "before the fact that Greeks were prepared to accept all of this as sacred revelation." Marcion decided to make a radical incision. He found in Gnostic dualism the schema for the unequivocal character that he thought he could give to the Christian doctrine. The god who had created man and the world and given them a Law that could not be fully complied with, who directed the Old Testament history of the Jews in the manner of an ill-tempered tyrant, who demanded sacrifices and ceremonies, was the evil demiurge. The god who brings redemption without in the least owing it to man, whom he did not create, the "foreign god," is seen as the essence of pure, because unreasoning, love. This divinity has the right to destroy a cosmos that he did not create and to preach disobedience of a Law that he did not lay down. Deliverance turns out to be primarily man's enlightenment regarding
his fundamental and impenetrable deception by the cosmos. Gnosis must therefore be literally recognition [Erkenntnis]. But the deliverer who brings this recognition from its foreign source in transcendence can no longer be the son of the creator of the world and the ruler of its history. Marcion wanted a god who did not need to contradict himself by creating man in such a way that he would have to deliver him from his lost state; by laying down a Law, the impossibility of complying with which would make it necessary for him to absolve those who became guilty under it; by setting up a natural order, only to infringe on it with his own miracles—in a word, by producing a world that, in spite of his omnipotence, in the end allows the announced design of salvation to accrue only to a few men.

Marcion wanted to place his foreign God, free of the burden of responsibility for the world, entirely and without restriction on the side of man's salvation. The price of this was the attachment of a negative valuation to the Greek cosmic metaphysics and the destruction of the trust in the world that could have been sanctioned by the biblical conception of creation. The decisive contrast to the Neoplatonic system and to the other Gnostic systems lies in that the process of salvation is not symmetrical with the preceding history of calamity; it does not follow the path back to the reestablishment of an original situation, putting an end to its 'interruption.' Men do not return to their transcendent home from a foreign world, which in accordance with the order of things they should never have left, but rather—as the enthusiast Harnack puts it—"a magnificent foreign land is disclosed and becomes their homeland."

Marcion made clear the logic that was the problem of the whole immense literature that the patristic epoch produced. Gnosticism's systematic intention forced the Church, in the interest of consolidation, to define itself in terms of dogma. Harnack has advanced the thesis that "Catholicism was constructed in opposition to Marcion." Taken more broadly, this corresponds to the thesis that the formation of the Middle Ages can only be understood as an attempt at the definitive exclusion of the Gnostic syndrome. To retrieve the world as the creation from the negative role assigned to it by the doctrine of its demiurgic origin, and to salvage the dignity of the ancient cosmos for its role in the Christian system, was the central effort all the way from Augustine to the height of Scholasticism. Our interest here is not in the history of this effort itself, the failure of which made it necessary to overcome
Gnosticism a second time, but in the price that had to be paid in order to overcome Gnostic dualism within the medieval system, whose frailty must be understood in relation to that effort.

The persuasive power of Gnosticism for early Christianity lay in the universal foundation that it offered for the eschatological promise. The downfall of the world and judgment over it were supposed to be imminent, and concentration on the significance of this event as salvation presupposed consciousness that the world deserved destruction. Gnosticism gave the most plausible explanation of this presupposition. It was meaningless to pursue the questions of the creation of the world and the lord of its history when this episode was soon to come to an end. The fact that the expected *parousia* [presence, arrival: in this case, the 'Second Coming'] did not occur must have been full of consequences for the transformation of the original teachings. Here, however, we are interested only in one point: The world, which turned out to be more persistent than expected, attracted once again the old questions regarding its origin and its dependability and demanded a decision between trust and mistrust, an arrangement of life with the world rather than against it. It is easy to see that the eventual decision against Gnosticism was due not to the inner superiority of the dogmatic system of the Church but to the intolerability of the consciousness that this world is supposed to be the prison of the evil god and is nevertheless not destroyed by the power of the god who, according to his revelation, is determined to deliver mankind.

The original eschatological pathos directed against the *existence* of the world was transformed into a new interest in the *condition* of the world. The metaphysical interest in the Creation returned once it appeared that deliverance was accomplished less spectacularly in the underground of what is merely believed. The large number of patristic commentaries on the first book of the Bible, Genesis, is tangible evidence of this consequence. Christianity had to adjust itself to the rules of the game in the given and persisting world; it had to demonstrate its ability to discuss with the surrounding Hellenistic world the latter’s pressing questions regarding the attitude of the new doctrine to the old cosmos. The eschatological heritage, which soon aroused not the community’s hope but its fear, which motivated prayer not for the early coming of the Lord but for postponement of the end, proved to be a burden in the effort to achieve acceptance in the surrounding spiritual world. The scene is Romanesque, but not for that reason any
less instructive, when in the apocryphal Passion of Saint Paul the emperor Nero explodes with rage precisely because Paul holds out the prospect of the destruction of this world by fire; the fact that Nero orders the execution of Paul and the cremation of the Christians is understood as the consequence of this kerygma [proclamation, invocation, preaching], as giving its adherents a taste of their own medicine. 7

The settlement arrived at between Christianity and ancient metaphysics led to a new conservatism regarding the cosmos. Augustine’s turning away from Manichaean Gnosticism designates the end point of a development. The conception of creation is effective in criticism even of Neoplatonism, which had provided and would continue to provide so many elements of the new system. Augustine attacks the postulate of Porphyry that the flight of the soul from the world of bodies is the goal of its striving; he who says this, Augustine objects, must apply the same reasoning to the world soul and feel himself called upon to hasten the destruction of the world. 8 The Stoic formula that the world was created for the sake of man finds broad acceptance in the patristic literature, making it possible to forget that man’s salvation had been expected precisely from the destruction of the cosmos. The concept of providence, although foreign to the biblical world of ideas, is assimilated as theological property and made into an essential anti-Gnostic principle.

But a result of this development is that the question of the origin of what is bad in the world becomes pressing once more, and at the same time the traditional means of solving it are cut off. Plato had not said that the demiurge was omnipotent but only assured us that he had made the world as good and as worthy of himself as he was able. Necessity, the adversary whom he had found already on the scene, had set him a limit beyond which he had no power but that of mere persuasion. The biblical God of creation had been raised to an omnipotent being, and the elimination of Gnosticism required that matter be deprived of its dualistic pregivenness and be included in the unity of the creation from nothing. The elaboration of creatio ex nihilo [creation from nothing] as concreatio [cocreation (of matter and form)] was Augustine’s lasting achievement in his commentaries on Genesis. Exegesis no longer could, and no longer wanted to, overlook the fact that God, in the biblical account of creation, had expressly given each of His works the confirmation that it was good. Then where did the bad in the world come from?
The answer that Augustine gave to this question was to have the most important consequences of all the decisions that he made for the Middle Ages. With a gesture just as stirring as it was fateful, he took for man and upon man the responsibility for the burden oppressing the world. Now, in the aftermath of Gnosticism, the problem of the justification of God has become overwhelming, and that justification is accomplished at the expense of man, to whom a new concept of freedom is ascribed expressly in order to let the whole of an enormous responsibility and guilt be imputed to it.

Five years after turning away from Manichaeanism and one year after his baptism, Augustine wrote the first book of his De libero arbitrio [On Free Will]. But the thematic question of his treatise is not the freedom of the will as an anthropological and moral quality but rather as the condition under which it was possible for the just God to punish man, on account of his failings, with the bad things in the world. The premise of human freedom allows Augustine to interpret the deficiencies of the world not as an original failure of the construction of the world for man’s benefit but rather as the result of God’s subsequent intervention in His work in order to put nature in the service of justice with respect to man.

The guide to his solution of the problem of the origin of the bad (unde malum?) had already been given to Augustine by the linguistic fact that ancient philosophy had not distinguished in its language between the wickedness that man perpetrates and the bad things that he encounters. That these bad things are the world’s reflex to his own wickedness was thus already implicit in the formulation of the question. The problematic of freedom is secondary; it is promoted from outside inward, the train of thought being that the bad things in the cosmos can only be punishments if man can really be made responsible for his actions. The justice of the deus iustus [just God] is preserved as a premise, not proved as a conclusion. Belief in a just God gives access to the knowledge of human freedom and the solution to the metaphysical question of the origin of the bad; Augustine’s reasoning here corresponds to his schema of the dependence of knowledge on premises accepted in faith.

But is not freedom, if it is made responsible in this way for the bad things in the world, itself bad in its turn? Here is the gap in the argumentation through which the Gnostic demiurge threatens to force his way in again. Augustine summons up dialectic and rhetoric in
order to close this gap; the difficulties in answering this question were evidently responsible for the delay of seven years in the composition of the second and third books of the treatise on freedom. Must not even those who lead bad lives assent to freedom, without which they could not ever be good? Even he who is wicked wants at least to be able to be good; thus even for him, freedom is something that he does not wish did not exist. Freedom confirms the goodness of God and His work in every case because it wills itself; indeed it wills itself independently of its moral quality. But falling back upon the reflexive structure of the will, which wills not only this or that but primarily itself as the condition of its concrete acts of choice, only moves the problem a step further back: The will that wills itself is only free if it can also not will itself. Here rationality breaks down; reasons cannot be given for self-annihilation: "Scir

Can man bear the burden of being responsible for the cosmos, that is, for seeing to it that God's design for His work does not miscarry? This conception reminds one remotely of Nietzsche's attempt, with the idea of "eternal recurrence," to make man sense the enormity of his responsibility for that which always, again and again, will be the way it was once. Augustine has none of this pathos of human responsibility for the world. The burden placed on man is for him only a side effect of the unburdening of his God. But Augustine would certainly never have been a Manichaean if the bad parts of the world had appeared to him merely as disruptions of the great order, as absences of beauty in an otherwise unclouded picture. In order to deserve as punishment the world as it had been perceived and evaluated by the Manichaeans, the sins of man, which take over the position of the wickedness of the Gnostic demiurge, had to be great, all too great. Even in the remorseful examination of his past life in the Confessions, Augustine found no sin that could have been measured on this scale. The balance between the condition of the world and the guilt of mankind, which he had drawn up in his early philosophy of freedom, caused him to become the theologian of the uniquely great original guilt of mankind and of its mythical inheritance.

In the very text that had convinced Marcion of the wickedness of the Old Testament lawgiver, in Paul's Epistle to the Romans, Augustine found the theological means by which to formulate the dogma of man's universal guilt and to conceive of man's 'justification' [in the
theological sense of the term] as an absolution that is granted by way of an act of grace and that does not remove from the world the consequences of that guilt. There he also found the doctrine of absolute predestination, which restricted this grace to the small number of the chosen and thus left the continuing guilt of the all too many to explain the lasting corruption of the world.

The Gnostic dualism had been eliminated as far as the metaphysical world principle was concerned, but it lived on in the bosom of mankind and its history as the absolute separation of the elect from the rejected. This crudity, devised for the justification of God, had its unspoken irony in the fact that the absolute principle’s responsibility for cosmic corruption—the elimination of which had been the point of the whole exercise—was after all reintroduced indirectly through the idea of predestination. For this sin, with its universal consequences, in the end only the original ground of everything could be held responsible—all that the massa damnata [condemned mass] had to do was to suffer the consequences.

For our present purposes the essential fact is that the later Augustine, the theologian of original sin and predestination, was to become the most important source and authority for the theological speculation of the later Middle Ages. The Gnosticism that had not been overcome but only transposed returns in the form of the ‘hidden God’ and His inconceivable absolute sovereignty. It was with this that the self-assertion of reason had to deal.

In many ways the Scholasticism of the Middle Ages travels Augustine’s path over again. Its attempt to hold the God of creation and the God of salvation together in one system rests, in the full range of its variants, on the ground plan of De libero arbitrio. And even the opposition of humanism holds to the precedent of Augustine’s spiritual biography as given in the Confessions—only it travels the path in the opposite direction: Petrarch, the reader of Augustine, is led back to Cicero and from him to Plato.

Gnosticism had not destroyed the ancient cosmos; its order survived but (nor is this the only case in which ‘order’ as an overriding value has done this) emerged as terror, from which the only way out was a flight into transcendence and the final destruction of the “cellula creatoris” [“cell of the creator”: Marcion]. The cosmos had not only changed its prescriptive evaluation, it had also lost the quality that was most important for its reliability—its eternity. On account of the
prescribed remedy of flight—the offer of deliverance against the world—
schemes to alter reality in man’s favor did not constitute a live alternative. Augustine’s momentous turning from Gnosticism to human freedom preserves ‘order’ for the Middle Ages and prepares the way for the return of Aristotle at the height of Scholasticism. The price of this preservation of the cosmos was not only the guilt that man was
supposed to assign himself for the condition in which he found the world but also the resignation that his responsibility for that condition imposed upon him: renunciation of any attempt to change for his benefit, through action, a reality for the adversity of which he had himself to blame. The senselessness of self-assertion was the heritage of the Gnosticism which was not overcome but only ‘translated.”

Translator’s Note

... des Übels. The usual English-language formula for this famous problem is “the problem of evil,” but the latter term is so exclusively a predicate of the will, of human action and its results, that this formula prevents us from appreciating the broader issue of the origin of “badness,” of what is simply not good, for whatever reason—the issue that, as the author goes on to show, is crucial both for Gnosticism and for Augustine. Augustine’s term, malum, does not prejudice the answer as our terminology (no doubt largely owing to his influence) does.
The second overcoming of Gnosticism, at the end of the Middle Ages, is accomplished under 'aggravated circumstances.' It is no longer able to save the cosmos of Scholasticism and is dominated by doubt whether the world could even originally have been created for man's benefit. The escape into transcendence, as the possibility that is held out to man and has only to be grasped, has lost its human relevance precisely on account of the absolutism of the decisions of divine grace, that is, on account of the dependence of the individual's salvation on a faith that he can no longer choose to have. This changed set of presuppositions brings into the horizon of possible intentions the alternative of the immanent self-assertion of reason through the mastery and alteration of reality.

A 'disappearance of order' ['Ordnungsschwund'], causing doubt regarding the existence of a structure of reality that can be related to man, is the presupposition of a general conception of human activity that no longer perceives in given states of affairs the binding character of the ancient and medieval cosmos, and consequently holds them to be, in principle, at man's disposal. In turn, the 'disappearance of order' is bound up with a new concept of human freedom. But the burden that devolves on man this time is of a different nature from the one laid on him by Augustine: It is responsibility for the condition of the world as a challenge relating to the future, not as an original offense in the past. The revalued cosmos of Gnosticism had preserved the stability of its ancient predecessors; it could only be destroyed from
outside, by the superior strength of the transcendent principle, or ‘overcome’ by a move toward the outside. Human hope had its vanishing point beyond the world. The reality that at the end of the Middle Ages comes to be seen as ‘fact’ (factum: something done or made, i.e., a contingent state of affairs) provokes the will to oppose it and concentrates the will’s attention upon it. The bad aspects of the world no longer appear as metaphysical marks of the quality of the world principle or punishing justice but rather as marks of the ‘facticity’ of reality. In it man appears not to be ‘taken into consideration,’ and the indifference of the self-preservation of everything in existence lets the bad appear to him as whatever opposes his own will to live. The Middle Ages came to an end when within their spiritual system creation as ‘providence’ ceased to be credible to man and the burden of self-assertion was therefore laid upon him.

Thus “self-assertion” here does not mean the naked biological and economic preservation of the human organism by the means naturally available to it. It means an existential program, according to which man posits his existence in a historical situation and indicates to himself how he is going to deal with the reality surrounding him and what use he will make of the possibilities that are open to him. In man’s understanding of the world, and in the expectations, assessments, and significations that are bound up with that understanding, a fundamental change takes place, which represents not a summation of facts of experience but rather a summary of things taken for granted in advance [Präsumptionen], which in their turn determine the horizon of possible experiences and their interpretation and embody the ‘a priori’ of the world’s significance for man.

Self-preservation is a biological characteristic, and insofar as man stepped onto the world’s stage an imperfectly equipped and adapted organism, he had need from the start of auxiliary means, implements, and technical procedures for securing the satisfaction of his elementary needs. But in relation to this aspect of human nature the means of self-preservation, allowing for small variations, were constant for long periods. It seems to be the case that over long stretches of his history, man has not seen his situation in the world as one of fundamental want and physical need. Rather the picture that he has made of himself exhibits the features of a being that is well provided for by nature but fails, itself, in the distribution of her goods. The problem of justice is thus predominantly posed as that of the measures taken in distri-
bution. It is easy to see that in the framework of this idea, man's technical skills and accomplishments can only have the function of supplementing and assisting nature, of executing her ends. The destruction of trust in an ordered structure of the world oriented to man—whatever motives were operative in that destruction—had to mean an eminently pragmatic change in man's understanding of and relation to the world. If the 'disappearance of order' that was brought about by the disintegration of the Middle Ages pulled self-preservation out of its biologically determined normality, where it went unnoticed, and turned it into the 'theme' of human self-comprehension, then it is also the case that the modern stage of human technicity can no longer be grasped entirely in terms of the syndrome of the anthropological structure of wants. The growth of the potency of technique is not only the continuation—not even the acceleration—of a process that runs through the whole history of humanity. On the contrary, the quantitative increase in technical achievements and expedients can only be grasped in relation to a new quality of consciousness. In the growth of the technical sphere there lives, consciously facing an alienated reality, a will to extort from this reality a new 'humanity.' Man keeps in view the deficiency of nature as the motive of his activity as a whole.

After the kind of delay characteristic of the philosophical explication of historically effective motives in consciousness, Nietzsche formulated the situation of man in the 'disappearance of order,' abandoned by natural providence and made responsible for himself, but he did so not in order to express disappointment at the loss of the cosmos but rather to celebrate the triumph of man awakened to himself from the cosmic illusion and to assure him of his power over his future. The man who conceives not only of nature but also of himself as a fact at his disposal has traversed only the first stage of his self-enhancement and self-surpassing in the self-assertion of his modern history. The destruction of trust in the world made him for the first time a creatively active being, freed him from a disastrous lulling of his activity.

For Nietzsche every form of teleology is only a derivative of theology. The supposed centering of the world's meaning on man appears to him to be equivalent to the 'providence' that misleads man into concurring with the divine approval of everything at the creation. Asking nature for information regarding man's destiny and fullness of power had led to the post-Copernican abasement of his self-consciousness.
“Has the self-belittlement of man, his will to self-belittlement, not progressed irresistibly since Copernicus? Alas, the faith in the dignity and uniqueness of man, in his irreplaceability in the great chain of being, is a thing of the past. . . . Since Copernicus, man seems to have got himself on an inclined plane—now he is slipping faster and faster away from the center into—what? into nothingness? into a ‘penetrating sense of his nothingness’? Nietzsche rightly sees in the Copernican reform an attempt to save the cosmos once again, or to reestablish it; wrongly, he suggests that in its intention and primary effect this attempt was carried through at the cost of burdening mankind.

But that is not yet the full point of his critique. The induced effect on consciousness of a scientific proposition rests for him on the “overrating of truth” as science, which makes man’s understanding of himself dependent on the picture of reality that he can obtain. “How can anyone presume to speak of a destiny of the earth? . . . Mankind must be able to stand without leaning on anything like that. . . .” The assumption that if not reality itself, then at least the truth about it must be useful and beneficial to man, appears to Nietzsche as the last, hard-to-recognize remainder of that teleological metaphysics, as a transformation of the “absurd faith in the way of the world,” the “most crippling belief for hand and reason that there has ever been.” Modern natural science did indeed arise as part of a critique of the principle of the anthropocentric teleology of nature, but for Nietzsche this does not exclude the possibility that in regard to the human relevance of truth that it presupposes, and on which respect for natural science is grounded, it has held fast to the teleological premise. Precisely by Nietzsche’s enabling us to see how even the great instrument of self-assertion, modern science, stands under a residuum of the conditions whose acceptance in the ancient world and the Middle Ages had kept the will to self-assertion latent, the inner logic of the connection between self-assertion and the ‘disappearance of order’ becomes clear with a unique sharpness.

The final overcoming of the Gnostic inheritance cannot restore the cosmos because the function of the idea of the cosmos is reassurance about the world and in the world, because it has as its correlate the theoretical ideal and the theoretical leisure that had been associated with the idea of the cosmos from the time of the Greeks. The world cannot be made ‘good’ in itself once more by a mere change of sign because it would then cease to be man’s irritation and provocation.
The later Nietzsche sought, through the idea of eternal recurrence, to change the function of the idea of the cosmos: The cycles of the world process were not to repeat the model of a prescriptive lawfulness in nature, as in the Stoic cosmology, but rather to raise the sum total of the consequences of human action to the role of the ineluctable lawfulness of the world and thus to charge man with absolute responsibility for the world. Theory, which contemplates the world, was to become functionless compared to the praxis that changes it. From this point of view eternal recurrence is the dissolution of self-assertion, as a still dualistic element, in the identity of human will with natural law, which makes possible the “highest evolution of man as the highest evolution of the world.” The pregivenness of nature is reduced to a minimum—to the most external, mechanistic contingency, as the “conception by which to gain the highest power”—to the substrate of what Nietzsche calls the “world construction.”

The self-assertion of reason as the epitome of the motives constituting the epoch is reduced by Nietzsche to an episode of a merely preliminary character. Natural science and the historical attitude, we are told, have exhausted their usefulness in overcoming the Middle Ages. They were still weapons that the Middle Ages had sharpened against itself, useful as means for winning a new freedom, but not themselves as meaning with which to fill that freedom. The power that the instrument has gained over the will, which it was supposed to serve, must be broken in a new turning. Like knowledge against the Middle Ages, art has to be mobilized against science. It seems to him that against historical writing and natural sciences “immense artistic powers are called for.” The function of philosophy changes; it no longer has to establish the possibility of science and to give birth to new sciences but rather “to consider the problem, to what extent science may grow: It has to determine the value!” It finds in art the power with which “to break the unrestricted drive for knowledge,” not to let “the reins of science” escape from its hands.

This whole theory interests us here only for the implications that it allows to become visible in a retrospective view of the foundation of the modern age. It was not enough for Nietzsche to legitimize resistance against a reality no longer characterized by consideration for man; man’s right then remains dependent on reality as he finds it or believes he finds it. His right should consist in imputing the least possible binding force to reality, so as to make room for his own
works. "Not in knowing but in creating lies our health!... If the universe has no concern for us, then we want the right to scorn it."

One might think that this formula defines exactly the self-consciousness of an age that has given itself up to its technical achievements. But Nietzsche ignored this possible interpretation of his basic thought. There is no talk of technique in his writings. Technique retains the posture of self-assertion, with its dependence on theoretical truth about nature. It derives from a teleology that compensates obedience to the laws of nature with mastery over nature. Technique may have seemed to Nietzsche to be the epitome of the surrogates for the lost natural teleology benefiting man. That he passes it over in silence, that he ignores the manifest possibility of implanting in it some of his pathos of human pretension, is more instructive than if 'interpretations' could be cited.

That technique also could surpass the character of pure self-assertion, that it could not only disguise the element of need but even eliminate it in the immanence of becoming an end in itself, that it could break out of competition with nature's accomplishments and present itself as authentic reality, was still beyond the horizon of experience at the time. Hence the absolutism of art. "Only as an aesthetic phenomenon is the world any longer justified for eternity..."

The method employed here, that of viewing the problematic of the legitimacy of the origin of the modern age from such distant vantage points, may seem questionable. That is a result of the difficulty we are faced with on account of the difference between the historical process and its expression in documents. As Karl Marx noted in the preparatory work for his dissertation on Democritus and Epicurus, we have to distinguish "the steady forward motion of the mole of real philosophical knowledge from the talkative, exoteric, variously gesticulating phenomenological consciousness of its subject."

Gnosticism had made acute the problem of the quality of the world for man and, through the contradiction that the patristic literature and the Middle Ages opposed to it, made cosmodyicy conditional on theodicy. The modern age attempted to strike out this condition by basing its anthropodicy on the world's lack of consideration of man, on its inhuman order. But it remained for Nietzsche to make visible the presuppositions of this justification of man by disputing them. We are concerned here only with this effect of making visible, not the dogmatics employed in achieving it—that is, with the optics, not the analysis.
The mole threw up his first hill at this point, enabling us to trace his underground route. The nature of history does not allow us to practice historical microscopy; we have to look where the structures of the process manifest themselves of their own accord.

The modern age has regarded self-preservation (conservatio sui) as a fundamental category of everything in existence and has found this borne out all the way from the principle of inertia in physics to the biological structure of drives and the laws of state building. Nietzsche sees in self-preservation only the metaphor of a rational category, the attempt to conjure up an order from (and in spite of) disorder. In accordance with the precept, “Beware of superfluous teleological principles!” he recommends that we examine whether self-preservation can be assumed to be a fundamental drive of living things. “A living thing seeks above all to discharge its strength — life itself is will to power; self-preservation is only one of the indirect and most frequent results.” Self-preservation for him can only be understood as a reaction to a reality that necessitates it; it presupposes that the quality of this reality is an endangering one. But the model of a relation to reality that Nietzsche wants is not supposed to depend upon a quality of reality. “There is neither order nor disorder in nature,” he wrote as early as 1868 in an essay on the problem of teleology since Kant. The replacement of self-preservation by the “will to power” is only the reversal of the thought that reality is indifferent with regard to its individual members—the result is the doctrine that life must be indifferent with regard to reality.

The elimination of the premise that the world has a particular quality for man that in effect prescribes his basic mode of behavior makes fully visible for the first time what it could mean to take things for granted in advance in a world concept. Nietzsche’s philosophy is among the approaches to a kind of thinking that removes problems by specifying the conditions under which they no longer arise. But the coup de main of putting the will to power in place of new answers, of ending the history of reoccupations by striking out the very schema whose formal constancy they presuppose, has only illuminated better what it was meant to destroy. To give oneself the history that sets one free of history, or that only endorses what is present without putting it in question, would have meant, so to speak, to secede from history and throw off its burden—which is often dreamed of, also, for instance, in the form of the pseudonymous ‘Being’ whose advent is supposed to expose an entire history as forgetfulness of it.
The categories that Descartes provided for the modern age to use in understanding itself, which make him the favored thinker of every account of its origin, are those of methodical doubt and an absolute beginning founded only on itself. Methodical doubt is a cautious procedure; it is meant to be distinguished from the dogmatic negation that already knows what should ultimately be rejected, and must demonstrate that; instead, it restricts itself to regarding all judgments as prejudiced until they have been proved otherwise. This procedure is supposed to be usable by anyone and at any time; the new judgments that it produces exclude the very hypotheses that would enable us to understand why this undertaking is considered necessary and is carried out at a particular point in history.

An absolute beginning in time is itself, in its intention, timeless. Reason's interpretation of itself as the faculty of an absolute beginning excludes the possibility that there could appear even so much as indications of a situation that calls for reason's application now, no sooner and no later. Internal necessity forbids external necessities from playing any role here. Reason, as the ultimate authority, has no need of a legitimation for setting itself in motion; but it also denies itself any reply to the question why it was ever out of operation and in need of a beginning. What God did before the Creation and why He decided on it—where reason was before Descartes and what made it prefer this medium and this point in time—these are questions that cannot be asked in the context of the system constituted by their basic concepts.
The absolute beginning that inaugurates history forbids itself to have a history—and that means to be not only an original positing but also the answer to a crisis. History exists for Descartes only as the totality of prejudices, or for Bacon as the system of idols, which now find their end, without this end's becoming comprehensible as a consequence of their earlier acceptance, their fall from power as a consequence of the unbearablebility of their rule. The characteristic features of self-assertion are concealed so as not to conflict with the evidence of a spontaneous generation; the crisis disappears into the obscurity of a past that cannot have been anything more than a background for the new light.

This self-interpretation directly provokes the countermove of a massive historicism, to which one does an injustice if one excludes it from the rationality of the modern age. The idea of an absolute beginning is in its turn—even if it sees itself as entirely in the service of the system of rationality ultimately to be erected—no more rational than any creatio ex nihilo. The restitution of the disavowed 'historicity' is in itself not yet a movement against the Enlightenment. But the Romantic rehabilitation of the Middle Ages shows the potential that is latent in this process. The historicization of the beginning of the modern age is transformed into a gesture of reproach, with which the history of its desire not to be history is restored to the epoch, and its derivation is (as it were) imposed upon it as an obligation. The refutation of its claim to an absolute beginning goes on to cast doubt on its historical legitimacy, referring always to the claims in its self-definition and making the suppression of historical dependence an index of the sort of questionable consciousness that glosses over its unjust contents. Historicism seemed to provide an admission of neglected legal titles, which had to be feared by the epoch's understanding of itself as exhibited in the Enlightenment. Thus the apologia for the Middle Ages at once becomes the construction of a legacy, whose open neglect can only be explained by secret benefit. The historiographical recovery of the Middle Ages, which had originally been a triumph of the historiographical intellect over the distance of historical alienation, succumbs almost as a result of its own internal logic to the service of the category of secularization.

An important additional element is the narrowing of the thematic scope of historical study to the 'great centuries,' the stable substance of 'classical' formations. This selectiveness had been raised to the status
of an obvious, even exemplary, procedure in the study of the ancient world, where the idealization of a humanist canon had bracketed out whole realms of phenomena that did not belong in the picture: those of crisis, disintegration, the disappearance of supposedly timeless ideals. For this procedure, whose practitioners were satisfied to enjoy the view from one summit to another, the break between the epochs was of course unintelligible and took on the character of either pure catastrophe or pure willfulness. The beginning of the modern age, basing itself on its own internal evidence, seemed to destroy in barbaric fashion a meaningful historical context and to spring from an act of pure self-aggrandizement.

The revision of this historical picture has been under way for a long time. The focus of research interest has shifted more and more away from the markedly 'classical' phases of historical formations toward the zones of transition, deformation, and new formation. This holds for the ancient world just as much as for the Middle Ages. One may wish to speak of the low points of the historical process—but it is here that structures can be grasped that make manifest the historical movement as such. The process that is supposed to become thematic under the rubric of the "disappearance of inherent purposes" [Telosschwund] and to render the onset of the modern age intelligible as 'self-assertion' is initially questionable in regard to its specificity for precisely this and only this context. The end of the ancient world seems to be just as capable of interpretation by means of this category as is the crisis of the Middle Ages. This is why it was necessary to analyze the 'procedure' whose application to the final, Gnostic phase of the ancient world furnished the ground plan of the Middle Ages. But the difference between the *aporias* [difficulties] that were to be eliminated and the intensity of the questioning that had to be faced requires more clarification if we are to remove the objection that asks, Why didn't the crisis of the ancient world find its correlate in self-assertion?

Hellenism, with its scientific and technical achievements, can appear to be a sort of 'impeded modern age,' which in its very onset was thrown back by Christianity's breaking in and only got going again with the rediscovery of its texts by the Renaissance. The modern age would then be the normalization of a disturbed situation, taking up once again the interrupted continuity of history in its immanent logical sequence. The Middle Ages would again be a senseless and merely annoying intervening period in the historical process. If I turn a part
of my efforts to the refutation of this thesis, it is not because this reasoning in itself alarms me but because it conceals the singular situation of provocation and self-assertion from which springs the incomparable energy of the rise of the modern age.

I have spoken so far of Gnosticism as the final form of the ancient metaphysical system, in opposition to which patristic dogma consolidated itself. However, Gnostic speculation is not an expression of a disappearance of order but rather of the radical revaluation of an order that was in the process of petrifying. But the patristic polemic, which wants to use the positive cosmos of ancient metaphysics against the demonized cosmos of Gnosticism, nevertheless insists on a genealogy that derives the Gnostic cosmos from the disintegrating classical cosmology of the Greeks. Here one should not overlook that the dependence of the patristic version of ancient cosmology on Stoicism and its emphasis on the cosmos also involved the use of its polemical formulas, especially those aimed at Epicurus. But the arguments for these formulas had to be found, and they are instructive.

Irenaeus of Lyons traces the Gnostic dualism back to the antithesis of atom and empty space in the philosophy of Democritus and Epicurus. The world as it appears is for both Gnostics and atomists something other than what truly exists; but—and this is the distinction Irenaeus passes over—for the atomists it is composed of what truly exists, whereas the Gnostic pleroma [fullness] draws all the predicates of existence to itself and allows the world to be degraded to a mere appearance of nothing, to the demiurge's deception. More important is the asserted equivalence of the transcendent god of Gnosticism and the extramundane gods of Epicurus; what they have in common is that they bear no responsibility and care for the world—they do not even sit in judgment and dispense justice for men's deeds. A century later Tertullian named Epicurus as the grandfather (patriarcha) of Marcion's senseless and motionless god (immobilis et stupens deus) and treated that god as contemptible on account of his incapacity for wrath and revenge. The contradiction is evident: the Stoic God of cosmic providence and the Old Testament God of wrath and judgment cannot both be brought into play against the Gnostic god of salvation at the same time.

The instructive value of this polemic in connection with our fundamental questions only becomes evident when we set alongside it a comparison between Epicurus's teachings and the late-medieval conception of God's sovereign freedom to do what He pleases [Willkür-
Leibniz pronounced this equivalence. In his exchange of letters with Samuel Clarke in the years 1715 and 1716, Leibniz opposes the connection between Newton's physics and voluntaristic theology, which seemed to him to be a necessary consequence of the assumption of absolute space and absolute time. Clarke, basing himself on this position, had rejected the application of the principle of sufficient reason to the explanation of nature. The act of creation was supposed to remain the original fact, which could not be further inquired into and rationally grounded. Leibniz entitles this the “décret absolument absolu” [the absolutely absolute decree]. Absolute space had for him precisely the characteristics that exclude a rational origin of reality; there are in it no meaningful differences of quantity and of place, so that it is an aggregate of rational undecidabilities. In the Creation there is for Leibniz only one act of mere power, the creation of matter as such. He who reduces the concept of God to omnipotence and the will that does what it pleases is logically compelled to see in matter the essence of creation and to reduce everything to matter. Theological absolutism denied man any insight into the rationality of the Creation, which is exactly what Leibniz wanted to open up in accordance with the principle of sufficient reason and by means of the idea of the God Who practices mathematics. That the world is a coherent order becomes, on Clarke's view, a mere assertion, without consequences for human thought. Order is the side of reality that is turned away from us: “For in truth and strictness, with regard to God, there are no disorders...”

The essence of the dispute between Leibniz and Clarke is the question of how the reality of nature presents itself to man: whether it is dependable and serviceable to him or whether he is merely expected to acknowledge its orderly character without having it confirmed. Leibniz insists that the very order that human reason claims to find in reality embodies the qualities that divine reason had to give to its work. The controversy here is no longer about the problem of the arrangement of the world to suit the requirements of human life but rather about the question of the effectiveness of the human reason that has to assert its own laws as the laws of the world. The rational dependability of the world, the condition of the possibility of all theory, is the remnant of teleological order that Leibniz defends. On the other hand, absolute will, as a metaphysical principle, is the equivalent of the assertion that the dependability of the world cannot be proved and is therefore a mere fact, always subject to revocation at any time.
The high point of the dispute between Leibniz and Clarke is reached when Leibniz asserts the complete equivalence of the system of absolute will and the system of absolute accident, of voluntarism and atomism: “La volonté sans raison seroit le hazard des Epicuriens” [Will without reason would be the chance of the Epicureans]. The universe as interpreted by atomism is ruled by the principle of the identity of indiscernibles since the atoms and empty space are defined by the fact that they allow no rational action whatsoever but place reason in a position where all possibilities are indifferent, so that chance becomes the sole principle of reality. The nominalistic God is a superfluous God, Who can be replaced by the accident of the divergence of atoms from their parallel paths, and of the resulting vortices that make up the world. The concept of an absolute will is internally contradictory and consequently a chimera, a fiction.

We need not be concerned here that since the time of the Stoa the accusation of “Epicureanism” had become a polemical blow below the belt; here the term is in fact very accurately applied. Just as little do we need to concern ourselves that the position Leibniz constructed in opposing Newton did not save the metaphysics of a world order guaranteed by divine reason. The path forward from this point was determined not by the principle of this critique but rather by one of its side effects, the phenomenalizing of space and time. The instructive thing for us is not the antithesis between Leibniz and Clarke, as such, but rather the principle, employed in Leibniz’s analysis, of the equivalence of nominalistic and mechanistic explanations of the world, a principle that gives us the key to the reoccupation that was effected in the replacement of the late-medieval by the early-modern type of explanation of nature.

One of the essential, though usually underestimated, phenomena of the beginning of the modern age was the attempt to reappropriate Democritus’s atomistic philosophy of nature in the form it had been given by Epicurus and Lucretius. This renewal of ancient atomism prepared the way for the new ideas of matter and motion. But in spite of this function, the process is still understood merely as a piece of ‘Renaissance’ conditioned by the literary rediscovery of Lucretius in 1417, on account of which it has come to be regarded as a historical datum requiring no further explanation. But the mere demonstration of the presence or reappearance of a source does not explain anything. Renaissances have their genetic logic, and only the exhibition of that
logic satisfies the demands of historical understanding. The observation of Leibniz that we have cited, which he made in his argument with Clarke, discloses the structural connection between nominalism as a late-medieval phenomenon and atomism as an early modern one. Both positions regard the origin of the world as an event inaccessible to human rationality. Epicurus had assumed an uncaused divergence of atoms from their parallel straight-line paths in infinite space as the origin from which developed the vortices that gave rise to his worlds; nominalism could provide for all questions regarding the reason and purpose of the Creation only the Augustinian *Quia voluit* [Because God willed it].

But the systematic interchangeability of the two theses, which Leibniz noted, does not mean that they must be regarded as equivalent in their historical function as well. The primacy of the divine will, which puts rejection of the question in place of explanation, was meant to increase the binding force of the given over men; the basic mechanistic thesis, on the other hand, did indeed remove the origin of the world from the realm of what can be grasped, but it had no 'conservative' implications for the relation of man to nature. On the contrary, it established the material substratum of the world as something meaningless in itself, and consequently as a potentiality open to man’s rational disposition. The reoccupation that took place between the absolutes will and matter defined the world as that which is precisely not pregiven, as a problem rather than as an established state of affairs. But the question why atomism could have this significance as the successor of voluntarism, but not in its original situation in the ancient world, leads us to a recognition of the irreversibility of this reoccupation: only after nominalism had executed a sufficiently radical destruction of the humanly relevant and dependable cosmos could the mechanistic philosophy of nature by adopted as the tool of self-assertion.

This prerequisite was not present at the origin of ancient atomism. Epicurus’s philosophy is essentially a therapy meant to lessen the human uneasiness caused by natural phenomena, or, more exactly, by the inherited explanations of those phenomena. Nominalism is a system meant to make man extremely uneasy about the world—with the intention, of course, of making him seek salvation outside the world, driving him to despair of his this-worldly possibilities and thus to the unconditional capitulation of the act of faith, which, however, he is again not capable of accomplishing by his own power. After the
classical philosophy of the Greeks, the postulate of ataraxia was still possible, whereas after the theological absolutism of the Middle Ages, self-assertion had to be the implication of any philosophical system. Can these distinctions be substantiated by a comparative analysis of ancient atomism and medieval nominalism? This would lend profile to the thesis that a historical ‘answer’ like that of the modern age could not have been given to Hellenism, but only later, to nominalism. For this purpose the comparable doctrines on each side will have to be defined more accurately in accordance with their functions within each system.

For Epicurus's gods and for the God of nominalism, there is no *ratio creandi* [reason for creation], no motive for bringing a world into existence. From this unambiguous shared thesis, however, radically different conclusions are drawn. For Epicurus it follows that no creation whatsoever can be assumed, since no *ratio* [reason] can be given for the act of creation. This is at any rate the direction taken by Lucretius in attempting to make the argument plausible: He has in mind, as a model of the rational production of a world, the Platonic myth of the demiurge with his prototypical Ideas, and in this connection poses the question where in the Epicurean system of empty space and atoms the gods could have found a model, accessible to intuition, of a world to create? The logical circle, according to which a world must have already been present from which to read off what could be created—a circle that is also present, though hidden, in the Platonic myth of the demiurge—excludes the idea of creation from the ranks of the rational principles of explanation. The origin of the world is left to chance—though to a chance that nevertheless contains its own guarantees, as will be shown.

The nominalists derive from the same initial thesis a conclusion that is extremely positive for their theological system: Because the Creation is uncaused, because it does not require a preexisting model for mere demiurgic implementation, it demonstrates the radicalness of the groundless will that is the ground of everything; it is the maximum of causality and the first in the sequence of pure acts of grace that constitutes the real theme of theology. God is not, like the Platonic demiurge, the executor of a world plan that is consistent in itself and makes its own uniqueness manifest, and whose ideal status means precisely that any rational being must recognize in it (and accordingly put into effect) the necessary characteristics of a world as such, so that productive and theoretical insight converge on this model. The nöm-
nalistic God stands with His work in the widest horizon of noncon­tradictory possibilities, within which He chooses and rejects without enabling the result to exhibit in any way the criteria governing His volition. Much of what He could create, He does not choose to create—for nominalistic thought, that is the difference between the origin of the world and a process of natural causality, from which the whole of the possible effect always results.8

This conception of creation is not an incidental piece of doctrine of the Nominalist school but is connected to its philosophical center, to the denial of universals and the assertion of the priority of reality over concepts. It is easy to show this since a realist doctrine regarding concepts, which holds that they possess a binding force as exemplary entities independent of things, is demonstrably incompatible with the strict concept of a creatio ex nihilo. The universale ante rem [universal having an existence prior to things] as that which can be and is repeated at will in concrete things makes sense only so long as the universe represents a finite embodiment of what is possible. The concept of the potentia absoluta [complete, absolute power], however, implies that there is no limit to what is possible, and this renders meaningless the interpretation of the individual as the repetition of a universal. Creation is now supposed to mean that every entity comes into existence from nothing, in such a way that even in respect to its conceptual definition it was not there previously. Only in this way can the possibility be excluded, as William of Ockham argues, that God might restrict His own power by creating a particular entity, because any aspect of other concrete creations that happened to be identical in species with the first could only be imitation and repetition, not creation. Absolute power is original in every one of its creations. It does not recognize the Aristotelian distinction between definite essential form and individuality but produces only what is essentially unique.9

But these very riches of creative abundance put human reason in the embarrassing position of having to set its economy of classificatory concepts over against the authentic reality as an auxiliary construct that is just as indispensable as it is inappropriate—in the position, that is, of being unable from the very beginning to interpret its theoretical mastery of reality as anything but self-assertion. Thus the denial of universals directly excludes the possibility that God's restriction of Himself to His potentia ordinata [ordered, or ordained, power] in nature too could become comprehensible for the benefit of man and his
reason. Divine spirit and human spirit, creative and cognitive principles, operate as though without taking each other into account. The gratuitousness of the Creation implies that it can no longer be expected to exhibit any adaptation to the needs of reason. Rather than helping man to reconstruct an order given in nature, the principle of economy (Ockham’s razor) helps him to reduce nature forcibly to an order imputed to it by man. God is not economical; He does many things lavishly that could have been done simply and sparingly: “Quia vult, nec est alia causa quae renda” [The reason is that He willed it, and no other reason is to be expected].

Ockham’s distinction between the potentia absoluta and the potentia ordinata does not alleviate the situation for rationality because although it does imply that once chosen, the ordo [order] will be observed, it does not provide any access to the contents of the chosen order. The potentia ordinata is directly relevant only to the path of salvation, not to the path of knowledge. God’s ‘will’ is supposed to be accessible only through ‘revelation’—faith in salvation is not supposed to be translatable into or exchangeable for faith in the world.

While this may not be a metaphysical dualism of the Gnostic type, it is its practical equivalent ad hominem: the only dependable and trustworthy God is the God of salvation, Who has restricted Himself to His potentia ordinata, like a partially constitutional monarch, but Who, through predestination, still Withholds from man’s knowledge the range over which He chooses to be dependant. It is precisely this restriction to those who are chosen that distinguishes the pragmatic dualism of the late Middle Ages from the Gnostic dualism of late antiquity because liberation from the cosmos now is no longer a divine offering open to all men and authenticated by the possession of knowledge. This time there is no consciousness of conditions under which the world could lose its significance for man. The groundlessness of the Creation is indeed dogmatized as requiring an act of unconditional submission, but submission as such is still not a condition of salvation. Escape from the world into transcendence is no longer an alternative for man himself and precisely for that reason has lost its human relevance and historical effectiveness. But recourse to intraworldly composure of the mind, to the secum vivere [self-sufficient life] of Epicurean ataraxia, is also blocked. The method of neutralizing the phenomena and the problems of nature would have been found to have lost its efficacy, if anyone had tried to apply it once more, because
its presupposition of the finite and hence completely describable possibilities of natural processes had become untenable against the background of the infinitude of divine power. The dependence of ataraxia on physics could not be reestablished. Only insofar as physics could be thought of as producing real human power over nature could natural science potentially serve as the instrument by which to overcome the new radical insecurity of man’s relation to reality.

Philosophy and science, which, autonomously formulated, offered themselves as means for the removal of this uncertainty about the world, could not in themselves, as pure theory, become “the happiness of their age.” Philosophy not only had to project and provide a foundation for ‘method’; it had itself to become a method of assuring the material adequacy and competence of man’s possession of the world. Nature could not once again be forced to the edge of consciousness, its appearances blunted and robbed of their power; on the contrary, it now became the incessantly pressing theme, which made more and more exclusive demands on theoretical attention. There was no longer any refuge in “the lamplight of the private man.” Knowledge as the endeavor of an individual, as an attempt to grasp a totality of truth as the source of fulfillment, proved to be hopeless. Scientific method, as it was projected by Descartes, provided the procedural regulations for a summoning-up of incomparable theoretical energy, in whose service both individuals and generations were enrolled.

What was no longer possible, or not again possible, can be exhibited directly by a comparison with Epicurus’s intention, which had been to ‘humanize’ the groundlessness of nature as the ground for indifference to it, to remove by means of physics the potency of the drive for knowledge that holds sway within it, and to make manifest by the same means the superfluousness of theory as theory. This difference is made especially tangible by the formulation that the young Marx gave to the basic character of the Epicurean philosophy in his dissertation: “…the interesting thing about Epicurus,” he writes, is “how in every sphere he tries to eliminate the state of affairs that provokes the appearance of presuppositions as such and how he commends as normal the state of affairs in which presuppositions are covered up.” While for Epicurus everything is aimed at blunting and diffusing the problems forcing themselves upon man from outside, in the declining Middle Ages the reverse is the case: Everything works to sharpen them to the most acute form. Although the intention in this, to begin
with and in the first instance, was to bring the pretension to theory to the point of inevitable resignation and thus of submission to faith, nevertheless the immanent dynamics of the situation led to the contrary result; namely, the development of the consciousness that precisely in what was supposed to be sacrificed there lay that which could not, in the interest of humanity, be relinquished.

Comparative analysis of Epicureanism and nominalism leads to another point of apparent agreement in the idea of a plurality of worlds. This idea was to become one of the essential factors in the disintegration of the metaphysical idea of the cosmos, preparatory to the modern age. And the Enlightenment will perform the thought experiment of other and different worlds especially in accordance with its function of criticizing man and his notion that he has a privileged status in the cosmos; the self-assertion of reason, it will argue, requires emergence from teleological comfort, from anthropocentric illusion. But in ancient atomism this thought could not yet achieve what it could after William of Ockham, namely, an exhibition of the world's form as contingent and a demonstration to man, by means of mental variation of the world's actual makeup, of its capacity for and worthiness of alteration.

When Epicurus, like other Greeks before him, speaks of 'cosmos' in the plural, this means that one world eidos [world form, world Idea] is thought of as being realized in arbitrarily many instances. Before Plato and Aristotle gave the sanction of metaphysics to the uniqueness of the cosmos, the idea of the plurality of worlds had arisen among the Presocratics, without yet being given the weight of a dogma. Anaximander had thought of the world on the analogy of the legal system of the Greek polis, and from this analogy there had easily arisen the idea of unities sufficient unto themselves and separated by the no-man's-land of space. "When one leaves the polis, one comes to open country, and after a while to another polis. Thus the idea suggests itself that outside our cosmos, at a greater or lesser distance, other cosmoses are to be found, indeed an unending series of them."

The atomism of Democritus was the first doctrine to push the idea of the plurality of worlds to the point where it endangered the idea of the cosmos itself: The atoms are not only endless in number but also in the variety of their forms, and there is no longer any reason why worlds of the sort typified by our own should emerge from the vortices of these atoms in empty space. Against this absolute fortuitousness of the beginning and the form of the world, Plato set up his
combination of cosmology and the doctrine of the Ideas, and Aristotle provided the tradition with the canon of proofs of the necessary uniqueness of the cosmos as the exhaustion of space, matter, and forms. The Stoics perfected the identity of metaphysics and cosmology by making the teleology of nature, as it relates to man, an expression of the providence governing nature. But by this very outbidding of their predecessors, they made a scandal of the uniqueness of the cosmos: The cosmic teleology did not relate to the individual and his claim to happiness; the evil and the suffering in the world could only be justified by means of a teleology of the whole that was hidden and without consideration for the individual.

This is the focus of the opposition of Epicurus, who makes this very question of the potential happiness of the individual man the central concern of his philosophy. A cosmos, a teleology, a providence of which the individual could not feel assured seemed to him to be not only irrelevant to his central question but a hindrance to a form of life that could allow itself neither fear nor hope regarding what the individual could expect from the world. If suffering and evil were interpreted as elements in a ‘logic’ of reality, elements for which a hidden reason, of whatever sort, had to be assumed, they would make men the bearers of an ordained inequality of their fates and of their share in happiness, an inequality whose supposed meaning could not be regarded with indifference. The worlds of atomistic chance, which Epicurus opposes to the unique cosmos with its powerful sanction, make the external fate of each being within them appear as the result of a constellation that is favorable precisely because it is neither ‘intended’ nor defined and ordained as a ‘role.’ Chance is the sort of fate with respect to which indifference is possible. The assertion of the plurality of worlds is a sort of cosmological demonstration of the equality of everything that exists in the distribution of what can literally ‘befall’ each thing in the world-building falling together of atoms. Epicurus’s whole physical system passes in review the indifference of nature to man so as to suggest to man that his indifference is, in turn, the precondition of his happiness.

Epicurus makes use of Democritus’s atomism, but he changes its function radically; he is not interested in the explanation of natural phenomena but rather in the liberation of man from their supposed significance. Once again, this decisive difference between the physicist and the humanist was stated by the young Marx in his dissertation:
Democritus employs "necessity as a form of reflection of reality," whereas for Epicurus chance is "a reality that has only the value of possibility," and the concern in relation to this possibility is not "with the object that is explained but with the subject that explains." And further: "What is abstractly possible, what can be conceived, constitutes for the thinking subject neither an obstacle nor a limit nor a stumbling block. Whether this possibility is also real is a matter of indifference, because we are not here interested in the object as object. Consequently Epicurus proceeded with a boundless nonchalance in explaining individual physical phenomena. . . . One can see that he is not at all interested in investigating the real causes of objects. He is merely interested in soothing the explaining subject."15

This difference from Democritus also helps to determine the form taken by the thesis of the plurality of worlds. In spite of his rejection of the cosmos of metaphysics, Epicurus unobtrusively holds fast to those of its implications that served (so to speak) to temper the accidental character of the relations between atoms. The sheer fact that under the premises of atomism there was a world at all, not to speak of many of them, caused no difficulty for Epicurus, in spite of its improbability, because he was able to fall back unhesitatingly on a reserve of teleology. Lucretius, who in his didactic poem reports his master’s teachings with a faithfulness that was characteristic of the Epicurean school, describes it as improbable that the innumerable atoms outside our own world should not have accomplished anything.16 There again is the metaphysical proposition that nature does nothing in vain. But just as for Epicurus it is not really accidental that there are any worlds at all, so it is no accident what comes into being when worlds emerge from the atomic vortices. Here Democritus’s extreme destabilizing of the cosmos is retracted in favor of a reassuring dependability. According to Hippolytus’s account, Democritus had taught that the worlds differed in form as well as number and that in some of them there was neither a sun nor a moon, neither animals nor plants nor even moisture.17 This was the logical consequence of the endless multiformity of the atoms that Democritus assumed. Epicurus’s crucial alteration of the system of the teacher whom he disowns is the assumption of a definite, finite number of forms by which the atoms are distinguished from one another.18 As though it were a matter of course, then, the products of Epicurean accident resemble one another, including the unquestioned matter of course that in each of his worlds there are men.
Fundamentally—and this effect on consciousness must have been Epicurus's overriding concern—the chaos of the atomic vortices has a reassuring dependability that surpasses the guarantees traditionally provided by the gods. But the freedom from fear that this cosmology imparts must not relapse into admiration of the world, into the original affect of a philosophy that expects the fulfillment of man's existence to come from outside, from nature. That there is a world is not at all a remarkable fact: "Non est mirabile"; \(^{19}\) it is the least surprising—indeed, the 'natural'—state of affairs, which manifests itself in the plurality of worlds as the 'ease' with which they come into being. Man does not concern himself with what is there of its own accord, and in this he resembles Epicurus's gods, who enjoy their blissful existence in the empty space between the worlds with equally little concern for the course of natural events. \(^{20}\) Epicurus makes current once again the Greeks' authentic concept of nature, which they conceived of not as a quasi-divine subject, not as a "deus sive natura" ["either God or nature"], but as a power standing over things, but rather as a mode of processes that proceed from themselves, of their own accord. The demiurge, the unmoved mover, the 'world reason' had replaced this concept of nature with a supposedly more dependable factor, which allowed the world to be interpreted according to the model of the intentional product of human action. \(^{21}\) The crucial fact is that Epicurus was able to eliminate and exclude from human consciousness this god laden with care for the world, this deus laboriosissimus [hardest working god], only by building into the world process certain 'constants,' by making chaos into a sort of 'ideal disorder' and thus, as Kant reproaches the "shameless" Epicurus, "really [deriving] reason from unreason." \(^{22}\) In Epicurus there is no physical argument for the strict parallelism of the paths of the atoms in infinite space, and the finite variety of the forms of the atoms and of their recurrent combinations is attributed, by an absolute metaphor, \(^{6}\) to "treaties in nature" (foedera naturai). \(^{23}\) Epicurus's system is not free from metaphysics, but it rests on the postulate of the metaphysical minimum, which secures the world for man as a cosmos without allowing any binding force over him to result from this.

Such assurances of the dependability of nature would be forbidden to late-medieval theological absolutism. The latter was not concerned with the reality of the world and its significance for human consciousness but with preserving the full range of God's possibilities. The world
could indeed be a *demonstration of the power* that had created it; but no reality, however imposing—even if it were less in need of justification than the actual one—could be *proof of omnipotence*. Here was the common ground of all the paradoxes of Scholasticism: It could not remove from the world anything that was essential to the functioning of the system of proofs of God's existence, but neither could it commit divinity to this world as the epitome of its creative capacity.

The internal systematic conflict came into the open in 1277, when Etienne Tempier, the Bishop of Paris, condemned a list of propositions that as a whole reflected the conclusions of the thirteenth century's completed reception of Aristotle. Three years after the death of the classic author of High Scholasticism, Thomas Aquinas, his acceptance of the Aristotelian proof of the uniqueness of the world was condemned as a philosophical restriction of divine omnipotence. This document marks the exact point in time when the interest in the rationality and human intelligibility of creation cedes priority to the speculative fascination exerted by the theological predicates of absolute power and freedom.

The theological reaction of 1277 had an effect different from the one that was intended; by denying that the created world could be the equivalent of the creative power actualized in it, it opened the sluices to a flood of new questions. The nominalistic philosophy of nature, whose methodical style was to become the free variation of all the previously valid cosmological propositions of Scholasticism, is unthinkable without the support of this decree. But one should not separate this sentence, which condemned calling into question the possibility of a plurality of worlds, from its context. It was indeed meant to exclude the doctrine that this actual world epitomizes what is possible for God; but at the same time judgment was also passed against any doctrine that a universe of infinitely many actual worlds could be equivalent to the self-reproduction of divinity. The solution that Giordano Bruno's cosmology was to give to this basic question of the late Middle Ages, a solution of which we will give an account in part IV, was excluded: The first cause cannot produce an effect that is equivalent to its own reality. The Middle Ages remained stationed between these two negations and committed to their insoluble difficulties.

To the *potentia absoluta* [absolute power] there corresponded an infinity of possible worlds, but no infinity of actual worlds was allowed to
correspond to it. It was a secondary question whether only one or a plurality of these possibilities had been realized; there were important theological reasons for holding to the factual reality of only one world. But this one world could no longer be rationally justified. The principle of contradiction was the sole limitation on the range of variability of the possible worlds, which could no longer be understood as instances of an eidetically constant type. This would have contradicted the nominalistic principle that the repetition of a pregiven essential structure is incompatible with the concept of creation from nothing.

William of Ockham deals with the problem of the possible plurality of worlds, in a context which is just as significant as it is unexpected, in his commentary on the sentences of Peter Lombard. In connection with distinctio 17 of the first book of this standard compendium of Scholasticism, he had to discuss the question whether the grace of the Holy Ghost that is granted to man by God is capable of quantitative differentiation, of increase and decrease. The identification of redeeming grace with the Third Person of the divine Trinity was bound to raise this problem because the attribute of unchangeability of the divine person seemed to exclude any differentiation in the effect of its conveyance to man. The Lombard had nevertheless found a formula that enabled him to hold to the system of differentiated levels of human blessedness. The details of this construction are not of interest here, but the radical considerations associated with them in William of Ockham’s commentary certainly are. They broaden the originally narrowly conceived theological thesis into the very general statement that the operation of divinity is bounded only by the principle of contradiction.

One must call to mind what this premise means. The God Who is subject only to the logical principle of contradiction is at the same time the God Who can contradict Himself, Whose creation does not exclude the will to destruction, Who stands over every present as the uncertainty of the future, in other words, finally, the God Whose activity does not allow us to assume immanent laws and Who puts all rational 'constants' in question.27 The God Who places no constraints on Himself, Who cannot be committed to any consequence following from His manifestations, makes time into a dimension of utter uncertainty. This affects not only the identity of the subject, the presence of which at any given moment does not guarantee it any future, but also the persistence of the world, whose radical contingency can trans-
form it, from one moment to the next, from existence into mere appearance, from reality into nothingness. The human spirit’s temporality, its being in time, becomes its crucial handicap. The philosophical penetration of these considerations becomes clearest when one perceives in them the central motivation of Descartes’s experiment in doubt in the *Meditations*; this will be shown later.

The impotence of reason, as deduced by William of Ockham from the principle of omnipotence, consists in the inapplicability of the principle of economy to the classical questions of metaphysics: The nature that does nothing in vain is no longer a definition of divine activity, to which the avoidance of detours and superfluous expenditures cannot be ascribed. What is given, the actual world as well as actual grace, is never the maximum of what is possible. The thesis of the possibility of infinitely many worlds is only the equivalent of an assertion of the powerlessness of finite reason.

This was the exact opposite of the Epicurean doctrine, which was supposed to make plausible to man how the processes of the universe could be a matter of no concern to him. The concept of omnipotence excludes, paradoxically, only the possibility that God could ever make everything that lies in His power, that is, an actual infinity. Ockham could not rely here on the argument that this concept was internally contradictory, since God Himself was actually infinite. Here was the boundary drawn by the decree of 1277, which the Almighty could not cross even in order to bring about something free of contradiction, and the crossing of which by Giordano Bruno would signify the end of the Middle Ages and a contradiction to the Middle Ages. This helps to make precise the assertion of the possibility of infinitely many worlds: The Creator had a choice between infinitely many different possibilities, and the unfathomable decision at which He arrived does not commit Him; He can always create more worlds and different ones from those that He has created—but He cannot exhaust the infinite fund of possibilities without reproducing Himself. This ‘position’ of divine reproduction is nevertheless already ‘occupied’ in the theological system; it is defined not as creation but as begetting, that is, as the quasi-natural process by which the Second Person of the Trinity is brought forth. One who wanted the totality of possibilities for the world, the exhaustion of everything of which omnipotence was capable, had to make this position free; he had to contradict dogma and become a heretic. Giordano Bruno was to face this un-
avoidable consequence. And he had to conceive of the world once more as a unity, using the expression 'plurality of worlds' now only in a hyperbolical sense, for the repetition of elementary unities within the totality of the universe.

Thus a fundamental change in the meaning of talk about the plurality of worlds was ushered in. For the Greek atomists there was no significance in the fact that their cosmoses were located within the unity of a single empty space; this space separated the individual world formations absolutely; it was the nothingness between them and excluded all real relations. It was (at the latest) Newton's concept of a space through which the action at a distance of gravitation operates that put an end to the unworldliness and physical unreality of space. Space becomes the 'medium' of the unity of the universe as the system of interaction of all the bodies in it. In his early work on the natural history of the heavens, as though with the intention of harmonizing Epicurus and Newton, Kant entitles the universe "a world of worlds" but later corrects himself with the formula "the totality of the so many systems... that we incorrectly call worlds." The interest of the Enlightenment in the question of the plurality of worlds is directed, quite consistently, at the possible plurality of inhabited cosmic bodies, thus understanding 'worlds' as 'earths.' It is no longer a matter of measuring God against the full range of possibilities but rather of comparing man with what he has made of himself and of the earth, seen as it were from outside. It is not the actual makeup of the universe that is of interest but rather the relativizing of human self-consciousness, the doubt that is generated regarding the uniqueness of what man has produced as his 'world.' The 'other worlds' provide a fictive exotic standpoint for criticism, just like the realms of 'noble savages' in the Enlightenment's travel romances.

It follows from this, in connection with our intended comparison of the difference in radicalness between atomism and nominalism, that the late-medieval doctrine of the plurality of possible worlds has a function completely unlike that of the atomistic plurality of actual worlds: The groundlessness of the factual world, in which man has to live, produces a more intense consciousness of insecurity than the groundlessness that Epicurus had used to negate creation as such. The questions that cannot be asked confront reason with its impotence more pitilessly than those that do not need to be asked.
Intraworldly secession into the idyll of the khepos, the ‘garden’ of Epicurean ataraxia, had presupposed the calm of a situation in which the problematic of the world was alleviated. The garden whose cultivation, in view of a hopeless world, was to be recommended at the end of Candide is a point of grim irony but is not the solution that the epoch found for its inherited problem of the quality of the world. It was not a matter of indifference which of the possible worlds God had in fact created; but since man could not hope to fathom this decision, it had to be made a matter of indifference. The search for a set of instruments for man that would be usable in any possible world provides the criterion for the elementary exertions of the modern age: The mathematizing and the materializing of nature.

The lawfulness of an arbitrarily chosen nature—that was the aprioristic, ‘pure’ science of nature, which, to use Kant’s language, started from the “concept of nature as such” and took as its object the ultimate characteristics of a speciesless matter. For this theory, which (so to speak) anticipated the factual world, it was actually a weakness of ancient atomism that it anticipated the specificity of the phenomenal world in the specific forms of the atoms, so that it knew no ‘pure’ matter. But at the same time the postulate of pure materiality was the ideal premise of an attitude to the world that can be defined by the concept of technicity. According to that attitude, man can make what he wants of the world to the extent that it can be reduced to the characteristics of a mere substrate underlying what man constructs.

A third and final aspect in regard to which atomism and voluntarism, as systems representative of the crises of their respective epochs, are to be compared here is that of their anthropological components. Because Epicureans and nominalists—even though with differing argumentation—deny the teleology of the world, they must at a minimum dispute the privilege that the Stoics had emphatically ascribed to man, namely, that the human existential interest is taken into consideration in the whole of nature. But in his anthropology, as in the rest of his system, Epicurus is entirely uncritical with regard to his own teleological implications. One need only read Lucretius’s description of the original condition of mankind to see how strong were the anthropocentric presuppositions here, and not only by accident, but clearly in connection with the culture-critical tendency of this mythology of the primeval time.
The nature that was not created out of divine providence for man necessarily continues to owe man a great deal; it stands laden with debt before man, who is thus burdened by no responsibility for the bad in it. But this unburdening of man, which forestalls Augustine's reversal of the relation of debt, must not rob the system of its intended effect by accentuating man's concern about his own existence. Therefore the theory of the origin of culture has to emphasize that nature holds ready everything that is necessary for man. Auspicious nature is to be thanked, according to a fragment of Epicurus, "because it made what is necessary easily accessible, and what is difficult of access unnecessary." Thus the groundlessness of nature permits the groundlessness of concern because the 'cosmos' is sufficiently powerful even in chance events to let needs and givens intermesh with one another just as the forms of the atoms themselves allow the formation of meaningful, organized configurations. The logic of the materialization of the world is not pushed to its extreme, in which man's ataraxia would become impossible and everything would depend on his practical energy. But at the same time the intermeshing of nature and need is a critical principle that prevents an Epicurean from regarding nature as mere material: Necessary wants can be satisfied without great exertion and expense, and the satisfaction of natural wants does not leave much to be wished for because nature itself holds ready at hand the wealth with which they can be satisfied; only empty wants find neither measure nor satisfaction in nature. Thus, because Epicurus's nature provides man with more than it can really provide consistently with his own premises, theoretical indifference and practical unconcern can be combined.

However problematic it may at first appear, the position and rank of man in Epicurus's system cannot be defined without bringing in his theology. There has been much arguing back and forth about the seriousness of Epicurus's doctrine about the gods. The first thing to be said is that the doctrine of the gods who take no interest in the worlds is advantageous to Epicurus in argument, in contrast to an unprovable atheism. But beyond that, the form of the gods' existence is like a model of his philosophical idea of eudemonia. This is the only explanation for the fact that, according to Lucretius, Epicurus's lost work contained an extensively worked-out theology. It has the function of a positive myth that is oriented toward confirming the human capacity for happiness precisely because the gods are supposed
to be imagined in human form. Cicero has given us the shortest justificatory formula for this, which appeals to the preeminence of the human form and human nature over all others in nature: "Omnium animantium formam vincit hominis figura" [Man's form surpasses that of every living creature]. For Epicurus the isomorphism between men and gods has the systematic significance of a metaphysical guarantee of what man can be and what he in fact achieves in the shape of the wise man. The man who perceives his possibilities and realizes them lives, as the "Letter to Menoeceus" says, "like a god among men." And that means above all that he shares the serenity and freedom from care of the gods' existence. The relation of men to the gods is a sort of mythical reflection, which is accomplished through pure imagery, without any interaction and with no need of knowing of the gods' reality through experience. Here the wise man can allow himself the emotional state that he must deny himself with respect to nature: admiration. "The philosopher admires the nature and disposition of the gods and seeks to approach them; indeed it is as though he were irresistibly driven to come into contact and intercourse with them; thus it is appropriate to characterize wise men as 'friends' of the gods, and to characterize the gods, conversely, as 'friends' of the wise. . . ."

That the gods should have human form was a familiar idea in Greek myth; but at the same time the philosophical criticism of myth had found it scandalous. For here the human was at the same time the all too human; it was envy and jealousy, favoritism and capricious meddling with human destinies—the very things that brought human ataraxia and divine bliss into conflict with one another and on the weaker side gave sustenance to the emotions of fear and hope, which Epicurus's philosophical therapy was meant to get at. Atomistic chance was supposed to give man a resting place between mythical caprice and physical necessity. It seems that for Epicurus the philosophical critique of myth had gone from one extreme to the other: The necessity that had taken the place of caprice had failed to save humanity, which was the core of the myth deserving to be saved.

So it is understandable that Epicurus firmly opposes the supposedly 'purer' form of Greek religiosity, the deification of the starry heavens, employing his method of neutralizing emotional states for this purpose. It is not certain whether Lucretius accurately represents Epicurus's opposition to the stellar theology when he says that it was motivated
by the danger that the gods might return to the world, the possibility of a relapse in antiquas religiones, into the mythical consciousness of dependence on unlimited powers. In any case Lucretius seems to stand closer than does Epicurus to the ‘Gnostic’ suspicion that the stars could represent powers that are ill-disposed toward man. The cosmic is potentially the demonic, and for Lucretius deliverance from fear lies only in the idea that the influence of all the elements of nature upon one another is limited, that everything has its finita potestas [limited power], that the theological attribute of omnipotence possesses no reality. It is certainly important for Epicurus too to ban from man’s consciousness the influence of overwhelming power; but it is independently important for him to criticize a theology that can mean nothing positive for man, that seeks the divine in the antithesis to what is human and believes that it can find this in the stars, as the region of nature most distant from human mortality and need.

Epicurus’s theology is a representation of the humanly familiar, in which the similarity of form suggests the possibility of the same eudemonia. True, Epicurus’s gods are immortal, but their eternal life is not a necessary condition of their happiness—otherwise happiness would be out of man’s reach. Because the wise man recognizes death as something that need not mean anything to him, he reduces the difference between mortality and immortality to nothing. Here—and this too was recognized as central by Marx in his dissertation—Epicurus breaks with the “view of the entire Greek people,” that likeness to a god was identical with immortality and freedom from need. “In the theory of ‘meteors’ [atmospheric and astronomical phenomena], therefore, the soul of the Epicurean philosophy of nature appears. Nothing is eternal which annihilates the ataraxia of the individual self-consciousness. The heavenly bodies disturb its ataraxia, its identity with itself, because they are existing generality, because nature has become autonomous in them.” The naturalizing of the stars, their inclusion in the homogeneous contingency and transitoriness of the mechanism of the atoms, sets reason free from its cosmic objectivization, making it an exclusively human, no longer a cosmic, law. Consequently Epicurus fights not only against astrology, as the false relation of nature to man, but also “against astronomy itself, against eternal law and reason in the heavenly system.” The linkage of reason to what is eternal, immutable, and free from need is severed.

But here atomism comes into conflict with the assumptions it had taken over from the tradition of Greek thought: Its unchangeable and
specifically formed atoms were only “the eternal” of the one Being of Parmenides, of Plato’s Ideas and Aristotle’s Forms, “in material form”; they were not the logical consequence of materialization itself, which would indeed have been required for the consistency of the system but not for its function. Epicurus may have believed that the reduction of the imperishable to its minimum in the atoms could guarantee the combination of physical dependability and protection of man’s self-consciousness. Man’s preeminence lies not in an anthropocentric teleology but in the fact that his successful existence has become the sole criterion of the functioning of the system.

Epicurus’s argument, reconstructed, runs as follows:

Because the eternity of the heavenly bodies would disturb the ataraxia of self-consciousness, it is a necessary, stringent conclusion that the heavenly bodies are not eternal. . . . Here Epicurus must have seen the highest existence of his principle, the peak and finale of his system. He alleged that he created the atoms so that immortal foundations would lie at the base of nature. He alleged that he was concerned about the substantial individuality of matter. But, where he finds the reality of his nature—because he knows no other than the mechanical—in autonomous, indestructible matter, in the heavenly bodies, whose eternity and immutability are proven by the belief of the people, the judgement of philosophy, the evidence of the senses—there it is his single effort to draw them back down into earthly transitoriness. It is at this point that he turns zealously against the worshippers of autonomous nature which contains the point of individuality within itself. This is his greatest contradiction.\footnote{40}

A contradiction, one may add, that in the end rests on the fact that Epicurus still stands on the ground of Greek metaphysics, that he still sees the precondition of the fulfillment of human existence in a given quality of nature, and that the human form of the gods, too, is still a piece of ‘cosmos’ for him—of a cosmos that is not, it is true, guaranteed by a superposed Logos but rather by the atomistic substratum.

Thus it is indeed correct to say that “the decline of ancient philosophy is displayed with complete objectivity in Epicurus”\footnote{41}; but it is equally correct to add that this decline did not lead to a transition to a new formation of the human relation to the world and of human self-understanding because the only freedom with respect to the world that man achieves in the course of this decline is “the negative movement of being free from it.”\footnote{41} The atomistic materiality of the world
is indeed sufficient to reassure man regarding his situation in reality, but it is not radical enough to appear to him as a plastic substrate, subject to his mastery and his power of disposition. Happiness is what is left over when nature no longer presses upon man, when it concerns him no more than it concerns the gods in the spaces between the worlds, gods who are free from care precisely because they have no power over the world. "He whose possessions are not sufficient for his needs is poor, even if he should be the master of the entire world."42

The still undissolved connection between cosmology and anthropology is confirmed by the last systematic element of Epicurus's philosophy relevant here: the connection between the deviation of atoms at the beginning of a world and the human consciousness of freedom. Once again it becomes clear that man's possibilities depend upon a minimal set of metaphysical presuppositions. The initial conditions of all the processes in the universe are defined by the fact that all the atoms are traveling in parallel straight lines through infinite empty space. This basic state of affairs is characterized by an extremely rational order and at the same time by sterile unproductiveness. Only on the assumption that individual atoms can breach this 'order,' that by minor deviations from their parallel paths they can encounter other atoms and thus initiate the formation of a vortex of atoms, do the elementary bodies even come into contact, in accordance with their affinities, and finally realize a world. The 'sufficient' reason for the fact that anything at all comes into existence and everything does not remain in the eternal fruitlessness of the atoms' parallel paths is as trivial as it could conceivably be.43 To minimize this reason is to minimize the binding character of the world; in this respect Epicurus's philosophy is constructed in accordance with a logic strictly antithetical to that of the Stoics, who strive everywhere for the metaphysical maximum.

At the same time Epicurus contradicts the mythical dualism of disorder and order, chaos and cosmos. The perfect order of the original stuff falling uniformly through space is powerless to produce anything like a world, unless the tiny aberration enters in, which as chaos starts the playing through of possibilities. The beginning of the world is an infringement of physical necessity (principium quoddam, quod fati foedera rumpat [some beginning which breaks the bonds of fate]). This original event of cosmogony is just what man rediscovers in himself. It is his ability, as an active being, to introduce absolute beginnings into reality, his libera voluntas [free will], the will that escapes the necessity of causal
antecedents and opposes to them its own measure (haec fatis avolua
voluntas [that will torn free from fate]). The principle of the cosmos
is realized in man himself; what made the world possible is no foreign
and inaccessible metaphysical authority but the very same thing that
constitutes man's independence from the world, the core of his
consciousness of himself.

Far from being an embarrassment for the Epicurean philosophy,
the deviation of the atom represents its central systematic principle:
liberation from the world by means of explanation of the world, the
identity of the minimum of physics with the maximum of human
freedom. The rebellion of man against the cosmos is accomplished
even here, in the most radical aspect of its foundation, through the
principle and with the authorization of the cosmos itself. The living
power of spirit (vivida vis animi), with which Lucretius in his apotheosis
of Epicurus makes the philosophical savior break through the world's
walls of flame and step forth into the infinite universe, is nothing but
the consistent extension into consciousness of the atom's ability to be
irregular, to diverge minimally from its path. The groundlessness of
the world, its atomistic indifference to everything that it brings forth
and eventually brings back into its unchanging material sum, is taken
by man into the philosophical service of the consciousness that is free
of the world. But man can do this only in such a way that he discovers
that what he achieves is what was there all along, as the remainder
of the original event that gave rise to the world.

Man's position in the world is seen in a radically different way by
nominalism. In the patristic and Scholastic traditions, various types of
answers to the question of the meaning of the Creation had arisen;
however, one can recognize an overall tendency, which shows less
and less acceptance of the proposition of the Stoicizing patristic authors
that the world was created for man's sake. And the other answers
can also be differentiated according to the extent to which man par-
ticipates in the purpose of God's work.

Anselm of Canterbury, with whom the Scholastic program found
its first coherent expression, took up in his major work, Cur deus homo?
(which was completed in 1098), an idea of Augustine's, according to
which God created man in order to fill up again the heavenly choruses,
which had been decimated by the revolt of the angels led by Lucifer.
But this myth was meant above all to explain why the redemption
of fallen mankind had become necessary for God, if the purpose of
the entire work of creation was not to be unfulfilled, since all men had forfeited their right to be taken up into the ranks of the angels. The plausibility of this idea for the Middle Ages lay in that God was related only indirectly to an end outside of Himself; the refilling of heaven's choirs was aimed at His own glorification. The gloria dei [glory of God] as the embodiment of the final purposes of the world and of man served not only to formulate the mythical figure more abstractly but also to adapt it to the Aristotelian idea of the exclusive self-reference of the unmoved mover as the thought having itself as its sole object. That such an idea of the absolute and its transcendence could achieve such a sustained influence on Scholasticism can only be understood as the repression of the humanistic element of the Christian tradition by its theological 'rigor.' Only when the indifference of divinity toward man had been thought through to the end was theology's immanent logic satisfied. The divinity that is concerned with, and finds satisfaction only in, itself must instrumentalize and mediate any relation to man that its will is thought to involve. In this logic, then, also belongs the modification and crucial restriction of the Stoic world formula: God did not after all create everything for man but rather for those whom He has chosen and redeemed by His grace.

In view of the secrecy of the divine decrees of election and rejection, this sort of teleology no longer means anything, in theory or in practice, for man's consciousness of himself and his relation to the world. The sharper the accent finally placed by medieval theology on the topics of original sin and divine grace, the more precisely it had to differentiate between the lost paradisaic, unmediated enjoyment of the world and the hostile opposition of nature to man's claim to dominate it in his condition of exile from that paradise. Finally, the formula that the Creator had done His work for no other purpose than to demonstrate His power omitted man entirely from the determination of the world's meaning and approached the voluntaristic formulas that closed the sequence of development, formulas whose function was not to answer but to reject the question. The world as the pure performance of reified omnipotence, as a demonstration of the unlimited sovereignty of a will to which no questions can be addressed—this eradication even of the right to perceive a problem meant that, at least for man, the world no longer possessed an accessible order.

The most important consequence of the transition from a general proposition about the teleology of the world for man's benefit to the
restricted assertion of its functioning for the benefit of those who are predestined for salvation is that the whole problem falls under the exclusive competence of theology, that the theses proposed for its solution are valid only on the assumption of faith and the *potentia ordinata* [ordered, ordained power] guaranteed by faith. Philosophy has no access to this security; its considerations stand under the assumption, rendering everything insecure, of the *potentia absoluta* [complete, absolute power]. This differentiation of premises is indeed strictly observed by the nominalist thinkers, but not by those who had to exercise theological censorship over their propositions and who could not accept the fact that the unbroken transition from the philosophical basis to the theological superstructure had long since vanished.

Philosophy won its autonomy precisely on account of the renewal of the ‘Gnostic’ assumption that the omnipotent God and the God of salvation, the hidden God and the revealed God, are no longer conceivable by reason as identical, and hence can no longer be related to one another for the purposes of man’s interest in the world. The role of the philosopher is defined by the reduction of human certainty under the pressure of the assumption that divine omnipotence cannot have placed any restrictions on itself for man’s benefit. In this circumscription of the role of reason, the elimination of the traditional teleological assumptions has a prominent place. The cosmic preeminence of man had to be put in doubt, or at least rationally bracketed out, because talk of a hierarchy of beings no longer made any sense. Among the propositions of Nicolas of Autrecourt that were condemned in 1346 and that he recanted at the public burning of his writings in Paris a year later can be found the thesis that the precedence of one being over another cannot be demonstrated with evidence.\(^50\)

This most radical thinker deriving from nominalism drew from the sole limitation of absolute power by the principle of contradiction the conclusion that human certainty as well could be well-founded only by being traced back to the principle of contradiction. Examination in accordance with this criterion had disqualified above all the concept of causality. With that, the Scholastic cosmos as the embodiment of the epoch’s ideas of order had become philosophically questionable. The question of the quality of the world is just as senseless as that of its purpose; Nicolas of Autrecourt is able to reduce it to absurdity with the optimistic formula that this world is the best world since it is composed of equally perfect elements and there is no criterion according
to which one could judge another imagined world to be more or less perfect. It is easy to see that this *universum perfectissimum* has nothing to do with Leibniz's "best of all possible worlds" since any other arbitrarily chosen world, as sheer fact, would have to receive this predicate. Since the sort of world that in fact exists is supposed to be a matter of indifference to man, it becomes equally a matter of indifference to him whether his knowledge of this world corresponds to its reality, whether what appears to him has its ground in a substance independent of perception: "non potest evidenter ostendi, quin omnia, quae apparent, sint vera" [It is not possible for it to be made known clearly whether everything that appears is true]. But this position no longer has as an alternative the ancient Skeptics' expedient of positing the realization of human happiness without possession of the truth. For in regard to the question of what brings human existence to its fulfillment, the theological decision in favor of the transcendent status of such fulfillment remains binding, just as much as it excludes general human accessibility. And for this very reason it is neither surprising nor inconsistent that in the end Nicolas of Autrecourt retreats to a minimal theoretical position, that is, a position least affected by the thesis of divine omnipotence.

That position is atomism. The few traces of his work that have been preserved for us provide no basis on which to decide the question whether he drew on ancient tradition or his own reflections led him to reduce all alterations in nature to the changes in position of the smallest bits (*congregatio et disgregatio corporum atomalium naturalium*). Against dependence on ancient atomism, or at least in favor of its alteration in the direction of a systematically adapted minimal hypothesis, speaks the fact that for him there seems no longer to be a finite variety of specifically classifiable atoms; the appearances of nature are due exclusively to the constellations of a homogeneous material substratum. Although one cannot say that this extreme nominalist thinker formed a school and won influence, still he makes visible with solitary clarity the consequences of nominalism, and in fact in a way that is consistent with the equivalence of voluntarism and atomism asserted by Leibniz in his argument with Samuel Clarke. The radical materializing of nature is confirmed as the systematic correlate of theological absolutism. Deprived by God's hiddenness of metaphysical guarantees for the world, man constructs for himself a counterworld of elementary rationality and manipulability.
It might be objected that precisely by its emancipation from theology, the nominalistic philosophy renounced the medieval basis capable of supporting the appreciation and proper valuation of man, that the center of gravity of the medieval anthropology did not lie in the teleological propositions deriving from Stoicism at all but rather in the biblical assumptions that, on the one hand, man was made in God's image and, on the other hand, His son became a man. If it made sense to distribute such historical censures, one would have to tax Scholasticism with its inability to combine systematically the biblical premises of its anthropology and its Christology. Scholasticism always feared the consequences of ascribing to man's maker an obligation for the salvation of what He created, and thus of seeing in the proposition that man was made in God's image something like the motive for the Incarnation.

Avoidance of the premise that God had irrevocably obliged Himself to the only creature He made in his own image, that He had committed himself to satisfying man's need for happiness, led finally to the speculative attempt to eliminate altogether the motivational connection between the Creation and the Incarnation and thus to reintroduce Gnostic dualism in fact if not in the original formulation. Not only could the world no longer be created for man's benefit, but even God's becoming man could no longer refer exclusively to man. In spite of the unambiguous formula of the Nicene creed, that God became man for the sake of man (propter nos homines... homo factus est), there emerges Duns Scotus's peculiar doctrine of the absolute predestination of Christ, which turns the propter nos homines into a propter se ipsum [for His own sake].

If human nature was destined from eternity to be united with divine nature, human history becomes irrelevant to the divine act of will, and the act of grace becomes a mere side effect of an event that would have been in order even without man's need for redemption. How far the theological absolutism of the late Middle Ages had departed from the biblical assumptions can be seen from its anxious efforts to keep the action of its God free from even the appearance of 'reacting' to man's action, to his history and his 'works.'

The biblical God, Who seemed to have involved Himself so passionately in the history of man and had bequeathed to human behavior the whole scale of great affects—anger, revenge, partiality—can hardly be recognized any more as the prototype of the God described in the
speculations of Scholasticism. In fact the God of High Scholasticism was already more the paradoxical consequence of all the ‘protective measures’ taken by Greek philosophy against the caprice of the mythical gods in their intercourse with men—except that this motive of defense had become utterly unrecognizable for Scholasticism (lost, as motives are in every sort of ‘scholasticism’) when it thought that it could recognize and make demonstrable its own God as that of Aristotle. That it would be unworthy of divinity to have the world as the sum of its interests and that in its exalted self-sufficiency and inaccessibility for everything transitory it could be occupied only with itself, while, as though entirely incidentally and without noticing what it is doing, as the ‘unmoved mover,’ it also sets the world in motion—this conception from Aristotelian metaphysics could only have been understood within the specific context of the Greek Enlightenment’s turning against mythology, the turning that Epicurus had completed (and revoked in one important point, that of its human relevance).

The Christian Middle Ages could not adopt the elements of a concept of God that had been formulated to serve in this front-line position without endangering and finally destroying the substance of the biblical idea of God, the idea of a God for Whom interest in man and the capacity to be affected by human events and actions had been constitutive. When High Scholasticism sought to interpret and systematize the biblical God with the categories of the Aristotelian ‘thought thinking itself,’ the unmoved mover, the actus purus [pure act], it had to retract each step of the divine interest in man (which, as revelation, was obligatory for it) into the closed reflexive circle of the absolute thought-of-itself and the absolute self-reference of divinity and make the facts of human history appear as too ‘trivial’ even to serve as ‘occasions’ for divine action. The divine will, which was unknown to the rationality of Greek philosophy, entered this metaphysics as an erratic principle and was adapted to its schema of self-reference. When the connection between theology and anthropology lay entirely in the willed decision that predestined the Son of God from eternity to become man, then in any case and above all this meant that man and his salvation were no longer the ground of the divine action relating to man and his salvation. For Nicolas of Cusa’s struggle, too long overdue, to counteract the internal disintegration of the medieval system, for his attempt to provide something like a mundane and human compensation for theological absolutism and the intensification of metaphysical transcendence,
and thus to give the system new consistency, the point of application had to be precisely here.

At this stage all we can show is the need for such a struggle. Its ineffectualness must then of course become a symptom of the fact that the epoch's 'own means' simply were insufficient to eliminate the disturbances, distortions, and loss of balance of its spiritual structure. The prescription laid down for theology by the received Aristotelian metaphysics, that God's basic concern in each of His acts can only be with Himself, was also the stronger principle in comparison with the basic theological propositions (unknown to genuine Aristotelianism) of the creation of the world and the redemption of man. In the perfect theocentrism toward which Scholasticism tended, Duns Scotus's idea (just as central as it is edifying) that God's relation to the world and to man is to be conceived in terms of love is scarcely uttered before it is bent back into the grotesque circularity of the Aristotelian schema, so that this can only be, so to speak, the detour taken by God's self-love when He chooses from the totality of men those into whom He causes the love of Himself to flow. Such mediating of man no longer admits questioning and doubt whether in this teleology, which benefits only those who are chosen, the latter can still be glad of a precedence whose inner injustice, as a grace they did not deserve: in view of those who equally did not deserve to be rejected, is not only admitted and accommodated but actually treated as an expression of the perfected absolutism of divine sovereignty.

The weakness of the logic underlying this conclusion was that it hid from itself in the propter se ipsum [for His own sake], as the principle of the theological zeal that had supposedly achieved its object, the contradiction to the propter nos homines [for our human sake], which had the binding force of dogma for the system of the epoch. The idea of creation was no longer allowed to guide man's understanding of himself; the fundamental contradiction between creation and the provision of salvation, first recognized by Marcion and 'resolved' in the radical dualism of Gnosticism, had broken out again but was no longer recognized as a contradiction because of the way in which rational questioning had been rendered absurd. The incidentalness of man in God's dealings with and for Himself eliminated everything that supported the idea that God's creation of man committed Him, in regard to His Incarnation, to the choice of human nature as the medium of His appearance in the world. On the contrary, this problem was covered
by the standard formula of voluntarism, that He could have adopted any other nature and that He adopted this one only because it suited His pure will. This point exhibits most clearly nominalism's difference from the reassuring function of the Epicurean theology, in which the gods, as beings with human form, lead their blissful lives outside the worlds and represent this life to man as his highest possibility in the realization of philosophical wisdom.

Christian theology also contains, in the form of the God Who became man, a potential for human assurance, to realize which—if one finds the late attempt of the Cusan instructive—would have been its noblest endeavor. Here there was a barrier: The assiduous labor on both the image and the unimaginability of the divinity seemed to be capable of success only at the expense of this human substance. The basic conflict that was never admitted, perhaps was never perceived, but was latent in the Middle Ages was unsparingly articulated by Ludwig Feuerbach as the antinomy between theology and Christology. To him the baroque Count von Zinzendorf, the founder of the Moravian Brethren, appeared as a "Christian atheist" and thus the embodiment of that latent crisis, or even of its only possible solution, in accordance with which Christology cannot be anything but "religious anthropology." The focus of such intensive piety and simultaneous joyfulness was the certainty "that God is one with man, and means just as well for him as for Himself”; and Christ was for him "a being corresponding to this love of man for himself;" "man's own heart and being in a deified and objectified form." Nothing less than the loss of this location of man in the theological system of reference had come about during the decline of the Middle Ages: the speculative self-renunciation of "anthropological 'egoism.'"

Let us not forget that what is written here is not meant as a myth of the "objective spirit," which plays out its dialectic with and over man. But there are phases of objectivization that loose themselves from their original motivation (the science and technology of the later phases of the modern age provide a stupendous example of this!); and to bring them back into their human function, to subject them again to man's purposes in relation to the world, requires an unavoidable counterexertion. The medieval system ended in such a phase of objectivization that has become autonomous, of hardening that is insulated from what is human. What is here called "self-assertion" is
the countermove of retrieving the lost motives, of new concentration on man’s self-interest.

If history, as Schiller remarked in his inaugural lecture in Jena in 1789, must give an accounting of everything man has ever “taken from and given to himself,” then the theological absolutism of the declining Middle Ages can be characterized as the extreme of taking from ourselves, as a self-divestiture of all pregiven guarantees of a privileged position, established at the Creation, in the ‘order’ of reality. For this loss of order there could no longer be the escape and the solution of late-antique distance from the world. But man’s negation of even the last physical and metaphysical ‘assurances’ of his role in the world, in favor of the logic of the “maximal God,”54 allows the question of the minimum potential of his self-assertion—the minimum of a potential that had remained unquestioned in the late-antique context of involvement in the cosmos—to pose itself now in its full rigor.

The model of the trains of thought induced in this situation stands before us in Descartes’s Meditations as the reduction of the process of doubt to the gaining of a new absolute fundament in the Cogito [I think—ergo sum: therefore I am]. The provocation of the transcendent absolute passes over at the point of its most extreme radicalization into the uncovering of the immanent absolute. What happens with Descartes for the philosophical foundation of the modern age was formulated with incomparable epigrammatic clarity by Luther in his disputation theses of 1517, in antithesis to Duns Scotus and Gabriel Biel and to the whole system of the Middle Ages, as follows: By virtue of his nature, man cannot will that God should be God; on the contrary, the essence of his volition can only be to be God Himself and not to allow God to be God: “Non potest homo naturaliter velle deum esse deum, immo vellet se esse deum et deum non esse deum.”55 The God Who had never owed man anything and still owed him nothing, the God Who in Augustine’s theodicy left to man the entire burden of the blame for what is wrong in the world and kept man’s justification concealed in the decrees of His grace, was no longer the highest and the necessary, nor even the possible point of reference of the human will. On the contrary, He left to man only the alternative of his natural and rational self-assertion, the essence of which Luther formulated as the ‘program’ of antidivine self-deification.
Luther's thesis posits enmity between those who cannot be certain of an election that they can neither earn nor otherwise guarantee and the God Who is not supposed to be there for them. The absolute certainty founded on human thought itself, which Descartes seeks, is not the 'secularization' of the certainty of salvation, which is supposed to be guaranteed in faith and its nuda fiducia [naked trust], but rather its necessary counter-position, which is theologically demanded and (unexpectedly) legitimized by Luther's thesis. Theological absolutism has its own indispensable atheism and anthropotheism. It postulates as complementary to itself a position that does not want to be postulated in this way, that denies itself this legitimation, of being what is 'natural'—in the sense of ungraced by God—and not what is rational and humanly necessary, grounding itself in itself. Freedom winds up on the side of godless destruction; in the distribution of roles, as between election and being lost, it is assigned naturaliter [by nature] the opposing part. This dualism is system immanent; it can neither be understood nor accepted unless the presupposed 'naked trust' already includes the certainty of salvation, which only the chosen few can possess.

If one proceeds from the assumption that human autonomy can henceforth articulate its positive character only outside the Middle Ages, then it becomes clear that only two fundamental positions remain open to it, if it wants to throw off its supposedly 'natural' role: hypothetical atheism, which poses the question of man's potential under the condition that the answer should hold 'even if there is no God'; and rational deism, which employs the 'most perfect being' to guarantee this human potential—the 'most perfect being' that is functionalized by Descartes as the principle of the deduction of the dependability of the world and of our knowledge of it. The double face of the Enlightenment, on the one hand its renewal of a teleological optimism and on the other hand its inclination to atheism, loses its contradictory character if one places it in the context of the unity of the onset of human self-assertion and the rejection of its late-medieval systematic role.

Translator's Note

a. The author introduced the concept of "absolute metaphor"—as a "carried-over" sense of a term that cannot be fully translated into or reduced to the kind of direct, literal discourse from which it is derived—in his "Paradigmen zu einer Metaphorologie," Archiv für Begriffsgeschichte 6 (1960):7-142. The term is introduced on p. 9.
The detailed comparative analysis of ancient atomism and nominalistic voluntarism, a voluntarism that at least in the case of Nicolas of Autrecourt shows its affinity to an atomistic physics, was meant to make clear that in late antiquity and the late Middle Ages heterogeneous attitudes to the world were induced. In Hellenistic philosophy there had indeed been various forms of man’s turning away from the cosmos and the ideal of theory, but the severity of the problem of human self-assertion had remained partially hidden on account of the continuing acceptance of the cosmic quality of reality. The overall result of Epicurus’s philosophy can be described as the recommendation of a neutralization of man’s relation to the cosmos. His atomistic physics was not meant to satisfy a theoretical interest in reality but rather to argue for the irrelevance of the physical answers to the shaping of life in the world. Here, in spite of their entirely different epistemological approaches, lay an essential similarity to Skepticism and its ideal of refraining from theoretical assertions. Physical hypotheses were meant to free the phenomenon of nature from its affective reference, and in this respect it did not matter whether a claim was made to explain the phenomenon unambiguously or whether it was to be established for every relevant explanatory hypothesis that it need not influence man in his relation to reality.

However formally similar to early modern natural science Epicurus’s method may appear to be, its function is radically different: It is not meant to objectivize the phenomena but rather to neutralize them.
The immanent intention of objectivization is toward the verification of a hypothesis, whereas neutralization is indeed meant to exclude uncertainties but not to create certainties. The ultimate epochal difference is that Epicurus does not recognize the postulate of domination of nature as the consequence of his consideration of man’s situation in the world, the postulate which for both Descartes and Bacon became the essence of what is perceived as existentially necessary for man. Making men the “maîtres et possesseurs de la nature” [“masters and possessors of nature”; Descartes] did not appear to Epicurus as a condition of the possibility of human existence in the world. In other words: In Epicurus’s will to knowledge there was missing something that one could call the “technical implication”—what he wants is to be able to put the phenomena at a distance, not to be able to produce them.

But precisely this ancient way out, into the moderation and unmolestedness of self-possession, was closed during the decline of the Middle Ages; the pressure of putting in question had penetrated too deeply into the makeup of self-consciousness and man’s relation to the world. The more indifferent and ruthless nature seemed to be with respect to man, the less it could be a matter of indifference to him, and the more ruthlessly he had to materialize, for his mastering grasp, even what was pregiven to him as nature, that is, to make it “available” and to subordinate it to himself as the field of his existential prospects. I have been aided in grasping the specific difference in the historical presuppositions by a remark made by Heisenberg in comparing ancient atomism and modern physics: “The statements of modern physics are in some way meant much more seriously than the statements of Greek philosophy.” If this is taken literally, then for the philosophical reader, who is inclined to take the claim of truth as a constant of the philosophical tradition, it is at first glance a provocative assertion; but the more one tries to grasp its possible justification, the more instructive and apt it seems to be. It really is a new sort of ‘seriousness’ that marks the modern will to knowledge and links it to the elementary concern for self-assertion. The characteristic liberality and nonbindingness that one notices in Epicurus’s atomistic physics and that exempts it from insistence on verification is due precisely, as I meant to show, to the intactness of a ‘residual order’ by which the existential problematic of man remained beneficently concealed and theory did not yet need to be made graspable as the instrument.
with which to make oneself master of the world. The new seriousness imposed on man by the late-medieval situation consists in the constant and unrelieved pressure of confirming a relation to the world that is established within the horizon of metaphysical conditions that leave no way out, neither outward nor inward.

The new exertion that was required in this situation was called by Descartes a laboriosa vigilia, a taxing vigilance.\(^2\) The last section of the first of his six Meditations, in which this expression is contained, provides at the same time the most extreme level of the doubt that he intensifies step by step and from which he derives the necessity for a new and unconditional guarantee of knowledge: this is the level of doubt that follows from the idea of the genius malignus [malicious spirit], that all-powerful and cunning world spirit who is intent on misleading man by appealing to his constitutional credulity—an appeal against which man can at least oppose the one effort inherent in his freedom: his ability to withhold judgment. Descartes’s Meditations have not only the function of presenting a theoretical thought process in which specific difficulties are removed by argument and eliminated once and for all; rather they tend to develop by exercise the habitual attitude of the obfirmata mens [steadfast mind], the inability to forget how the human spirit is endangered by its liability to judgment and prejudgment. The goal of this exercise is a condition of the spirit in which it makes use of its own freedom (mens quae propria libertate utens); it is not the beginning, posited once and for all, of a new philosophy and a new idea of science that by ‘settling’ a catalog of methodically introduced uncertainties could lay the foundation for a theoretical step forward guaranteed for all future time.

The artificial order of the stages of doubt in the first Meditation strengthens the impression Descartes seeks to arouse in his whole work, namely, that as though with one stroke he had easily put aside the traditional opinions and prejudices (opinionum eversio) and by himself had methodically created the authentic radicality for his new beginning. The heroizing of Descartes as the founding figure of the modern age has its foundation in his self-stylizing effort, in which the historical becomes hypothetical. When Hegel in his History of Philosophy defines the significance of Descartes for the epoch, he accepts this rational authenticity so painstakingly detached from its historical motivation: “The effect of this man on his age and the new era cannot be represented as too extensive. He is a hero who approached the matter
all over again from the beginning and for the first time constituted anew the ground of philosophy, to which it now returned for the first time in a thousand years.” The idea of a philosophy free of presuppositions, which knows that it arises autonomously from reason, was prepared by the Discours de la Méthode of 1637 and the Meditationes of 1641 in such a way that the arguments for doubt appear not as an elaboration of the historical situation of reason but rather as an experiment that reason poses for itself under conditions of artificial difficulty in order to gain access to itself and to the beginning it proposes for itself.

Within the context of this experiment of reason with itself, the genius malignus appears as a freely chosen exaggeration of the requirements that must be met by reason in finding its new ground in itself. And this formulation is indeed perfectly correct, since after all the nominalistic God is not the genius malignus; He is ‘only’ the God who does not enable man to be certain that he is not. The deus absconditus and deus mutabilissimus [hidden God, most fickle God] who is not committed to kindness and dependability except under the conditions of salvation as defined by revelation could only be taken into account philosophically as if he could be the genius malignus in relation to man’s certainty of the world. By transforming the theological absolutism of omnipotence into the philosophical hypothesis of the deceptive world spirit, Descartes denies the historical situation to which his initial undertaking is bound and turns it into the methodical freedom of arbitrarily chosen conditions.

Thus a claim was made to the absolute beginning of the modern age, the thesis of its independence from the outcome of the Middle Ages, which the Enlightenment was to adopt as part of its own self-consciousness. The exigency of self-assertion became the sovereignty of self-foundation, which exposes itself to the risk of being unmasked by the discoveries of historicism, in which beginnings were to be reduced to dependences. The weak point of modern rationality is that the uncovering of the medieval ‘background’ of its protagonists can put in question the freedom from presuppositions of which it claimed to have availed itself as the essence of its freedom.

The artificial latency of the motives in the Cartesian train of thought does not spring from anxiety about originality; rather it is itself an expression of the freedom that does not submit to the conditions under which reason has to prove itself radically but poses them for itself. For
even before reason, by means of the certainty of the Cogito and the proof of God’s existence, extracts itself once more from the abyss of its doubt, it has assured itself of its elementary freedom not to be deceived necessarily because although the equality of men in their judgmental activity is indeed threatened by the boundlessness of the will, it is also protected by the possibility of refrain ing from decisive judgment. Reserving assent is the first methodical step of the Meditations, the first conclusion that is derived from experience of the un dependability of traditional and received opinion, even before the argumentation of doubt is constructed. The ideal of the mind free from prejudice, the mens a praeiudiciis plane libera, seems to Descartes, on the basis of the Stoic theory of judgment that he employs, to be realizable by an act of decision in favor of indecision; and in this man demonstrates not only his immunity from metaphysical surprise but also the power to be free of historical constraint, to begin his own history afresh at any moment he chooses.

In the Principles of Philosophy of 1644 Descartes not only gave this primacy of freedom (as the cognitio prima et certissima [first and most certain idea]) over the certainty of the Cogito a more precise systematic expression, but he even described the capacity to abstain from theory as the source of man’s independence from his origin—which is to say, from the ‘quality’ of his God. Whatever man’s origin might be and whatever power of deception might dominate him, there remains this minimum of freedom in the act of withholding assent. A god can prevent man from knowing a single truth, but he cannot himself bring about error, unless man for his part freely runs the risk of being deceived. So man is not free in that he has grounds for his action but rather in that he can dispense with grounds. Absolute freedom would be the readiness and the ability to resign all interest in truth so as not to risk error. The structure of consciousness appears both transparent and at the disposal of its possessor, so that the dimension of prejudice can be suspended. For this approach great disappointments and corrections were in store, from historicism to psychoanalysis.

Descartes painstakingly effaced and disavowed the traces of his historical background in order to constitute the myth of the radical beginning of reason. In the Discours de la Méthode he dated the beginning of his doubt regarding the tradition back to La Flèche and passed over his crucial encounter with Isaak Beeckmann in Breda in 1618; he avoided (at the least) any answer to the reproach that his Cogito argument
had already been formulated by Augustine, and the question of a possible dependence has remained undecidable down to the present. Thus also the argument from the all-powerful God, where the possibility cannot be excluded that He might bring about the nonexistence of that which appears to man to exist, is introduced not as a liability inherited from history but as a constructed factor of uncertainty: Only the conviction of the existence of this God has the pregivenness of an "old opinion" rooted in our thinking, from which a new inference is drawn. The argument for doubt is founded, independently of theological tradition, on two sorts of experience: the experience that occasionally something seems evident to others that to me is evidently false; and the experience of my own error, which at least excludes the interpretation of the assertion of God's goodwill as implying that He must will that I should never be deceived. A divine will, then, which allows it to happen that I am occasionally (interdum) deceived, cannot contradict the attribute of goodwill—but why then should the "occasionally" not be able to turn into an "always"?

The fact that Descartes conjured up with his genius malignus an evil spirit that he could not then get rid of in a respectable and argumentatively solid fashion (as tends to be the case with evil spirits) is due to presuppositions by which he is still entirely bound to the traditional concept of reality. One could summarize these presuppositions as the assumption that reality contains an 'implication of assertion,' as though man perceived in the given world an associated claim to be that which it appears to him to be. This assumption allows it to appear possible to Descartes, at the end of his experiment, to ground the reality of the physical world in a metaphysical guarantee of its dependability. The assertoric quality of reality presents itself in the Cartesian doctrine of judgment in accordance with the Stoic schema, insofar as to the given content of a judgment an element of affirmation or denial is added, which reproduces the authentic assertoric sense that is implied in what is given.

In his marginal notations to the *Principles of Philosophy*, which were concluded in about 1692, Leibniz was to regard this concept of reality itself as the general prejudice that had evaded Descartes in his elimination of prejudices because it was implicit, as a hidden assumption, in his whole experiment with doubt. At the end of his analysis Leibniz not only declares the refutation of the argument from the deceiver God (Whom he entitles an *exotica fictio* [exotic invention]) to be a failure
but holds the argument to be irrefutable because it rests on an exorbitant demand in the very concept of reality it employs.

Leibniz asks what, after all, is meant when in Descartes's consideration of doubt he speaks of a possible "deception." The supposed lack of correspondence between our ideas of a nature independent of consciousness and what actually exists in itself need not be deception if it is merely one possible interpretation of these ideas that finds in them a claim to such a correspondence. As Leibniz says, there could be weighty reasons, unknown to us, for a lack of correspondence. This would have no relevance whatsoever for man since our consciousness is neither directed to nor sustained by such a correspondence. It depends exclusively on an immanent structure of harmony in what we are given. The question, then, which for the first time achieves its full clarity in Kant's philosophy, is that of the conditions of the possibility of this synthetic structure of the given. Thus Descartes's very concept of reality differs from that of modern philosophy in a way that makes Descartes appear not so much as the founding figure of the epoch but rather as the thinker who clarified the medieval concept of reality all the way to its absurd consequences and thus made it ripe for destruction. This does not prevent it from being the case that Descartes himself inaugurated this epochal turning with his approach to certainty through the *Cogito*; but he fell short of consistency at the point where he sought for a guarantee of a reality corresponding to our "clear and distinct ideas."

I have tried to show what it means to say that Descartes transformed the late medieval crisis of certainty into an experiment with certainty, that he represented the necessity of the historical situation as the freedom of self-imposed conditions of 'exaggerated difficulty.' But the experiment rests upon the presuppositions of the crisis, in that it constructively intensifies them. From the nominalists' hidden God, to Whom man cannot appeal for certainty regarding the world because He refuses to perform any 'function' for man other than that of salvation, Descartes derives the hypothesis of the *deus fallax* [deceiver God], the *deceptor potentissimus* [most powerful deceiver], Who in pursuit of his intentionally universal deception can not only intervene on the side of the objects but can also have given man himself a nature that even in regard to what it is most clearly given is capable only of error. Nominalism had largely restricted its discussions to God's partial intervention in the process of knowledge, and more particularly to
the obligatory example of miracles, which directly presuppose the
normal workings of nature for their demonstrative effect. It is certainly
the case that such considerations did not originally reckon seriously
with intentional deception occurring in fact but were only meant to
deprive man’s cognitive relation to nature of its unquestioned ob-
viousness and to inspire thankfulness for an unearned prerogative.

William of Ockham states that God owes nothing and cannot owe
anything to any being, and neither can He do any wrong. The
teleological interpretation of the human striving for knowledge does
not support any claim that it should be fulfilled, or even that it should
not be deceived. The argument from the natural conformity [conven-
ientia] between disposition and achievement, between an organ and
its successful performance of its function, which had enjoyed un-
questioned validity in the ancient tradition of cosmological metaphysics,
became questionable when transposed into a metaphysics of creation.
It would allow the prescription of a natural order to become an ob-
ligation binding on the creative will itself, something that could not
be admitted by those who were zealously concerned with God’s sov-
ereignty. In discussing the question whether it was suitable for a soul
capable of cognition (anima intellectiva) to be joined to a body like the
human one, Thomas Aquinas was still able to insist that such a problem
must not be considered from the point of view of omnipotence but
rather with regard to the inner conformity of the organ to its function. The
system of this conformity also restricted the problem of knowledge:
The same relation that subsisted between reason and its bodily in-
strumentation could also be asserted to hold between organ and object,
capacity and achievement. The situation of pregiven arrangement
between man and the world kept the problem of knowledge latent,
however much might be said about the manner of functioning of the
cognitive apparatus.

One sees immediately that the questions that have been asked since
William of Ockham can be simply characterized by their distance from
the ancient presuppositions. Ockham may say explicitly that he asserts
only supernaturaliter loquendo [supernaturally speaking] the possibility
of the miracle of the production of ideas without objects, of the cognitio
intuitiva [observational knowledge] of a nonexistent object—and indeed
as a perception satisfying all the relevant criteria: secundum omnen
conditionem—but nevertheless the important thing is not this excep-
tionalness, without which Christian Scholasticism simply could not
have got along with its theological presuppositions, but rather the systematic penetration of such theses and considerations. It is only from this point of view that it becomes possible to characterize nominalism as the system of breaches of system, as the shift of interest and accent onto the miracle, the paradigmatic reduction of the bindingness of nature. It is not the power that could give rise to the world but the power that can give rise to something other than this world that occupies the speculative interest. In the context of the doctrine of creation, the real objects are from the start only secondary causal agents in the cognitive act, the act to which the creator gives an object as though by a detour through created reality; it seems like only a small and harmless alteration, indeed a simplification and shortening of the way, when the object is projected into human knowledge not from its worldly existence but directly from the original ground of its possibility. Quite incidentally, this sort of question also shows that the tendency of late Scholasticism is toward overcoming the causal mediations and indirections in the world structure of the Middle Ages and that the question of absolute power is already implicitly the question of the immediacy of its operation in every place and creature in the world.

But at the same time it can be seen that such immediacy has a primarily destructive effect on the system’s security and must have this effect as long as immediacy does not mean the present realization of the whole of what is possible. The thesis that the first cause operates immediately is not new as such in William of Ockham; it had already been discussed before him, even in regard to the object of knowledge, in the Scotist school. Certainly the thought that God’s operation might be through two ‘channels,’ and thus the possibility of man’s deception, had not yet come within reach here. The phenomenalism involved in Ockham’s thesis implies only the general indistinguishability of primarily and secondarily effected ideas and not the concrete imputation of a false idea of a particular object, or of an idea of a nonexistent object. Certainly this thesis, which may have been intended as a ‘harmless’ broadening of the concept of what God could do, first received from the censorship of fifty-one propositions of William of Ockham (by the Curia of Avignon in 1326) the accent that kept such propositions from disappearing from the discussion and fostered the assumption that there was a dimension of unsuspected uneasiness behind them. The apprehension of the censors of Avignon is directed
only at the possibility that Ockham’s thesis could also be applied to the other-worldly condition of the unmediated vision of God: Phenomenon and reality would become interchangeable even in the theological limiting case of evidence, in the bliss of absolute truth. Ockham himself provided against this apprehension in the appropriate question of the Quodlibeta: the first cause can only produce immediately the effects of the secondary causes but cannot, so to speak, replace itself.16

This apprehension would not be particularly interesting if it did not show where a remnant of absolute certainty was for the time being still sought and needed and how distant the recourse to the absolute fundament of the Cogito, the irreducible presence of the subject for itself, still lay. In the discussions of the nominalist school the accent of interest then moved to this question: Assuming the possibility of the immediate action of the first cause on man’s cognitive faculty, what becomes of the certainty of knowledge of nature? This ‘secularization’ of the interest in certainty stands under the same theological premises as the attack on that interest: The undenied vestige of certainty in the absolute visio beatifica [beatific vision] loses its comforting function to the extent that the intensified concept of divine grace renders uncertain the attainability of this absolute evidence, or at least makes it clear that man can do nothing to earn it.

Peter of Ailly, whose influence was to extend into the following century and to reach its high point at the Council of Constance, lectured in 1375 on the sentences of Peter Lombard. In this commentary he says, in opposition to Ockham’s thesis, that for physical objects, on the assumption of God’s general influence and the normal course of nature—that is, excluding miracles—sufficient certainty is to be assumed; so there is no reasonable occasion for doubt, especially not in regard to causality, since otherwise all demonstrations in natural philosophy would be invalid (sic perirent omnes demonstrationes naturales).17 But the argument that doubt regarding the existence and nexus of the objects of the senses is indeed possible but is not rationally meaningful can only mean that man must presuppose the presence of the conditions under which his self-assertion in the world is possible, that the radicalizing of his questions is bounded by the situation in which all questioning would be meaningless. This follows from the argument (no doubt directed against Nicolas of Autrecourt) that the denial of the principle of causality would upset the explanation of nature. Thus Walter Burleigh had already argued, in opposition to Ockham’s denial
of the reality of motion, that to deny this sort of thing is to make the science of nature impossible. 18

In this context, that can only mean that metaphysics may not make physics impossible. If, in a world no longer arranged for the benefit of and coordinated with man, knowledge of nature proves to be a condition of the possibility of human self-assertion, then the conditions under which knowledge of nature is possible must be presupposed as given, or at any rate as not open to meaningful doubt. The metaphysical foundation of the possibility of knowledge of nature seems itself to be something that on the given assumptions cannot be demanded because the desired foundation would have to be subject to the same skepticism that created the demand for it. The appeal to the *cursus naturae solitus* [normal course of nature] is not teleological but rather hypothetical, in the sense of a general supposition without which no other hypothesis has any sense at all—a postulate of self-defense, which does not assert the regularity and dependability of nature but rather assumes them as the only possibility left to man. At this point in particular, one must pay close attention to the primary function that is assumed by such a hypothetical universal premise: It defines a minimal condition, which as such is certainly not yet sufficient but at least does not destroy from the beginning all prospect of acquiring knowledge of nature.

At this stage, the correlate of the nominalistic absolutism aimed at the submission and resignation of reason does not yet involve the claim to domination over nature that emerges from the ‘history-of-Being’ ['*seinsgeschichtlich*': Heidegger] interpretation of the modern age as that age’s pure ‘mode of behavior.’ The “history of Being” [*Seinsgeschichte*] is, of course, concerned with the isolated epochal ‘fact’ that emerges from an impenetrable background and has no need of an accessible historical context. The modern epoch becomes the pure fatality of ‘forsakenness by being’ [*Seinsverlassenheit*], which permits, as a direct result of failure to recognize the ground of history that is not at anyone’s disposal, the illusion that man makes history and that history can consequently be understood through the logic of the questions that man himself raises. Such an approach must either level off the difference between self-assertion and the claim to domination or else interpret the new sense (once it is acknowledged as such) of the demiurgic relation of power between man and reality as a tendency
(only now achieving adequate formulation) whose cryptic early forms can already be diagnosed in declining Scholasticism.

The "history of Being" excludes the possibility that the signatures of an epoch might be illuminated by reference to the dialogic structure of a reason that is not indeed identical with history, nor even always spontaneously 'active' in it, but is nevertheless 'activatable' by need and necessity, by *aporia* [difficulty] and exogenous overextension. The modern age as an episode of the "history of Being"—more particularly, of forsakenness by being—would bear the stigmata of domination, of the serviceability of theory for technicity, of man's self-production, precisely not as an 'answer' to a provocation (bequeathed to it in whatever manner) but rather as one of the un-'graced' confusions surrounding the "Being" that has been withdrawn and concealed since the time of the Presocratics. In such an interpretation, it is true, the physiognomy of the epoch is not stamped by the dissimulation that, as the 'secularization' of the theological substance, conceals the truth of that substance; but the interpretation itself emerges unmistakably as a product of the secularization of the categories that were developed in the theology of grace. It is not that the contents of the epoch become pseudomorphs of their theological antecedent but rather that the characterization of the epoch's position in history can only be defined as pseudotheology. This characterization gets its orientation from both the temporary and provisional status assigned to the age, as prior to a new and then perhaps final event in the "history of Being"—its turning to *parousia* [presence]—and the compellingly imposed, negative evaluation of the age, in which mythical rejection by the substitute for divinity, on the one hand, and the arrogance of the subjectivity that is a failure as far as 'authenticity' is concerned, on the other, make up a single integral state of affairs. The epoch appears as an absolute 'fact' [*Faktum*]—or better: as a 'given' [*Datum*]; it stands, sharply circumscribed, outside any logic, adapted to a state of error, and in spite of its immanent pathos of domination (or precisely on account of it) finally permits only the one attitude that is the sole option that the "history of Being" leaves open to man: submission. The absolutism of "Being" is in truth only the continuation of the medieval result by other means.

The negative idealization of the modern age in the "history of Being"—which perhaps has only one thing in common with the self-consciousness of the Enlightenment, namely, the capacity to designate
Descartes's *Cogito* as the epochal beginning that lacks any intelligible antecedents—has the methodical advantage of being in possession of an a priori typification of the epoch. What genetic presuppositions underlie Descartes's *Cogito*, in which he shows himself to be the functionary of the latest version of forsakenness by Being, is of no interest to the initiate of the "history of Being," because it remains a matter of indifference in relation to the incidence of the epochal meaning from the vertical (which need not always mean "from above"). On the other hand, it interests the historian, from the perspective of the traditional demands of his form of rationality, only to the extent that it contributes to the elimination of the mythology of the absolute beginning and withdrawal into the comforting solidity of what was there all along.

From these points of view it may seem insignificant that while the nominalistic discussion of Ockham's thesis of the possibility of intuition of a nonexistent thing does not arrive at Descartes's *Cogito*, it does anticipate his assertion of the incontestability of man's freedom not to have to let himself be deceived. In the separation of the passivity of sense perception, with which man is delivered up to the external agencies acting on him, and the activity of judgment, with which for the first time he runs the risk of error, the nominalists already saw the narrow solid ground of self-assertion.

Gregor of Rimini attempts a solution of the problem raised by Ockham of the simple sense perception of, for example, a particular color by proposing that the act of perception never justifies more than the limited judgment, "I see this color," and not the more ambitious judgment, "This color exists." The judgment that is thus reduced to its subjective basis remains unaffected by the question of the existence of the perceptual datum. So the possibility of error is localized in judgment only to the extent that the judgment asserts a state of affairs to exist that goes beyond the immanent fact of consciousness, that is, to the extent that it not only states but interprets. For the complex datum of, for instance, a man running, it is still true that God could give rise to and maintain this perception; but here again it is within the power of the subject himself to protect himself from possible error. Only if God could also help to produce the judgment about a nonexistent state of affairs would deception become unavoidable. Gregor excludes this possibility, and not indeed only on grounds of the freedom of the subject, but with the express statement that divine omnipotence
is limited by the impossibility of deception: "Quia tunc deus per se et directe me falleret, quod est impossibile." Thus the deception can only be indirect, as the production of a perception, since the responsibility for the error then remains with man in his, so to speak, over-shooting in the act of judgment. Thus the Augustinian model of theodicy, assigning to man the responsibility for the evil in the world, is held to here also.

Gregor's basic idea, that man as a being absorbed in and (so to speak) naively interpreting the world of his senses can indeed be deceived, but not man in his judgmental capacity, was to lead to a skeptically tinged discussion of the question of the advantageousness of undisguised truth for man in Pierre Bayle's article "Rimini" in his Dictionnaire. Bayle, to whom the supposed truth content of the entire tradition appeared as a sum of contradictions, and who saw in the establishment of this contradictoriness the sovereign task of critical reason, is far from being disconcerted by the most radical application of Cartesian doubt. Should not God, he reflects, behave toward man in regard to truth just as a doctor behaves toward a sick person or a father toward his children, toward partners, that is, whom one often deceives (wisely and for their own good) but never defrauds? Would men be able to bear the truth if God gave them access to it in its nakedness? Such a reflection, which not only considers it salutary that man should be left to his ignorance but would even be prepared to regard leading him astray as a merciful act, presupposes that no constitutive relation is seen between truth and man's happiness. This connection had still been indissoluble for late Scholasticism because the definition of the blessed final state of the elect depended on it. One could indeed consider the possibility that God's sovereignty might withhold the truth from man, but not that man could be privileged and well provided for by this very state of affairs. The skeptic, it turns out, is least able to do without the assumption of an agency that provides for him, whether it be cosmos, God, or nature. For the nominalists, the path of skepticism was blocked precisely because they had destroyed this agency in their theology.

What it means to say that Descartes functions in the self-representation of modern philosophy as the founder of the new claim to certainty based on the absolute evidence of the Cogito can now be more precisely defined. By radicalizing the nominalists' potentia absoluta into the hypothesis of the genius malignus, he sharpened the doubt
surrounding certainty to such an extent that the pragmatic formulas for the self-assertion of reason, such as had been opposed to Ockham's thesis by members of the Nominalist school, could no longer be sufficient. Recourse to the absolute fundament excludes the pragmatic concession that man does not need to assume anything that would deny him the possibility of acquiring knowledge, and—if one regards it as a way of avoiding a problem that is insoluble in any case—declares it to have been a mistake. For self-assertion a general postulate would have been sufficient, to the effect that any metaphysical assumption could be ignored if it destroyed the possibility of knowledge.

Descartes forced himself to take the further step of requiring that the hypothesis of the general impossibility of knowledge be refuted, so as to win the secure ground on which one could proceed to construct the system of physics and thus in the end the morale définitive [definitive morality]. Thus Descartes did in fact fundamentally define the character and claims of modern thought, not, however, by confronting the tradition with the violence of a radical claim and a new plan but rather by making the implications of theological absolutism crucially more explicit and developing them into such an acute threat that a basis for resistance could now only be found in absolute immanence.

The fact that Descartes only retrieved, on the side of the subject and his need for certainty, what he had advanced on the side of transcendent absolutism becomes evident to us if we look once again at another tendency of nominalist defense against the theological problematizing of cognitive certainty. In Paris in 1347, forty theses from Jean de Mirecourt's Commentary on the Sentences were condemned, and thus again one of those catalogs was made manifest from which the extreme consequences of the late-medieval development can be read off as though from a chemical preparation.

Ockham's initial thesis, with which we are already acquainted, that external perceptions could be produced and maintained by the power of God even in the absence of their object, is described by Jean de Mirecourt as the usual opinion (opinio quae communiter tenetur). In order to demonstrate the consequences of this thesis, the nominalist takes the further step of deriving from the impeachment of the theoretical subject that of the moral subject as well: if God, without the cooperation and consent of the subject, can directly produce the latter's acts of perception and thus bring about error without any lapse on the part of the knowledge seeker, then He could also produce morally repre-
hensible actions, such as hate for one's neighbor and even for God, directly and without the supposed agent being responsible. The unity of the subject, whose psychic acts and capacities William of Ockham himself had already refused to regard as independent and separable (since this would have involved a mistaken realism regarding concepts), excludes the possibility that theoretical certainty could itself be rendered insecure. It cannot, without making moral responsibility equally problematic as a result, since man can no longer be sure of being the author of his actions. Here theological absolutism comes up against one of its boundaries, the sharper definition of which it itself practically demands: God can indeed produce appearances without objects, even appearances of supposed actions of the most sinful kind, but He cannot bring it about that these should constitute acts for which the moral subject can be held responsible.

From the perspective we have now reached, one can say that the introduction of the concept of freedom into the theory of knowledge is an attempt to apply the paradigm of the transcendent incontestability of morality to theoretical self-assertion. A man may be chosen or condemned in the theological sense, destined for salvation or the opposite—but no 'external' agency can make him responsible for such a destiny. No more can he be forced into a theoretical judgment that contradicts his own insight, if the theoretical act, just like the moral one, is nothing but 'the soul itself,' its modus se habendi [mode of self-possession]. Under the enormous pressure of the demands made upon it by theology, the human subject begins to consolidate itself, to take on a new overall condition, which possesses, in relation to ambushes set by the hidden absolute will, something like the elementary attribute of the atom, that it cannot be split up or altered. Absolutism reduces whatever is exposed to it, but in the process it brings to light the constants, the no longer touchable kernels.

The ius primarium [primary right], the primeval right to self-assertion, becomes comprehensible long before Descartes and Hobbes as the essence of the modern age's understanding of itself—that is, as the anthropological minimum under the conditions of the theological maximum. This beginning does not come about as the formulation of a new concept against an old one, as the constitution of an epoch after the preceding one has been broken off, but rather as the mobilizing of motives toward the definition of an opposing force, precisely while the attack is being intensified; not as the negation of the premises but
rather as a condensation under the pressure of their exaggerated power.

Because theology meant to defend God's absolute interest, it allowed and caused man's interest in himself and his concern for himself to become absolute. The position of his openness to theology's claims forced his self-concern to reoccupy it. In the theory of knowledge this concern takes the form of the critical rejection of the conception of receptiveness that is basic to the Aristotelian system. For this very receptiveness delivers man up to an absolute power of whose goodwill he cannot be sure. Jean de Mirecourt defended himself against his condemnation in two written apologies. If sensation (*sensatio*) and knowledge (*intellectio*) were only qualities (*passiones*) of the organ of knowledge, he argues, all knowledge would be immediately dependent on God's will since the production of a quality is that of which God is alone and immediately capable (*quod deus se solo posset*). That would be one elementary, and in fact Aristotelian, explanation of the cognitive process. The other is the interpretation of knowledge as an activity (*actio*) of the knowing subject, and if this proves to be correct, then an intervention in the act of knowing can only come about if the subject 'cooperates' as a secondary cause. The idea, with which we are acquainted from the Ockhamist controversy, that the first cause cannot (as it were) substitute something else for itself as the object of the beatific vision, is now broadened into the statement that neither can there be any substitute for the secondary cause, as far as its activity is concerned: "Nullam actionem causae secundae posset deus agere se solo..." The author, frightened by his censors, does not dare to make a categorical decision between these alternative theories of knowledge and to express his preference for the 'activity' theory of knowledge as a *vera actio animae* [true act of the soul]. But even through the language made ambiguous by the circumstances of censorship, he makes it sufficiently evident where his interest lies or where he sees man's interests better served. He would like to attach himself to the second point of view, he says, if he had the courage; however, the reader may choose for himself.28

The guarantee that Descartes will seek to found on the most perfect being, which he gains through his proof of God's existence, relates, however, not only to the reality of the physical objects that present themselves through our clear and distinct ideas but also, in order to deal with the full extent of the uncertainty aroused by the process of
doubt, to the propositions of logic and mathematics. This conforms to the voluntaristic presuppositions of his concept of God, according to which even the so-called "eternal truths" are decreed by a sovereign act of the divine will and are thus only valid for the world that God de facto willed. Consequently the guarantee must extend to the non-alteration of this highest decree, so that it possesses final validity for the world and for the thinking rational beings within it, once these are posited. This seems to him to be adequately guaranteed on the assumption of the most perfect being, although the world persists not as a result of the unique act of its creation but only on account of the will that confirms its existence anew at every moment. Thus everything depends upon the weak thread of the proof of God's existence, on which Descartes hung his entire system; and at this very point he has regressed in comparison to the level reached by the late Scholastic critique of the efficacy of the arguments that were developed at the height of Scholasticism. Hence the critical equipment of his solutions does not measure up to the difficulties with which he confronts himself.

The abandonment of the ancient cosmos was completed at the moment when the distinction between possibility and reality ceased to be congruent with the distinction between reason and will, that is, when the act of the divine will no longer related simply to the existence of the world but also related to the universe of truths that hold in it. The infinite plurality of worlds is the horizon of uncertainty for the existing world and for each of its moments, if one cannot deduce from the contingency of the first act of foundation a world course that is minimally consistent in itself and constant by itself. It is evident that there could only have been one secure guarantee for this postulate of the constancy of the world's lawfulness, namely, the coincidence of possibility and reality, the exhaustion of reason by the will, and thus the identity of reason and the will in the world ground. This path will be taken by Giordano Bruno. The nominalists reject it, and the 'effectiveness' of their voluntarism rests on this rejection.

Jean Buridan justifies this with the argument that God could not create an object adequate to His potency because this would imply the assertion that He cannot create anything greater and better than what He has in fact created—and this assertion of exhausted potency "cannot" not be a possible assertion in regard to Omnipotence. The attribute of infinity destroys the possibility not only of justifying God on the basis of His works but also of giving man the security of a
cosmos that—as it was formulated for the Platonic demiurge—must be the best and insurpassable instance of what is possible as material appearance.

If, then, for nominalism the actual world could not be deduced from the premises of a world in general or from the principle of the best possible world, the radical question arose whether it was necessary or even important for man to know which of the possible world models had been realized in his world, what nature the hidden God has concealed in His creation. But that the hidden truth was a matter of indifference could not in itself signify man’s happiness because (as was not the case for Epicurus) for the Middle Ages, in all their phases, no concept of happiness was thinkable that could be defined as the mere elimination of negative factors—pain, the affects, insecurity due to uncertainty. For such a concept of happiness would have made the bliss of the elect in the vision of God into a sort of superfluous addition to a situation, already sufficient unto itself, of freedom from suffering and care.

Thus the possession of truth must continue as the essence of the fulfillment of man’s need for happiness; but to the extent that such possession becomes a transcendent gift of pure grace, this-worldliness may be conditioned precisely by the absence and inaccessibility of truth or may distinguish itself, through resignation vis-à-vis the identity of theory and eudemonia, as a purely preliminary condition. The freedom to abstain from categorical judgment in favor of hypothetical indecision presupposes that man does not require certainty in the sense of insight into the plan of creation and the reality lying open before God in order to assert himself in existence. The conditions of the temporal prolongation of existence can be strictly distinguished from the conditions of its fulfillment.

At the same time, the disappearance of the teleological protections that had been part of the concept of nature means that man has to adjust himself to coming to terms with a nature that is not adjusted for his benefit, so as to anticipate the inconsiderateness of natural processes and to make up for the inadequacy of their products by his own production. Hypothesis, which from one point of view is the formal expression of the renunciation of the claim to truth in the traditional sense of adequacy [adaequatio], becomes from another point of view a means of self-assertion, the potential for human production of that which nature makes scarce or does not provide for man at all. To this
kind of theory, which no longer has to provide man's happiness immediately as truth, the given reality is more than a matter of indifference only insofar as the theory projects upon it the reality to be produced and checks the latter, once produced, against it. Man's existence in the world now has only a mediated relation to theory.

The absolutism of the hidden God freed the theoretical attitude from its pagan ideal of contemplating the world from the divine point of view and thus ultimately sharing God's happiness. The price of this freedom is that theory will no longer relate to the resting point of a blissful onlooker but rather to the workplace of human exertion. Theory that can no longer be anything but hypothesis has really already lost its immanent value, its status as an end in itself; thus the functionalization of theory for arbitrarily chosen ends, its entry into the role of a technique, of a means, is a process subsequent to the loss of its status as an end in itself. Only one should not allow the imputation to be conveyed that purposes posited by a technical will must play the primary and motivating role for the technical process. What we call the "application" of theoretical knowledge is, as a concrete determinant of the theoretical attitude, sterile; whereas as a secondary actualization of an unspecific potential, it is not only established precisely through the unadmitted disappearance of theory as an end in itself but also serves for the same reason as the ultimate justification for the whole expense of the cultivation of theory. Here the explicit avowals of the power of ancient and humanistic tradition, which asserts the identity of theory and eudemonia, are kept to one side.

The model for the new position of theory in view of the hidden nature of the deus absconditus's [hidden God's] creation—which cuts us off from the cognitive ideal of Aristotelian physics and cosmology—was provided by astronomy, with its resignation vis-à-vis the provision of causal explanations of the motions of the heavenly bodies and in its conception of itself as a mere 'art,' the business of which was, by means of constructive auxiliary representations, to render the unknown and inaccessible mechanism of the goings on in the heavens sufficiently calculable to meet the human needs for temporal and spatial orientation in the world.

The idea that for this most sublime object the human spirit had to make do with hypothetical improvisations was canonized in Ptolemy's Almagest, the handbook of astronomy that was authoritative for the tradition. For Ptolemy the hypothetical technicity of astronomy is
due to the transcendence of its very object, not to a reservation of secrecy on the part of its author. There is no metaphysical guarantee that this knowledge can be in the strict sense a 'science,' whose cognitive means would be equal to their task. Man's imagination, fed by earthly experience, is necessarily and unavoidably limited to the realm in which it originates and must have recourse to its capacity for invention when faced with what is entirely heterogeneous to that experience. The highly artificial character of the hypotheses introduced under these circumstances escapes the criterion of adequacy to the object; 'method' emerges as artfulness and self-defense against the metaphysical difference between its object and those of the rest of knowledge; it has the basic character of invention, compensating for a constitutional defect in man, rather than of self-measurement against the given.

Astronomy's exceptional position in the relation of theory to the world was also familiar to High Scholasticism, and it was not leveled off by the latter's Aristotelianism. Thomas Aquinas comments on the twelfth chapter of Aristotle's second book On the Heavens, in which the question (the most thorny one for the geocentric system) of the order of the heavenly spheres above and below the sun, and the interconnection of what are presumed to be their motions, is discussed: In order to cope with these difficulties, Aristotle had appealed to the individual animation of each of the heavenly bodies and justified the attempt (motivated by the desire for knowledge) to follow even a narrow path in the midst of the most difficult terrain of appearances and to be satisfied with even a little certainty, regarding this as an expression more of timid restraint than of audacity. Aquinas follows him in this. But looking back on the history of astronomy and on the differences especially in regard to the positions of Venus and Mercury, he distances himself even from the prospect of a little truth. He explicitly leaves open the possibility that the actual state of affairs could be entirely different from what is assumed by astronomy. In another place Aquinas compared the inadequacy of the human spirit vis-à-vis the astronomical object with the unprovability of the theological dogma of the Trinity: as in natural science proofs can be adduced with complete certainty, so it is in regard to knowledge of the unity of God; but the capacity of reason to prove that this unity is composed of three persons can only be compared to the dim prospects for our cognitive capacity in relation to the true construction of the starry heavens.
What had been seen in High Scholasticism as the special case of astronomical knowledge is generalized by nominalism for all knowledge of nature. But this means that astronomy’s interpretation of itself as technique, which Aristotle had avoided by means of his formulation of the justification of even the most minimal yield of truth and the exemplary status even of hopeless endeavor—this interpretation penetrates into the theoretical ideal. This does not yet mean that orientation and preservation of man in the world are immediately defined as functions of theory; but it does at least mean that the ‘artificial’ character of the statements that can be made in the knowledge of nature already moves away from the norm of science (still conceived of in the Aristotelian fashion) and approaches that of the ‘liberal arts,’ among which astronomy traditionally had its place. From the modern point of view, for which natural science represents scientificness in paradigmatic and fascinating fashion, this may appear disappointing; but within late Scholasticism, it tends to bring about a connection that offered itself only within the Quadrivium of the liberal arts and was already a matter of course for astronomy, namely, the possible relevance of geometry and arithmetic for physics. The process in the history of the sciences that we would nowadays describe as crucial to their becoming scientific, namely, their primary mathematization, is paradoxically prepared for by detachment from the traditional concept of science and objective adaptation to the sphere of the artes liberales [liberal arts], in which not only the mathematical equipment lay ready or could be developed but also the tolerance in relation to the truth was attainable that was excluded by the Aristotelian and Scholastic ideal of science.

That man under the conditions of theological absolutism had to live with ‘less truth’ than the ancient world and High Scholasticism had intended for him and imputed to him proves to be the precondition of a new definition of ‘scientificness.’ Diminution of the claim to truth and thus of the autonomous dignity of theory first cleared the way for the syndrome of science and technicity, of theory and self-assertion.

Here the process of the justification of man’s claim to knowledge meshes with the rejection of the maximal demands posed by the Aristotelian tradition’s concept of science. That concept’s vulnerability now becomes evident to the extent that it had obscured the element of self-assertion normatively and withheld it from consciousness. “Science comes into being when the gods are not thought of as good,”
writes Nietzsche in a note from the year 1875. One could also propose this formulation: Science arises when man must give up wanting what is necessary for his mere existence to be sufficient to make him happy, too.
Cosmogony as a Paradigm of Self-Constitution

The process of the disassociation of theoretical efficacy from the idea of truth can also be described as a correlate of the declining anthropocentric consciousness, which is transposed from the diagram of the centripetal and thus teleological referential structure of man and the world into that of the centrifugal and thus demiurgic activity exercised by man upon the world. If the world is no longer reliably arranged in advance for man’s benefit, neither is the truth about it any longer at his disposal.

As though from a photographic negative, this connection between teleology and cognitive ideal can be read off from the decisive contradiction that Copernicus was to oppose to the development described here. He argued for going beyond the artificial function of theory in the field of astronomy itself and expressed his dissatisfaction with the constructivist tradition of this discipline by appealing to the principle that the world was intended for man. “When I had pondered for a long time this uncertainty of the traditional mathematics in connection with the calculation of the motions of the spheres, it came to seem scandalous that in spite of such painstaking investigation of the most trivial data regarding that circular motion, the philosophers had not arrived at a more dependable idea of the movement of the world’s machinery, even though this was constructed on our behalf by the best and most trustworthy Master Builder of everything.” That this monumental recurrence of the anthropocentrically assured claim to truth could take place in astronomy, of all places, was, while it had
no direct effect on the theory of science, of incomparable importance for its actual history because it was only thus that physics could be forced into its subsequent reform by Galileo and Newton. It was an episode of metaphysical contradiction, which failed to block the overall process that is our subject here because astronomy was already mathematized and was not modified in this status as an ‘art’ by the Copernican definition.

Descartes, on the other hand, drew the consequences from the ‘disappearance of inherent purposes’ ['Telosschwund'] in the nominalist development when he pronounced the prohibition against deriving any propositions in natural science from a purpose that God or nature could have had in their productions. Man should not presume to possess insight into the intentions behind the world. The assumption of God’s infinite power means above all that finite reason cannot determine that any of its hypotheses should correspond to the actual constructive principle of nature (generalis totius huius mundi constructio). This distinction between the infinity of the principle and the finitude of reason can be characterized as a postulate of theoretical humility: “Ne nimis superbe de nobis ipsis sentiamus” [Let us not think too highly of ourselves]. This postulate is violated particularly when knowledge is assessed as though all things were made for man’s sake only, and as though consequently man could possess insight into the purposes for which they were constituted. Consistently, then, when Descartes discusses the three world systems of Ptolemy, Copernicus, and Tycho Brahe, he cannot deduce the superiority of the Copernican system from the admission that it has the advantage of simplicity and clarity (aliquanto simplicior et clarior). Only if the world had been created with consideration for man and his capacity for knowledge could it be concluded that greater intelligibility must be a criterion of reality. Thus Descartes admits the Copernican and Tychonic systems as equivalent in value, ultimately putting forward his own hypothesis as the simplest of all (omnium simplicissima), but without drawing from this the conclusion that it represents the actual state of affairs. Where truth is not to be had, there is room for the indifference of decision. In fact it is important to Descartes to introduce his concept of freedom into the process of theory construction in this way because in the range of hypothetical variation, reason protects itself against being led astray by metaphysics. The rejection of anthropocentrism prevents the human power of imagination from serving as a criterion of the real circumstances in the
world. The distance of the fixed stars from the earth, for example, even if one started from the dimensions granted to it by tradition, would already be so incredible in comparison to what man is familiar with that no arbitrary increase in that distance could increase its inconceivability, while in relation to omnipotence the distance could not be thought sufficiently great that it would be less credible than any arbitrarily chosen smaller distance. Neither from the point of view of man nor in regard to the concept of God does there arise anything like a 'natural' scale for the world. Consequently a range of free hypothetical variation opens up wherever one does not consider it possible to employ technical parameters.

What holds for space does not hold without further ado for time. Here there arise the much discussed difficulties in the interpretation of the Cartesian cosmogony, in regard to which people are all too ready to trace any unclarity to the author's fearfulness and masked anxiety under the influence of the Galileo affair. People would rather not imagine that the 'beginner of the new philosophy,' as Schelling entitled Descartes, could have perpetuated so much medievalism in himself and lent power to so much contradictoriness for reasons other than fear. If Descartes had really begun 'to break off all connection with earlier philosophy, to erase, as though with a sponge, everything that had been achieved in this science before himself, and to rebuild philosophy from the ground up, just as though no one had ever philosophized before him,' then the beginning of his projected cosmogony could indeed only be understood as the relapse of a self-terrorized revolutionary. In fact, however, according to his own assumptions, Descartes did not face the alternatives of inquisition or freedom of thought, loyalty to faith or reason, but rather the paradigm (which was realizable in this exceptional case) of a truth that, in contrast to the possible satisfactory constructions of reason, 'happens' to be known. The Bible did not in fact contain any information regarding the distance of the fixed stars from the earth; but it was not this that first made room for the 'art' of hypothesis, any more than this room would have been closed off if the deus revelatus [God of revelation], in some specific passage, had lifted the veil of secrecy from the deus absconditus's [hidden God's] physics. For 'revelations,' however indisputable their truth may have been for Descartes, lacked on account of their voluntaristic discreteness the element of the internal consistency
of a system of true propositions, which Descartes had required in the rules of his projected method.

Thus the admission of the truth of the biblical account of Creation as a prelude to his cosmogonic vision is not a cunning device of doubled truth, but neither is it a mere continuation of fideism, which presupposed that it definitely was a matter of absolute truth—even if only in the form of unconnected pieces of a hidden totality. Rather his project sprang from precisely the opposite position, where there is no interest in absolute truth (except as a luxurious surplus benefit) as long as any hypothesis is available that has an explanatory value covering the relevant range of experience. Descartes announces that he will leave the *genuina veritas* [genuine truth] alone (*malum hoc in medio relinquere* [give this up for the time being]) only to assure us immediately that there is no doubt that the world came into being in a different way than the one he will sketch, namely, as a unique and immediately complete creation. This is in accord not only with Christian doctrine but also with natural reason, which in view of God’s immeasurable power could not expect anything but a product having no need of further improvement. But the hypothesis starts precisely from the assumption that infinite power is at bottom identical with the infinity of what is possible, so that, regarding the path that it actually adopts, no certainty can be had from the result alone, and indeed no certainty needs to be had for the purposes of life (*utilitas ad vitam*).  

In this section there is an important difference between the Latin version of the *Principles of Philosophy* of 1644 and the French version of 1647: The French text appends to the statement at the end of Chapter 44 that hypothesis has the same serviceability in life as secure truth the additional argument that hypothesis is perfectly sufficient in the use of natural causes to bring about those effects that one has set oneself as ends. On the assumption of unlimited possibilities, the experimental verification of hypotheses loses its power of conclusive demonstration, but this restriction loses its significance if knowledge of nature is directed from the outset at the *telos* [defining purpose] of the production of the phenomenon. As an instrument of self-assertion, theory has no need of the luxury of relating its hypotheses to—and taking part in—the truth possessed by divinity itself. The involvement with technique integrates theory and the theoretical attitude into the functional complex of the immanent teleology of human self-assertion, and weakens its—until then—irreducible claim to truth.
The power to foresee events, to anticipate them, to alter or to produce them, proves to be the 'self-assertive' sense of the incipient modern science. This state of affairs is not altered by Descartes's programmatic statement that the completion of knowledge should provide the foundation of the definitive morality. Once morality has been defined as dependent on the given reality—that is, as the human conduct that is fully appropriate to the situation, that guarantees man a peaceful conduct of life thanks to the absence of conflicts with reality—then this conception already contains the conclusion that not only the adaptation of man to reality but also the adaptation of reality to man can bring about the same effect (even though this may no longer be aptly described as "morality").

The adaptation of human behavior to the reality of nature that is mastered by theory, as the essence of the definitive morality, is thus only the initial formulation of a new definition of the meaning of the theoretical attitude, a formulation that can endure as long as human action with theoretical regard to nature proves to be adequate for man's needs but that must be translated into the more pointed conception of a reality to be altered and produced in accordance with human purposes, to the extent that reality proves to be inconsiderate of man. The world must be regarded as producible if it is not certain that man can get by with what is given. Following the Cartesian program, man first of all refines his ability to enjoy nature's benefits by supplying himself with the theoretical knowledge that is a pre-condition of an existence in conformity with nature, but already he does this reserving the right to interfere in nature, to subjugate it as the substrate of demiurgic production.

On these assumptions, the contradiction that appeared to be contained in the introduction of the Cartesian cosmogony resolves itself. The choice of a hypothesis that, contrary to revelation and 'natural reason,' regards the world as a system gradually developing from original matter and seeks to demonstrate the possibility of this process is dependent on the intention of exhibiting the nature with which man is confronted as a sum of what can be produced, depriving it of the self-evidence of what is set forth ex nihilo [from nothing]. For this purpose it is perfectly sufficient for Descartes that it could have been this way, even if he was in fact honestly convinced that no such evolution had taken place. Reduction of the world to pure materiality is not primarily a theoretical proposition, which would have to compete
with a traditional truth, but rather a postulate of reason assuring itself of its possibilities in the world—a postulate of self-assertion.

The Cartesian cosmogony has a function that is radically different from that of the Platonic cosmogony in the *Timaeus*: There it was a matter of assuring by a myth the approximation of the quality of the cosmos to the ideal, a matter of sanctioning the existence and the intelligibility of what exists as the image of the pure sphere of what should be—whereas here, in Descartes’s sketch, it is a matter precisely of reducing what exists to the mere materiality of its preconditions, a matter of the reversibility of the nexus between starting point and result, between chaos and cosmos. Descartes’s concept of matter avoids the device that was adopted by the ancient atomists of building the determination of nature’s form into its very origin and thus perpetrating the self-contradictory postulation of specifically formed atoms; but it also avoids the phantom of the Aristotelian primary matter, with its absolute lack of definition, which never manifests itself in physical processes and is referred totally to the complementary and equally shadowy factor of form.

How near to the characteristic qualities of myth Descartes’s cosmogonic hypothesis comes, in its tendency toward the role of a pragmatic postulate, can be seen from the apocryphal ‘backward’ extension given to it by a discussion of the hypothesis in a famous eighteenth-century textbook of physics: “According to Cartes, before this world existed there was a lump of uncommon hardness, which God by His omnipotence dashed to pieces, and set all of its parts in motion. These parts rubbed against one another in such a way that there arose a great many little balls. . . .”¹⁰ This seemingly ironic overstepping of the economy of the model, by producing a prehistory of the homogeneous original matter itself, in which omnipotence finds its role after all in the crushing of the archaic atom—but precisely the role of reducing it to the substratum of the world!—demonstrates graphically the paradigmatic significance for the mode of operation of modern rationality that was to fall to Descartes’s cosmogony. God must not be needed in the history of the world itself; in Erxleben’s apocryphal version of Descartes, the worker of miracles and keeper of the construction plan of nature performs the great miracle of His omnipotence before the beginning of the history of this world, in order to bring about the chaos from whose grinding mill, by the self-regulation of
long-term processes, the world lying before our eyes is finally supposed to have emerged.

This passage makes it clear why the renewal of ancient atomism by, for instance, Gassendi got the worst of the competition with Cartesianism and its concept of matter and space. One can put it as follows: In the situation of man alarmed about his metaphysical insecurity, the concept of the atom that preforms the shape of the world contains too much no longer credible reassurance, too much pregiven cosmic character. The process of the disappearance of order and teleology in nature has undergone a revaluation; what is no longer found ready as reality benefiting man can be interpreted as a possibility open to him. The widening of this horizon of possibilities occurs precisely because the process of the disappearance of inherent purposes is no longer merely accepted and (so to speak) suffered but rather is taken in hand, as a task of critical destruction, and pressed forward.

The relation of the doctrinal differences to the functions accruing to the differing positions admittedly remained mostly hidden from contemporaries. Thus Robert Boyle (1626–1691), who tried like Gassendi to make use of ancient atomism and, in accordance with the implications set forth here, exhibited a peculiar cramped combination of trust in teleology and skepticism, wrote regarding the modern reception of atomism: "Certain modern philosophers have correctly followed the example of Epicurus in that they were satisfied not to specify in each case the supposedly true, but rather merely one possible cause of the phenomena."

The instructive thing about this quotation is that it overlooks the crucial difference, which deprives atomism's modern reception of the character of a renewal of the ancient doctrine: Epicurus wanted to specify not only one possible cause of natural phenomena but rather in each case what appeared to him to be the complete catalog of all the possible causes, since this was the only way in which he could demonstrate the irrelevance, for the condition of man's consciousness, of the decision between these possibilities. The new atomists, just like the Cartesians, seek one hypothesis to explain the phenomenon, and indeed not in order to produce theoretical reassurance or practical indifference but rather in order to render the phenomenon itself producible independently of its real conditions in nature.

A further difference that at first remained unnoticed must be added: Ancient atomism makes its world develop from the original vortices
into a definite optimal complex of atoms and then disintegrate once more in the hail of atoms that strikes each such cosmos from outside; the Cartesian system, which ascribes a constant quantity of motion to a constant amount of matter, is caught according to its assumptions in a never concluded process, in which no given state can ever be distinguished as the definitive one. Descartes does indeed convey the impression that this development was as a matter of course directed toward, and concluded by, the condition of the world that has presently been arrived at and surrounds us, but the consistent logic of the materialization of nature has not been maintained in this suggestion. That logic implies, instead, that the total physical process, as a process of development, is never completed, nor can it be completed in any realized phase.

It was the competition between his cosmogonic hypothesis and the idea of creation that prevented Descartes from seeing the full extent of the consequences resulting from his assumptions. It was in fact not altogether so easy as it appears after the fact really to think through the consequences of leaving nature ‘to its own resources’ and to achieve some distance from what our actual experience had stabilized as eidetic typification in our concept of the world, interpreting it now as the product of a cross section at an arbitrarily chosen point of the total process. Kant, with his great cosmogonic speculation of 1755, which combined the Cartesian approach with Newton’s physics, was the first to find his way to the idea of the ‘unfinished [unvollendete] world’ and to project in it the cosmic archetype of endless progress: “The Creation is never finished or complete. It has indeed once begun, but it will never cease. It is always busy producing new scenes of nature, new objects, and new worlds.”12 A quarter-century before the Critique of Pure Reason, Kant sketches the monumental panorama of the endless evolution of worlds, still from the point of view of a faculty of reason that, so to speak, adopts the standpoint of divinity and identifies itself with the divine view of the world. Man appears, among the immense vortices of the self-propagating worlds, as an ephemeral episode. This whole infinite extravagance of a “world of worlds” is conceived in its relation to omnipotence, as the latter’s demonstration of itself to itself. For, as Kant observes, it would be “absurd to represent the Deity as passing into action with an infinitely small part of His potency, and to think of His infinite power—the storehouse of a true immensity of natures and worlds—as inactive, and as shut up eternally in a state
of not being exercised. Eternity is not sufficient to embrace the manifestations of the supreme being, if it is not combined with the infinitude of space."

Kant does indeed oppose (in Der einzig mögliche Beweisgrund des Daseins Gottes [The Sole Possible Proof of the Existence of God], 1763) to Leibniz's requirement that the actual world should be the best of all possible worlds the question "whether there isn't to be met with, among all the possible worlds, an endless increase of degrees of perfection, since no natural order whatsoever is possible above which a yet more perfect one cannot be conceived," but he still sees no connection between man's history and this process of improvement. That the world is 'unfinished' has nothing to do with human action but is due to its having been created as a result of inexhaustible power. It is not the call of an endless task that the materiality of the world poses for man, since man's demiurgic intervention could only interfere with the self-sufficient execution of the Deity's self-demonstration. History does not follow from cosmogony, as long as the latter is fully governed by its own teleology. Thus it is only consistent, in Kant's Theory of the Heavens, that man, "who seems to be the masterpiece of the creation," finds his place in the "world of worlds" precisely where there is an already "perfected world structure," among others still in the process of coming into being or already disintegrating, to guarantee his existence. Man does not indeed embody the significance of the whole process, but he is nevertheless involved in the culmination of the whole in such a way that the materiality of nature answers to him in particular. He sees himself faced with what is pregiven as a matter of course, which appears not to ascribe or even to leave open to him any demiurgic participation. The precritical Kant gives man once more—and not accidentally in the year of the earthquake at Lisbon, which put an end to the optimism of the first half of the century—an essentially contemplative role in a teleologically determined world: "All nature, which involves a universal harmonious relationship to the self-satisfaction of the Deity, cannot but fill the rational creature with an everlasting satisfaction, when it finds itself united with this primary source of all perfection. Nature, seen from this centre, will show on all sides utter security, complete adaptation."

If philosophy, according to another Kantian saying, is "the science of the fitness of all knowledge to man's determinate vocation," then this latterly pre-Copernican 'central point' of the cosmos (of a cosmos
seen this time in its temporal prolongation as the cosmogonic process) serves primarily as a reassurance for man regarding the perfection—admittedly partial, but appearing in the foreground of the whole—of his world among the worlds, at whose most distant edges only the telescope discloses to him the predominance of what is unfinished, of still naked materiality. The cosmological illusion of a teleology centered on man remains, and it remains as an expression of a nature that, at least for man, is providentially ‘finished.’

Only the transcendental self-criticism of reason eliminates this teleological preconception as well: The ‘unfinished world’ is no longer on the way, of its own accord, to ever greater perfection, with the aim of bringing forth man at its point of culmination, who as the witness of its immanent power registers its history in the result only and does not experience and push forward the process. Progress now becomes a category with a noncosmic status, a structure of human history, not of natural development. The ‘unfinished world’ becomes the metaphor of a teleology that discovers reason as its own immanent rule that up until then had been projected onto nature. Only when the mechanism of this projection is exposed does the history of the disappearance of inherent purposes enter the phase of conscious and deliberate destruction.

The late-medieval loss of the cosmos had been more a matter of doubt or suspicion than of critique; the prohibition pronounced by Bacon and Descartes against teleological anthropocentric assumptions was more a postulate of caution, of forestalling disappointment than of rationally eradicating an illusion. It was only for that reason that the teleological arguments of metaphysical reaction could have success—even in the early Kant himself—again and again in the midst of the Enlightenment. Kant’s critique concentrated all directed, purposeful processes in man’s rational action, and this meant that the world could participate in this sort of directedness only by becoming a substrate subject to man’s purposes. In its metaphorical usage, the expression “unfinished world” no longer legitimates human action by reference to a prescribed definition and obligatory role in nature. Rather, the transcendental turning requires that the world must be ‘unfinished,’ and thus material at man’s disposal, because this is a condition of the possibility of human action.

The materiality of the world is a postulate not indeed of the moral but certainly of the technical autonomy of man, that is, of his inde-
pendence from ends supposedly set for him by nature. The cosmos of the ancient world and of the metaphysical tradition—in other words: the belief that one is confronted throughout reality with what is already ‘finished’ [vollendet], that all one can do is either adapt oneself to this order or violate it, determining thereby nothing but one’s own happiness or unhappiness—this cosmos proves in retrospect to be precisely what Nietzsche was to call “the most crippling belief for hand and reason.” As a Romantic principle, the avoidance of evidence of completion is only the reflex in the aesthetic realm of the radical transformation of the concept of reality into the concept of an ‘open consistency,’ of something that remains outstanding and at man’s disposal, that offers to define rather than to take over self-assertion’s unending task. Talk of the imperfection of the universe—talk that has become metaphorical in that it carries over the meaning of action to the world acted upon—admittedly shares the perilous instability of all philosophical metaphor, which later can all too easily be taken ‘at its word.’

A development of the idea that is instructive in this regard occurs in the thought of Friedrich Schlegel, in whose transcribed Jena lecture on transcendental philosophy the thesis “that the world is still unfinished” is explained in the following manner: “This proposition, that the world is still unfinished, is extraordinarily important in every respect. If we think of the world as complete, then all our doings are nothing. But if we know that the world is unfinished, then no doubt our vocation is to cooperate in completing it. Experience is thus given an infinite latitude for variation. If the world were complete, then there would only be knowledge of it, but no action.” Onto this basic thought there is immediately superimposed the conception of the world as an organism, in which man is an organ integrated into the development of the whole. To begin with, the idea of the ‘unfinished world’ leads Schlegel only a little way forth from Fichte’s absolutism of the deed in search of a minimum of justificatory pregivenness; but this minimum swells under the pressure of its metaphorical function and acquires the vegetative hypertrophy that is peculiar to the organic even—indeed especially—in its metaphorical application to cosmology and politics.

The metaphorical turning that is exhibited here is instructive because talk of an ‘unfinished world’ recognizably originates in technomorphic imagery—as, for instance, when Lichtenberg notes that he cannot escape the thought that “our world could be the work of an inferior
being that did not yet understand its business properly," and thus perhaps "the nebulae that Herschel saw are nothing but examination exercises handed in, or perhaps still being worked on." Only in the 'unfinished world' in this technomorphic sense does man see himself functioning demiurgically vis-à-vis a reality that is at his disposal (because in and of itself it is unfinished and thus open) but also exposed to the risk of a freedom that can no longer be defined in terms of objective appropriateness. The early Schlegel of the Jena lecture shuns this very consequence of the materializing of reality and takes refuge in the organic retraction of the metaphor of the 'unfinished world,' which then refers to the imperfection of the whole that is still in the process of coming into being and maturing. The metaphorical short circuit accomplished by the Romantic flight from exposed self-assertion into the sheltering womb of the world animal, into the warmth of organic function, becomes plausible in the context of his turning against Kant: "The reason why we speak against freedom is that it breaks up the unity of the world. For if the world is thought of as a mechanism and man as absolute causality, then the world is split, and so is reason. The split that thus comes into being is even now irreparable, and no practical postulate can bridge it . . . It is entirely different in our theory, where the world is an organism, a nature. We do want our action to succeed; we want something to emerge from it; we do not want everything to be already foreclosed; but the mechanistic system prevents this. Our point of view also supports the importance of the moment and of the present in general."17

The world mechanism as an antithesis to which Friedrich Schlegel advances the Romantic identity of organism and freedom is of course no longer the *machina mundi* [world machine] of Descartes's cosmogony and Kant's model, whose initial conditions were defined only by matter and motion, but rather the baroque model of an automatic clockwork, whose initial condition is the perfection of the apparatus that, requiring no further intervention or contribution, determines the functioning of each of its parts. The Enlightenment had employed this model in particular in order (so to speak) to create a preserve for God, as the machinist of nature, and at the same time to eliminate the voluntaristic effects of continuing creation and of miracles. Certainly the (thus strictly defined) world mechanism did its critical—or, better, its 'apotropaic' [turning away, averting]—service within the totality that we call Deism, but at the same time it linked the idea of Enlightenment to a world
model whose fully designed and finished character could be repugnant
and lead to opposition from a point of view that was unwilling to
abandon freedom or that (in the manner of Romanticism) took its
stand on organic incompleteness. Precisely because mechanization and
materialization of the world had parted company, it was possible for
Schlegel’s objection—that the mechanistic world would leave no room
for human action—to find a footing: The perfection of clockwork,
which admitted only springs and wheels, seemed to exclude any
thought of criticism or altering reality. But for just the same reason
the organic metaphor proved to be no alternative at all: By seeking
to identify nature with freedom, it deprived man of freedom as the
specific definition of his role over against reality and organized him
into a totality whose construction is conceived as inscrutable.

The modern age’s will to a rationality that grounds itself is reflected
in the problem of the cosmological initial situation and the choice
between orienting background metaphors. Neither the image of the
world organism, which was revived in the Renaissance’s philosophy
of nature, nor the metaphor of the *artificium mechanicum perfectissimum*
[the most perfect mechanical artifice], which was first coined by Nicholas
of Oresme in the fourteenth century under the influence of the me­
canical clocks then beginning to appear, could provide a satisfactory
correlate for modern man’s understanding of himself and for his interest
in self-assertion. The perfect world mechanism of Deism does indeed
bracket God out of the course of the world and out of history after
the setting in motion of His mechanical creation, and thus becomes
an instrument of defense against theological absolutism; but at the
same time it leaves man only the narrowly defined function of a cog
in the mechanism and thus robs him of the effect of his rational self­
assertion. Kant’s statement in section 86 of the *Critique of Judgement*,
that “without man . . . the whole Creation would be a mere wilderness,
a thing in vain, and have no final end,” still depends on one of the
assumptions of his cosmogony in the *Theory of the Heavens*: the idea of
pure materiality, not only as the idea of an initial situation but also
as the idea of a continuing reservoir for the world process—though
of course this is not meant to harness man again into an objective
teleology to which he is subordinate. If matter is (as in Christian Wolff’s
definition) *actionis quasi limes* [the limit, as it were, of action], then the
reduction of nature to pure materiality and the diffusion of all the
world’s characteristics of pregivenness constitute precisely the ele-
mentary boundary definition of reality that opens the widest possible range for human activity. It follows from this statement also that human self-assertion does not restrict itself to holding its own and fortifying itself against the late-medieval disappearance of inherent purposes; rather it keeps this process in motion, as a leveling of the pregiven world structure, in order to obtain a ‘ground level’ upon which to proceed with its rational constructions.

An impressive example of how the schema of reducing the natural process to the homogeneous diffusion of elements, as rationality’s initial situation, is transferable to the problems of the human world as well is offered by Thomas Hobbes’s political philosophy. The classical proposition that nature has given everything to everyone (*natura dedit omnia omnibus*) becomes the point of departure of the construction of political order. But viewed in terms of the context in which it originated, this proposition had an unambiguously teleological intention and belonged in this sense to the natural-law axiomatics of the Stoa. It was meant to say that nature had arranged her goods adequately in relation to man’s needs and that only their just distribution is still required in order to achieve nature’s ends. At the same time this is also a critical regulator in regard to private property, which appeared to the Stoics as a form of mistrustful anxiety in the face of nature’s ample providence. Of course, criticism of the positive legal order on grounds of the natural principle of order does not yet mean a summons to the abolition of the actual legal relations, as one can see from the case of Cicero.

Hobbes made of this axiom something radically different and foreign to its origin. As the principle of the prepolitical state of nature, the proposition not only defines for each individual his right to insist on the satisfaction of his needs and thus to integrate himself into the supposed teleology of nature, but it also designates the unlimitedness and unlimitability of his claim to everything at all that he finds within his reach. Natural ‘right’ is the absence of rights for those who do not possess the power to defend their claims or their possessions, so that anyone powerful enough to gain control of everything that took his fancy would be empowered ‘by nature’ to do so. It is the model of theological absolutism, which here is projected into the state of nature and makes each individual into a *princeps legibus solutus* [an unobligated author of laws], inasmuch as the principle valid in this sphere is the dependence of rights on power and thus, in the limiting case, the dependence of unrestricted rights on omnipotence. In man’s pre-
political state of nature, the theological *ius in omnia* [right to everything] becomes the *ius omnium in omnia* [right of everyone to everything] and thus perfect chaos; natural law gives rise to its antithesis, lawlessness.\(^\text{20}\)

The solution to this self-contradiction comes with the construction of the political state of law, or, more exactly, with the definition of the instantaneous transition to political absolutism in which the conclusion of the capitulation treaty is simultaneously both the assumption and the surrender of the status of legal subject. The chaos of absolute rights, not the *telos* [defining purpose] of right, is the argument of reason that enables it to grasp the opportunity of self-assertion (and only this opportunity) by transferring the many absolute rights to one absolute right—that of the ruler. The doubtfulness of the achieved and justified order and of the resulting concept of order does not matter because it emerges from reason’s desperation [Verzweiflung], just as the Cartesian proof of God emerges from its doubt [Zweifel]. For this order there speaks only the argument of ‘any order at all’ [... is better than none ...], that is, a rationality so minimal that to attack it is inevitably to contradict oneself by implying a desire to return to the state of nature. This formal schema fundamentally distinguishes the modern age’s approach to political theorizing from the tradition of political-philosophical ideals. The analogy to ideas in physics, which Hobbes wanted to emphasize even by the order of his treatises *De corpore*, *De homine*, and *De cive* [Of body, Of man, and Of the citizen], is palpable, but it no longer has anything to do with the exemplary principle that Plato had pursued with the plan of his trilogy of dialogues, the *Timaeus*, the *Critias*, and the *Hermocrates*: the principle of preceding the theory of the state by a theory of the cosmos. Hobbes emphasizes—in contrast to Plato—the differentiation within the analogy, the unfortunate severity of the political problem in comparison to the freedom of natural science, which by free agreement (*consensio*) itself advances the point of departure of its definitions, and in this is ruled only by a hypothetical imperative, whereas the initial political act (*contractus*) is carried out under the categorical imperative of naked self-preservation.\(^\text{81}\) The systematic precedence of the theory of physical nature over the theory of the social contract reverses the genetic relation of foundation since the objectivity of physical theory already presupposes the subsistence of a society that, on the basis of its assured self-preservation, can become a rational community of mutual un-
derstanding *quasi pacto quodam societati humanae necessario* [as it were, by a certain contract necessary for human society].

Political reason, which constitutes itself in the act of the social contract, does indeed come upon natural law as a preexisting circumstance, but this pregiven nature is for it nothing but the antinomy whose solution is its task, the chaos from which its creation springs. The function of philosophy, accordingly, is no longer to be the theory of the world or of the Ideas, no longer to administer a treasure imparted to man along with his existence, but rather to imitate the Creation (*imitare creationem*), to renew the original creative situation in the face of unformed matter. The zero point of the disappearance of order and the point of departure of the construction of order are identical; the minimum of ontological predisposition is at the same time the maximum of constructive potentiality. Chaos is no longer the impotent indefiniteness of the ancient *hyle* [matter]; the progress of thought at the beginning of the modern age rests essentially on the fact that one began to make assertions about the absence of order and to ascribe to that absence (without the intervention of a transcendent factor) a law of self-regulation.

Here the result is not so determined as Hobbes represents it to be: Absolutism and liberalism are based upon the same principle of self-regulation, being distinguished from one another only in their judgments of the murderousness of the initial situation and of the forces at work in it. Teleological residues are not eliminated from liberalism in particular; thus Adam Smith still makes an “invisible hand” guide the self-regulating economic order and reserves his trust for “laws of justice” that are mysteriously present in the process, as indicated in the *Wealth of Nations*: “Every man has perfect freedom, so long as he doesn’t violate the laws of justice, to pursue his own interest in his own way and to set his enterprise as well as his capital in competition with the enterprises and capitals of other men.”

For Hobbes the state of nature had been that which man found present or in which he found himself situated; but the doubt whether this could be more than a regulative and critical principle, whether the opportunity for rationality to posit itself without presuppositions had ever occurred in history, could be transformed into the maxim that this was after all also one of the prerequisites that man could only create for himself and that, by a revolutionary reduction of historical positivity to elementary anarchism, he had to create for himself,
as though to get behind his own history and reach the zero point for the *creatio ex nihilo* [creation from nothing] of a rational social condition.

The modern relation to the world summarized in the concept of self-assertion breaks down pragmatically into construction and prevention. Exact predetermination of real situations makes it possible to anticipate unfortunate circumstances and to alter them. Mankind has always known want and the distress of being hard pressed by nature; but the generalization of such experiences to an evaluation of reality as a whole has additional prerequisites, which are not already given in those experiences themselves. How the world’s deficiency of order—its structural inadequacy with respect to man’s needs—is perceived and interpreted is thus not something to be attributed to the demonstrable presence of particular physical, economic, and social conditions but is rather a matter of the anticipations that are bound up with experience.

This becomes particularly evident in the case of a motif of modern intellectual history unknown in previous epochs: the idea of overpopulation, of growth of the number of men beyond the natural living space (considered to be constant) and beyond the quantity of food (considered to be growing at a rate less than proportional to that of the population). Even before the population figures actually increase alarmingly, the fear of population growth becomes acute and the discussion of its problems becomes a compulsive theme that is never dropped entirely.

In Thomas More’s *Utopia* (1516) the problem still has a purely spatial/regional character; the possibility of the overpopulation of the utopian island is considered, but the problem is immediately laid to rest with a reference to the possible expedient of colonizing the neighboring mainland. In the *Essays* of Francis Bacon, which first appeared in 1597, the place of the natural symmetry of needs and goods has been taken by political regulation within the state, whose economic and legal instruments are supposed to keep population growth within limits that prevent it from endangering political stability. Ethical justice in the distribution of goods is replaced by political calculation. In 1642 Hobbes introduces the idea of overpopulation into his discussion, as the ultimate threat to the efficacy of moral philosophy, at a significant point. He compares philosophical ethics with geometry—not to the advantage of the former: If the moral philosophers had clarified the *ratio actionum humanarum* [grounds of human actions] somewhat, there would no
longer be any wars—with the single and crucial exception, however, caused by the increase in the number of men and their need for living space: nisi de loco, crescente scilicet hominum multitudine [except about space, since the numbers of men are evidently increasing].

From another side, the problem of population growth is introduced quite in the humanist style: The learned controversy whether the population had been greater in antiquity than it was at present belongs almost in the context of the querrelle des anciens et des modernes [quarrel of the ancients and the moderns]. Thus Montesquieu believes in the decline of total population since early antiquity. In the context of this dispute, there also occurred the foundation of theoretical statistics by William Petty. The controversy reached its high point around the middle of the eighteenth century with the treatises by Hume and Wallace. Hume’s comprehensively argued skepticism regarding the assumption of higher population figures in antiquity was an important argument on behalf of the thesis of impending overpopulation. In Germany, Hermann Samuel Reimarus added an unexpected argument for the continuous growth of the earth’s population, pointing out that only on this assumption could the temporal beginning of the human species in a single pair of people be proved mathematically. But what might in this way be comforting as a means of strengthening a proposition still belonging to ‘natural religion’ nevertheless has the side effect of accentuating misgivings regarding a lawfulness with alarming future consequences: “The increase of the same” (that is, of the human species) “is grounded in its nature, and is the overall tendency; decrease in one place or another is accidental. . . .”

This idea of the autonomous lawfulness of population growth found its most influential expression for the thought of the time in Malthus’s Essay on the Principle of Population of the year 1798. The so-called law of population formulated here asserts that men’s increase in numbers is a geometric progression, whereas the increase in the quantity of food is an arithmetical progression. Appealing to the authority of Benjamin Franklin, Malthus considers it certain that a universal law of life has been found here, which also sets a limit to the increase of plants and animals, based solely on the given quantity of nutrition. For Malthus, the ominously widening gap between the two progressions no longer lies in the indefinite future; the threat is near—indeed it has long been palpable since the acquisition of food had become difficult. The conclusion that Malthus derives from his principle of
population is resignation in the face of the supposed law of nature, whose inhuman harshness should not be deprived of its regulative effect through preventive measures taken by the state. The transgression of the limits of existential possibility must have its full effect through the unbearable of its consequences. It should not be mitigated by recognition of a right on the part of the individual to society's removal of his distress. But this principle of self-regulation through poverty is sterile because its optimal functioning stabilizes only the limiting case of a barely endurable proportion between quantity of food and quantity of population.

The two great 'ways out' of this inhuman stability conceived only in terms of the political ideal of survival—namely, evolution and revolution—were still far from Malthus's thinking. When Charles Darwin became acquainted with Malthus's book in 1838, he wrote, "Here then I had at last got a theory by which to work." By generalizing biologically the disorder axiom of overpopulation and the struggle for existence arising from it, Darwin recognized in it the order principle of selection and the evolution of organisms driven by selection. The important consequences of this insight did not derive primarily from its theoretical explanatory value but rather from the fascinating effect of applying the schema of mechanistic world explanation to the realm that Romanticism, once again, had proclaimed to be heterogeneous, the realm of the organic, thus extending all the way to man the assurance of the ordering power of disorder, that is, of the "state of nature" in Hobbes's sense. Hobbes's social contract, however—the unconditional capitulation of individuals to the power that in their desperation they set up—appeared to have been a short circuit of rationality; only the prepolitical society, in which the struggle for existence could unfold, gave free reign to the law of nature, which was no longer a mere stabilizer.

But what we are discussing here is not an inexorable sequence of historical development. Darwin—and still more the "social Darwinism" that was imbued with Darwin's 'applicability' to human society—believed that they had found the sole logical consequence of Malthus's insights. There were, however, other approaches. The foundation of agricultural chemistry—that is, the theory of artificial fertilizing—by Justus Liebig in 1840 revealed that Malthus's dual progressions could not only be disputed as 'law' but could also be conceived as a reality alterable by improved technique. Technique is a product of human
impatience with nature. The long periods of time that Darwin required for the tiniest steps of evolution may indeed have made the great waste of nature, its huge expenditure of individuals, suffering and death, appear in a new light of significance; but as human security, as justification of man's historical status, they were empty of comfort.

To the scale of the steps of progress that the Enlightenment of the eighteenth century thought it could lay out, the abbé Galiani had already opposed his "Nous et nos enfants... le reste est rêverie" [Ourselves and our children... the rest is daydreaming]. The super-dimensional time periods into which, after the disappointment of the "best of all possible worlds," the newer optimisms deferred the parousia [presence] of human happiness—in the last analysis, in order to justify the present as the necessary preliminary and transitional stage on the way to that distant future—these could hardly be described as secularized infinity and were only a surrogate for omnipotence to the extent that man as an individual now had to perceive himself as impotent vis-à-vis time, the omnipotent. The position of transcendence was reoccupied by the element of postponement.

But the very difference in time scale between Malthus and Darwin shows that nature and history have definitively ceased to relate to one another; Malthus sees the crisis determined by the law of population as immediately impending, whereas Darwin justifies nature's indifference to what is alive at any given time, over thousands of generations, by appeal to the "unerring power of natural selection" and derives from this natural right the demand (at the end of the Descent of Man, published in 1871) that society should open for all men the free competition that grants to the most successful the greatest number of descendents. But precisely this social relevance of the new conception of evolution makes the heterochrony, the lack of temporal congruity between the natural process and the acute historical situation in which man finds himself, emerge with extreme sharpness.

The fascination that once again emanated from the concept of nature in this both overwhelming and alarming formulation was just as delusive as most of what had ever been represented to man about 'nature' as reassurance in his uncertainty—and, no matter how strange it sounds, even this 'organic' total conception, in spite of its surrender to mechanism, was still a type of reassurance. With it man took shelter, as Dolf Sternberger has put it, "under this bizarre gradualness, and he is warmer here (notwithstanding the rigorous technique of this
selection, of which, after all, he feels nothing now), warmer than in the position of the free outcast who confronted the rest of nature as a trial, task, issue, and enigma, as an alien abode." The peculiar organic/mechanical double character of this idea of evolution, which seemed to make man into at one and the same time the accidental result of the process and his own demiurge, having disposition over the process as his instrument, had precisely the lack of definition that man finds comforting in his utopian projections. This last of all alliances with nature was a blind alley—for many reasons, among which some were, in their implications, frightful (and that was due not, as must be said explicitly, to the theory as such but rather to its supposedly being rendered humanly pragmatic, to the claim to have given the definitive answer to the Malthusian problem regarding man's future). Malthus and Darwin had both made their theories culminate in the advice that man should obey the law of nature by clearing away the social hindrances to its unmediated and unadulterated operation.

The greatness of the much reviled nineteenth century lay in the fact that, at least in the greater part of what it actualized historically, it opposed this advice.

The opposition was in the breakthrough of technicization. Malthus's work was not intended to stimulate it, but in effect, like no other spiritual factor at the turn of the century, it made plausible the process of technicization (in the shape of industrialization) as man's self-assertion in the face of nature's inhumanity. That the great extension—by leaps and bounds—of life expectations could be accomplished at all violated the supposed law of nature by violating the difference between the progressions that law asserted, whose palliation, rather than alteration, Malthus had seen in the measures taken by the state and society against poverty. Even Hegel (in section 245 of his *Philosophy of Right* of 1821) still expresses his opposition to the public and private 'poor relief' illustrated by the English example by arguing from the irreducible difference between needs and means of subsistence: "It hence becomes apparent that despite an excess of wealth, civil society is not rich enough; that is, its own resources are insufficient to check excessive poverty and the creation of a penurious rabble." Technical progress made it evident that the scope available for life was not a natural constant and did not stand in a necessarily ultimate disproportion to the growth of population.
Neither resignation before 'laws of nature' nor leaving everything to the transcendence of time, as the end form of all the transcendences that are indifferent with respect to man, have been able to invalidate the self-assertion of reason. Its essence was expressed, once again by the Abbé Galiani, in the eighth of his Dialogues sur le commerce des blés: "Nature is an immense undefined something. It is a work worthy of its Creator. And we, what are we? Insects, atoms, nothings. Just let us compare. Doubtless nature always returns to the laws given it by its Creator for an indefinite duration. Doubtless it returns everything to equilibrium, but we need not wait for this return and this equilibrium. We are too small. For nature time, space, motion are nothing, but we cannot wait."

Translator’s Notes

a. The author presented several contrasting "concepts of reality" from different stages of our tradition, of which one is the concept of a "consistency" that is "never definitively and absolutely granted" but is perpetually contingent on future verification, in his "Wirklichkeitsbegriff und Möglichkeit des Romans," in Nachahmung und Illusion (Poetik und Hermeneutik 1), ed. H. R. Jauss (Munich: Wilhelm Fink Verlag, 1964; 2nd ed., 1969), pp. 10–14. (Quotation from p. 12.)

III

The 'Trial' of Theoretical Curiosity
Introduction

According to a simple formula for mirroring backgrounds, the statement that the contemporary world can exist only by means of science stands in suspicious relation to the fact that this is asserted by people who themselves make their living from science. But this suspicion is still harmless compared to the suspicion that results from the fact that science itself brought forth the very world, to live in which depends on—and makes us increasingly dependent on—science's continued existence and continued operation. The dilemma of any attempt to focus on this underlying state of affairs lies in the fact that talk about science only begets a further science [Wissenschaft: knowledge], whatever one chooses to call it. Nor can the attempts to inquire back into a prescientific sphere, whether synchronically, in the 'life world,' or diachronically, in history, free themselves from this adhesion. The great gesture of self-liberation is no help here. If one wants to speak of theoretical curiosity as one of the motivating forces of the process of science, then one cannot escape entanglement in the misgiving that one is being swept along oneself in the stream of that motivating force. It is curiosity that draws one's attention to curiosity; curiosity depends entirely on itself to throw off the discrimination imposed on it, as its modern history shows. It is not able to confirm the Platonic hope that one could know in advance what is held in store for it.

That the difficulties we have, and will increasingly have, with science are always integrated into it as scientific difficulties is only one aspect of the outlook on the subject of 'theoretical curiosity': the inevitability of a failure to find an Archimedian point over against the reality of
science. The other aspect is that of responsibility. Most of the people whose lives today depend on science would not even be alive, or would no longer be alive, if science had not made their lives possible and prolonged them. When one puts it that way, it sounds laudable. On the other hand, this means at the same time that the overpopulation of our world is also an excess produced by science. Are there unambiguous conclusions that can be drawn from this statement? One should avoid too easy answers to this question. To a large extent, science has broken the brutal mechanism of the "survival of the fittest": it gives more life to people who are less 'fit' for life and keeps them alive longer. Is this a humane achievement? Here again it would be frivolous to say that we have an answer to the question. But to pose it is to make as clear as possible the significance of what one is dealing with when one not only focuses on the dependence of our reality on science but also defines that dependence as problematic. The fact that, biologically speaking, we no longer live in a Darwinian world, or at any rate we live in a world that is less and less Darwinian, is a consequence of science that, even if in its turn it has consequences that are not evident at a glance, is simply irreversible. Science integrates into itself even the responsibility for the consequences of its consequences, by itself giving the alarm.

The existence, and even the mere dimensions of the existence, of science are not things over which we have the power of disposition as long as we do not feel entitled to answer in the affirmative the question whether the nonexistence of existing persons or the discontinued existence of people whose existence has at any time been in danger would have been a more humane alternative. The only person who can presume to play with the idea of a discontinuance or a reduction in the human effort called "science" is one who has a low estimate of the susceptibility of the motivation of theory to disturbance. The limits of responsible behavior may be much narrower here than many people imagine. Between uneasiness about science's autonomous industry and the constraints resulting from its indispensability lies an indeterminate latitude within which we are free to act as we wish but that it would be misleading to project upon science as a whole.

The difficulties that we have with science and the rule of those who represent science [die Epistemokratie] suggest the gleam of a hope that we might escape them by setting up yet another science, an 'ultimate science,' which would concern itself with nothing but science itself.
Another thing that makes this idea attractive is that it promises arbitrative functions, the exercise of power over the powerful, even if only over people defined as such for the purposes of the arbitration alone. It would be the Archimedian point—or else the exponential increase, through their iteration, of all the difficulties we already have with science. Why, after all, should a "science of science," which elevates itself to the job of the emphatically so-called "critique" of every other species of science, be free from the problematic that it would be sure to find in them? The discernment of a need for such a metadiscipline, the consensus regarding its acute urgency, imply nothing whatsoever about its possibility. But skepticism becomes all the more irritating, the nearer we seem to be to filling the office of arbiter.

We cannot live without science. But that is itself largely an effect produced by science. It has made itself indispensable. But what this observation does not explain is what it was that set the "industry" of science going and keeps it in motion. On the contrary, there exists a peculiar uncertainty as to what the motives are that move and intensify this epochal effort. One extreme is the mechanical connection between autonomous industriousness and meaninglessness that Victor Hugo expressed in 1864: "Science searches for perpetual motion. It has found it; it is itself." The absolute necessity of science in the contemporary world does not license any inferences about the process by which it began. Even if existential exigencies prevent us from interrupting the functioning of science, this is not enough to show that its reality originates in its necessity for life. We must reckon with a break in motivation when the moving impetus of theory no longer comes directly from the 'life-world'—from the human interest in orientation in the world, the will to the expansion of effective reality, or the need for the integration of the unknown into the system of the known. This is where uneasiness sets in. Necessity is manifestly not enough; it is unable to dispel the suspicion of meaninglessness or, perhaps, even more severely, the "fear of a total meaninglessness that lies behind every science."

The talk of the "science industry" [Wissenschaftsbetrieb] that has become popular refers, of course, to the objective structural similarity of scientific institutions and processes to those of industry, but in its most extreme form it points above all, contemptuously, to the bustling and autonomous industry of scientific work as it is now organized, to the rupture
of the connection between a motivation for the theoretical attitude that is founded in the 'life-world' and the realization of that attitude under the conditions on which the effectiveness of modern science depends; and finally it also points to the lack of congruence between the outputs of the autonomous process and the expectations, rooted in the European tradition, that the truth would make men happy and free. Seen from the point of view of the conception of theory that corresponds to these expectations, the connection between science and securing the chance to live is really an unexpected historical development. This surprise is not the sole cause of our uneasiness with science, but it is an essential element in the situation.

Since ancient times, what theory was supposed to do was not to make life possible but to make it happy. Hence also the first epochal injection of mistrust in theory, when happiness had become a matter for hope directed at the next world, for a salvation that man could not bring about, though it was still defined as visio beatifica [beatific vision]—as the acquisition of truth, fulfillment through theory. The premise that only the final possession of truth could guarantee man’s happiness went over from ancient thought into the interpretation of the biblical eschatology. That life was pleasanter for one who knew than for one who sought knowledge was a premise Aristotle took for granted; it corresponded to his concept of God and especially to his physics of finite space and thus of finite “natural” motions justified only by—and ending in—a goal state of rest. The early-modern renewal of the pretension to unrestricted theoretical curiosity turned against the exclusion of pure theory, and of the pure happiness that was bound up with it, from the realm of what could be reached in this world, just as it turned against the medieval God’s claim to exclusive insight into nature as His work. The investigator of nature could no longer remain—nor again become—the ancient world onlooker, though he had to reconstruct the connection between cognitive truth and finding happiness in a different way if, following Francis Bacon’s new formula, domination over nature was to be a precondition of the recovery of paradise.

From a central affect of consciousness there arises in the modern age an indissoluble connecting link between man’s historical self-understanding and the realization of scientific knowledge as the confirmation of the claim to unrestricted theoretical curiosity. The ‘theoretical attitude’ may be a constant in European history since the
awakening of the Ionians' interest in nature; but this attitude could take on the explicitness of insistence on the will and the right to intellectual curiosity only after it had been confronted with opposition and had had to compete with other norms of attitude and fulfillment in life. Just as 'purity' as a quality of the theoretical attitude could only be formulated in the circumstances of Plato's opposition to the Sophists' instrumentalization of theory, so also the 'right' to an unrestricted cognitive drive constituted itself and was united with the self-consciousness of an epoch only after the Middle Ages had discriminated against such intellectual pretensions and put them in a restrictive adjunct relation to another human existential interest posited as absolute. The rehabilitation of theoretical curiosity at the beginning of the modern age is just not the mere renaissance of a life ideal that had already been present once before and whose devaluation, through the interruption of its general acceptance, had only to be reversed.

The classical anthropological question whether man strives for knowledge on account of an inner and uncoerced impulse of his nature or whether the necessity of gaining knowledge is thrust upon him by the naked demands of the prolongation of his existence is no timeless, unhistorical problematic, although its continual recurrence—for instance, in the contrast between Husserl's phenomenological radical of the "theoretical attitude" and Heidegger's Daseins-analytic "existential" of "care"—seems to make this a natural assumption. The most widely read handbook of physics in the century of the Enlightenment was able to harmonize this question with no trouble: "Necessity and men's curiosity have perhaps made equal contributions to the discovery and further elaboration of the science of nature...." Jürgen Mittelstrass has proposed a distinction between "naive" and "reflected" curiosity, at the same time describing "talk of a novel type of curiosity that initiates the modern age itself"—of a 'self-conscious curiosity'—as "unsatisfactory" "so long as this beginning of the modern age cannot be distinguished by 'specific transactions." I am not going to go into the question whether one who demands evidence of "specific transactions" is not left in the hands of an overdetermined concept of history and thus in continued bondage to the criteria of official documentation [Aktenkundigkeit]. The proposed distinction in any case seems to me to be useful.

Just as anyone who wants to characterize the modern age as an epoch marked by technology or tending toward that end finds his
attention directed again and again to technicity as an original anthropological characteristic and thus as an omnipresent human structure, which admits only a quantitative differentiation of increased complexity between a stone tool and a moon rocket—so the stress on the element of curiosity undergoes the same process: Curiosity is a mark of youthfulness even in animals, and a mark, all the more, of man as the animal who remains youthful. Naive curiosity, then, would be the constant; but at the same time it is the substratum around which historical articulation and focus set in.

It is just this process that is my subject here: As a result of the discrimination against it, what was natural and went without saying is explicitly 'entered into' and accentuated; play with the world's immediacy becomes the seriousness of methodical formation, the necessity [Notwendigkeit] of self-preservation becomes the versatility [Wendigkeit] of self-assertion, and what was a mere occupation becomes a prerogative to be secured and at the same time becomes the energy that increases exponentially each time it turns out that the suspected reservation of the unknown but knowable does exist—that knowledge can extend beyond the Pillars of Hercules, beyond the limits of normal optics and the postulate of visibility, in other words, beyond the horizons that had been assigned to man as long as he had thought that he could remain the onlooker in repose, the leisurely enjoyer of the world, taken care of by providence. The interpretation of natural restrictions as representing a realm to which man was denied access 'in this world' radically altered the quality of the theoretical form of life recommended by ancient philosophy.

To demonstrate the logic of this process is immediately to exclude the naturalistic suggestion that in the preponderance of theoretical curiosity in the modern age what we confront is a fateful recurrence of the same, the turning of an anthropological tide. Toward the end of the nineteenth century Otto Liebmann exhibited the satisfaction of one who had finally pinned down a law of nature in explaining the epochs of theory:

That is, the propensity to theorizing seems to be subject, like other human inclinations, to an alternation of ebb and flood. In the causal context of a great variety of cultural-historical factors it experiences its alternating maxima and minima. There are ages in which it swells into a regular monomania and overruns in hypertrophic fashion the more modest need for the gathering of simple observational knowledge
of matters of fact. There are other ages in which it sinks below the zero point and seems entirely overcome by that same (to it) antagonistic need. When a doctrinaire attitude, ensconced in what has become a rigid and dogmatically closed world view, considers itself to have arrived at the summit of wisdom and now employs all its sagacity in elaborating all the subtlest ramifications of the finished conceptual system that it holds to be true—but equally, however, when a period that is carried away with youthful hope, a reforming period, in its precipitate drive to give form, peoples the unknown land of anticipated truth with hitherto unimagined mental creations and strays into the boundless and the fantastic—then the reaction against such hyper­ theorizing follows in natural sequence, and subsequent generations, cautiously assessing the evidence, will have to invest half of their efforts in the critical clearing out of overflowing Augean stalls. Then, to be sure, that excess is followed by a deficiency; a praiseworthy avoidance of doctrinaire illusions, an understandable fear of unreliable pseudo­ theories, an entirely admirable feeling for the truth causes people to fall into the other extreme....

This naturalistic approach makes very clear, in negative form, what should be expected of a presentation of the historical ‘proceedings’ relative to curiosity that aims at rational analysis.

Our situation is not that of the beginning of the modern age, however distinguishable by “specific transactions” that beginning may be. Is the problem of making a beginning still our problem? Jürgen Mittelstrass has answered this question by giving his concept of “‘reflected’ curiosity” a specifically heterogeneous function that I would like to characterize as that of an already iterated ‘reflection’: What set the modern age’s curiosity in motion no longer needs—in its self­accelerated, immanently propelled motion—rehabilitation and restit­ution of its primary energy; it has become indifferent to the new, as such, on account of its experience of the latter’s inevitability, which may even constitute for it a burden to be endured, and instead it is all the more sensitive to the direction that belongs to the motion that is thus stimulated, sensitive to the question of where it is headed.

In this situation, anyone at all who “defends man’s interest in what, so to speak, does not concern him” seems anachronistic—unless perhaps this were once again an act of defending theoretical curiosity in circumstances where it was supposed to interest itself only in material that did not run counter to powerful interests. Even in the categorization of theory as a derivative attitude subordinate to the radical of “care,”
there is a possibility, if not a necessity, of requiring the interest in theory to legitimate itself once again by demonstrating a contemporary and relevant, or even an authoritatively prescribed, "care" as its source. Scarcely a decade after theory, as mere gaping at what is 'present at hand,' had been, if not yet despised, still portrayed as a stale recapitulation of the content of living involvements, it was the greatness of the solitary, aged Edmund Husserl, academically exiled and silenced, that he held fast to the resolution to engage in theory as the initial act of European humanity and as a corrective for its most terrible deviation, and that he required of it a rigorous consistency, which is still, or once again, felt to be objectionable. Hermann Lübbe has described as the characteristic mark of this philosophizing, especially in the late works, the "rationalism of theory's interest in what is without interest": "The existential problem of a scholar who in his old age was forbidden to set foot in the place where he carried on his research and teaching never shows through, and even the back of the official notice that informed him of this prohibition was covered by Husserl with philosophical notes. That is a case of 'carrying on' whose dignity equals that of the sentence, 'Noli turbare circulos meos' [Don't disturb my circles]."6b

The bearing of the concept of 'reflected' curiosity is on neither the propulsion of theoretical activity nor its resistance to commands that it halt or demonstrate its relevance; that is, the bearing is not on world orientation but on the orientation of the total process of the curiosity that is consciously formed out of its earlier naiveté. Its expectation no longer relates to "the discovery of something entirely new but rather to the now never ending question, what will come next." The self-conscious curiosity that, at the beginning of the modern age, at first turned against history as the epitome of the abrogation of reason and of preoccupation with prejudices and impenetrable reserves made its own history—as soon as it had one—a subject of inquiry, not by adopting a qualitatively new attitude but because it still possessed the naive ubiquitousness that looks under every stone and over every fence, and consequently also into its own records. Reflection [Reflection] first arises as a result of the resistance that an examination of the history of science as a supposedly linear process of accomplishment opposes to the naive assumption that it is an 'object' like any other. Reflection on where one actually finds oneself and on what should come next is a side effect of the 'encyclopedic' impulse and activity
that are aimed at taking stock, at still keeping control of what can no longer be surveyed and taken in all at once, putting it in usable form as an available potential. Curiosity acquires its conservative complement in the encyclopedic program: It cannot understand itself only as motion; it must also seek to grasp its topography, the boundaries that are no longer set for it by an external authority but that instead it itself describes by the totality of its findings. Diderot’s article “Encyclopédie,” written in 1755, marks the onset of reflection on the competition between the need to survey and assimilate—to take stock—and the need to orient further progress. For the organizer of the Encyclopédie the problematic of the use of time is clear: It is true that assimilation does not yet take longer than the duration of the validity of what is assimilated, but the fundamental encyclopedic ideas of universal accessibility and of replicability through organization become, at least, questionable. On the one hand, Diderot is confident that future generations will be able to construct a better encyclopedia on the basis of his; but on the other hand, he emphasizes the special circumstances that have made this particular work possible, and thus the uncertainty whether comparable conditions will be present in the future. The balance of these considerations reads as follows: “L’Encyclopédie peut aisément s’améliorer; elle peut aussi aisément se détériorer” [The Encyclopedia can easily be improved; it can just as easily deteriorate].

The initial success of theoretical curiosity in the modern age would have been inconceivable without the transition from ‘naive’ to ‘self-conscious’ curiosity. The latter had not only emerged through its competition with the concern for salvation and its argument with the transcendent reservation [of realms of knowledge]; once people had presumed to peek behind the back cloth [‘behind the scenes’] of creation, it had also been able to translate the results, as confirmations of its suspicions as well as of its right to what was withheld, into the energy of the Plus ultra [Still further: Francis Bacon]. This dynamic of self-confirmation freed curiosity from the connotations of a ‘base instinct’ that bound man’s attention to inessential and superficial matters, to prodigies, monstrosities—in fact, to curiosa [‘curiosities’]. But the very summing up of these confirming effects engendered a need that one could classify, initially, as ‘topographical.’

The dilemma of the idea of the encyclopedia makes it clear why ‘reflected’ curiosity will find the dynamic set in motion by the self-conscious interest in knowledge objectionable: The expansion of the
horizon of known and understood reality could not be coordinated with the presence of what was already accessible within this horizon. Diderot did indeed think of the perfection of the encyclopedia as an objective task for the future; he thought about what abilities the contributors would have to possess, what circumstances would be favorable; but he did not consider the situation of the reader and the way in which it would be altered by the universal quality of the work. He would already have been able to say what we have to say today, that while we know more about the world than we ever did before, this “we” does not by any means mean “I.” The “we” of this statement confronts the “I” only in the form of institutions—of encyclopedias, academies, universities. These represent higher-level agencies [Über-subjekte] that administer knowledge about reality in space and time and organize its growth. The disproportion between what has been achieved in the way of theoretical insight into reality and what can be transmitted to the individual for his use in orienting himself in his world is disconcertingly unpreventable. But the intensity of the process becomes critical in regard to not only the relation between the objective stock of knowledge and its translatability into subjective orientation but also the stability of that stock itself in view of the fact that in the succession of generations of knowledge, the length of the ‘half-life’ of each, on its way to obsolescence, has already dropped to less than a decade. The phrase “in possession of the truth” [Wahrheitsbesitz]—no matter how one defines truth epistemologically—is no longer capable of nonironical employment. Even if, forgoing the use of the classical term, one speaks of the encyclopedic postulate of possessing the greatest possible stock of information, still the accelerating rate at which that information decays means that the individual is compelled to acquire a capacity for provisional relations with it, for transitory reliance on it, within the duration of his individual lifetime. It is easy to imagine this disappointment with the stability of scientific knowledge pushing people toward modes of ‘having’ theoretical propositions that seem less unstable and less taxing because they are hardly falsifiable.

This phenomenon of the acceleration of the theoretical process can no longer be explained by reference to the hyperfunctioning of a theoretical curiosity that organized itself around the recovery of the right to unrestricted expansion. Undoubtedly there exists somewhere in the course of the progressive consolidation of this structured process a point at which the possibility of the intervention of exogenous, ‘life-
worldly; historical motivations narrows and finally disappears and after which one has to say that in relation to what comes about as science, and to what scientists do, theoretical curiosity is now only a secondary factor. However much it may still determine the genesis of a choice of profession, it has correspondingly little effect on the objective state and the availability to the individual of the structured process in reality. This also—the lack of room for individual motivation, for an authentic initiative—is involved in our uneasiness with regard to science.

Of course it will not be possible to determine the exact point in time up to which, while an individual might not have been able to assimilate the totality of the truths accessible at the time—that limiting case has probably always been unattainable—still, enough could be attained in one lifetime that the individual could impute to himself a substantial share in what was known of reality and what seemed in any way necessary for its comprehension. It is only on this assumption, that the truth in its totality was at the disposition of the individual, that the ancient association of eudemonia with theory, as its precondition, could be held on to and even renewed. For when the program of a science safeguarded by method was projected in the early modern age, this elementary assumption was renewed. The reality in which man, both as individual and as society, lived was supposed to remain identical with the reality that theoretical knowledge was to open up and make perspicuous for human action. Otherwise Descartes could not have promised the definitive morality as the consequence of the perfection of physics.

The definitive morality, which as the epitome of materially adequate behavior was supposed to guarantee human happiness, remained bound to the continuing presence of the perfected theory for practice because the behavioral norm in each case emerged from personal insight into the structure of reality. But almost simultaneously, in Francis Bacon, a concept of human happiness appeared that separated theory from existential fulfillment by reducing the necessary knowledge to the amount fixed by the requirements of domination over natural reality. The recovery of paradise was not supposed to yield a transparent and familiar reality but only a tamed and obedient one. For this equivalent of a magic attitude to reality, the individual no longer needed to understand himself in his relation to reality; instead it was sufficient if the combination of everyone's theoretical accomplishments
guaranteed a state of stable domination over this reality, a state of which the individual could be a beneficiary even without having insight into the totality of its conditions. The subject of theory and the subject of the successful life no longer needed to be identical. This appears as relief from a demand that was immediately to become unfulfillable, even before the incongruence between theoretical objectivity and individual competence had become foreseeable.

Here it has already become in principle possible and permissible for scientific knowledge to be an instrument of specialists, a reserve administered by initiates, institutionalized not as something one can possess but rather as an available potential. Theoretical curiosity serves only to guarantee that in spite of the impediments to it, the cognitive process gets under way and is pressed forward; but the vindication of its self-assertion is not accomplished by the mere fact that the overstepping of the boundaries of the known world, which it dares for the first time, does enable it to discover new worlds but only by a demonstration of the real usefulness of knowledge as a source of capability. This is the explanation for the delay that intervened before Bacon’s theory of theory enjoyed real success. His ulterior magical conception—that a world that was created by the word must also be one that can be dominated by the word, that to be in paradise means to know the names of things—had to be forgotten. This is not, the context in which, for instance, Montesquieu speaks of the curiosity that is inherent in all men in his address to the Académie (near the beginning of the eighteenth century) on the motives to encourage people to pursue the sciences: that curiosity, he says, has never been so well vindicated as in the present age, in which one daily hears it said that the limits of man’s knowledge are being infinitely expanded and that the savants themselves are so amazed at what they know that sometimes they doubt the reality of their successes.8

To understand the process of the legitimation of theoretical curiosity as a basic feature of the history of the beginning of the modern age certainly does not mean to make curiosity into the ‘destiny’ of history, or one of its absolute values. The legitimacy of the modern age is not the legitimation of its specific constituent elements under all possible circumstances. It is possible that Socrates was in the right when, as Cicero says, for the first time he brought philosophy down from the heavens, settled it in the cities, introduced it into people’s homes, and forced it to investigate life, manners, and norms of behavior.9 But one
must also see what this Socratic turning became once it ceased to be understood as making man the subject of inquiry and was interpreted instead as the theological reservation of other subjects to divine sovereignty and was accordingly placed in Socrates's mouth as the abbreviated motto, *Quae supra nos, nihil ad nos* [What is above us is nothing to us]. The rehabilitation of theoretical curiosity is justified in the first instance only as the rejection of discrimination against it, of a restriction of its legitimacy that had only initially been grounded on concern for the salvation of the one who was thus constrained. Despite the fact that the connection between theory and eudemonia that was established in antiquity was involved in the process of the emancipation of curiosity at the beginning of the modern age, the question whether man in fact achieved happiness too in exercising the rights that he had thus recovered has no bearing on the establishment of the legitimacy of his pretension: From the perspective of a pure eudemonism, restrictions on human inclinations, based on any principle whatever, are incompatible with the motivation that is proper to the desire for happiness; that fact defines the burden of proof that has to be met in justifying restrictive reservations. The Socratic question whether man's interest in himself does not require neglect of his interest in nature does provide a form of argument for the discrimination against curiosity but is not characteristic of the state of affairs at the close of the Middle Ages, which was the determining factor in the formation of the new pretension. The balance sheet of theoretical curiosity in general is not predetermined by its legitimacy in the modern age. Still, the latter does provide food for thought that is relevant to the former, as is proper for a piece of philosophical reflection.

**Translator's Notes**

a. "'Reflektierte' Neugierde." Like our "reflect," *reflektieren* conveys the ideas of considering and of "reflecting on" something, but in addition it carries a clearer suggestion than our term does of 'reflexiveness,' of the possibility of considering or reflecting on one's own actions and inclinations as one's own, and thus of self-consciousness.

b. A remark reportedly made by Archimedes to Roman soldiers who, after conquering his city, Syracuse, were on the point of killing him.
The Retraction of the Socratic Turning

The light in which the landscape and things that surrounded the life of the Greeks stood gave to everything a clarity and (in terms of optics alone) unquestionable presence that left room for doubt regarding the accessibility of nature to man only late and only as a result of thought's experience with itself. This nature exists essentially 'of itself,' and it is essentially true 'of itself.' Such a naturalness of truth can immediately be combined with the conception that understands the world as a cosmos and interprets man's theoretical relation to reality teleologically, as a piece of this order, by explaining man's capacity for knowledge as something corresponding to a 'characteristic' of things, namely, their intelligibility.

The cognitive relation was therefore already interpreted early on, by the Presocratics, as the realization of an elemental affinity between the substance of the objects and that of man's organs of perception and knowledge. That a thing can only be represented "by its like" still finds in Aristotle's doctrine of the soul an admittedly more abstract but materially identical formulation in the proposition that "the soul is, potentially, everything in existence." Internal homogeneity and external intensity of light allow the soul and its objects to belong to one world, in whose all-around appropriateness there cannot be such things as the too small and the too large, the hidden and the withheld, and in which existential fulfillment is guaranteed if what is planned to go together does come together. Accordingly, man is seen, down to the Stoics, as the world's observer, at rest at the point from which
all of its objects are accessible, objects of which he experiences both the truth and the enjoyment. The 'theoretical attitude' is not recognizable as a basic decision, such as was projected by Husserl into the beginning of the European tradition—not as a voluntaristic act of foundation that grasps one possibility to the exclusion of others. Reality itself [die Sache selbst] offers itself and by its mere presence compels the inquiring intelligence along its path; and this basic idea justifies interpreting the history of inquiry and thought as a course aimed at sifting out the truth, as Aristotle undertakes to do with his philosophical predecessors, in whose formulas he sees the plan—won from the truth itself, though admittedly still obscure—of his own consummation of the tradition.1 When, in the lapidary initial sentence of the *Metaphysics*, Aristotle formulates the point of departure and the justification of philosophy in the proposition that "all men, by their nature, strive for knowledge," one could see in this an already one-sidedly accentuated, narrow, and potentially problematical comprehension of that basic situation, to which there would have to stand in strict symmetry the formula that everything in existence 'strives' from its nature to be known. So as to indicate what has happened in the history that we are discussing here, let me introduce a remark of Goethe that accurately states the resignation that accompanies the reverse of this basic experience: "If God's concern had been that men should live and act in the truth, then He would have had to arrange matters differently."2

Into the arcadian picture of this initial situation—which we have inferred in the manner of linguistics as an unverifiable root form—features must now admittedly be introduced on which later darkenings and doubts are founded. Philosophy originates with the discovery of the hiatus between appearance and existence, perception and thought, and already in Heraclitus and Parmenides it divides men into those who unreflectingly submit to appearance and perception and those who penetrate to the authentic truth behind these, who do not even gain access to the truth by their own powers but rather require initiation, as though into a mystery. The religious aspect appears here already as a potential restriction on the immanent self-evidence of theory and thus as a reservation against the self-realization of a fulfilled existence in the world, a reservation that in the last analysis terminates in the displacement of the possible unity of truth possession and happiness into a 'next-worldly' state, a displacement that will be carried out by
Christianity. Bound up with the weight of this religious reservation is a revaluation of theoretical activity: While in the assumed initial situation a certain intellectual quietism—letting the truth 'come to one'—was implied, with this reservation the energetic desire for knowledge really becomes for the first time not only a superfluous but also a blasphemous industriousness, in which man disturbs the teleology and economy of his lot and fails to behave trustingly as a member of a cosmos in which he is provided for.

Already at this early stage the attempt, so to speak, to bring the world of the heavenly bodies (seen as possessing the quality of divinity) down to the scale of human knowledge played a special role that is very characteristic for our tradition. Here man reached for the highest and therefore the 'critical' object of his world and his theoretical capability. Philosophy emancipated itself from the mythical relation to the world precisely by making observation of the heavens into the exemplary exercise of man's vocation for theory. Here the basic or initial situation shows through once again when the assertion (no doubt intended as justificatory) could be ascribed to Theophrastus that philosophy did not search out and choose this object among others but, on the contrary, the beauty of the object itself first awakened the philosophical appetite for knowledge. The transfer of the motivation of the cognitive drive outward, into the pressing character of the given itself, which occurs particularly in the derivation of philosophy from man's amazement at and admiration of the world, takes on a justifying function: The immediacy of the perception of the divine—which seemed to be disturbed by theory's unilateral laying hold of the phenomena—is converted into the indirect form, mediated by physical knowledge, of the more or less developed proof of the divinity standing behind appearances. The first philosopher to live in Athens, Anaxagoras, could be accused of impiety because he had maintained that the sun was a glowing mass; and even if this accusation was only an explicit formula for the demythologizing of philosophy that he definitively carried out, it was nevertheless certainly not accidental that it became the central charge against him. Perhaps the anecdote about Thales that Plato hands down also has a similar background: the laughter of the Thracian maid over the philosopher who fell in the well while sauntering and observing the stars may represent not only the malicious pleasure of the unfree in observing the consequences of idleness, but also an understanding of the revenge taken by her
tellurian gods on the Milesian who devoted his attention entirely to the stars. In the patristic polemics, the gaze upward is still contrasted, as the one capable of transcendence, to the downward gaze of the heathens, who are in the power of material idols. But the Thracian maid's ridicule of the protophilosopher Thales also hints at a further motif, which was to reappear in the course of the process through which the theoretical attitude became questionable: the conflict between the distant and the nearby, between that which has no immediate effect in life and the daily duties of a citizen in a community. He knows his way about the heavens, but he does not see what lies before his feet, sneers the slave girl. Especially the Roman reception of the Greek ideal of contemplative leisure will bring out this conflict of interests and thus prepare a pattern that was to be taken up by the patristic literature when the latter put the necessity of salvation, and the resultant economy of all human efforts, in the place of political urgencies.

The central figure around whom this discussion unfolds, and to whose name it was to remain attached, is Socrates. The primacy that he gave to man's self-knowledge draws after it the question whether the natural philosophy of his predecessors is disqualified as a distraction of attention from what is essential or whether knowledge of nature must be coordinated with that primacy of the knowledge of the human, as the precondition of man's integrating himself into the cosmos. In Xenophon's account of Socrates's trial, Socrates is said to have clearly separated the human/ethical from the cosmological/theological themes. Decisions that relate to what is uncertain and unknowable require the help of mantic power, the questioning of an oracle; but it would be foolish to question the oracle in matters for the judgment of which the gods had given man a capacity of his own. "Likewise he considers it impermissible to ask the gods about things that one could know if one only took the trouble to measure, to count, or to weigh."

What sounds to us today like a justification of quantifying natural science is here related exclusively, however, to the ponderabilities of practical life. Everything else that had become the object of philosophical interest since the Ionian school was now to be excluded. "He did not even have the habit, like most of them, of talking about the nature of the universe, or of discussing how the 'cosmos' (so-called by the philosophers) had come into being, and from what causes the various phenomena in the heavens came about, but rather actually
declared those to be fools who concerned themselves with such things. He asked these people whether they believed that they already understood human affairs so well that they could turn to such investigations, or whether they considered it acceptable to dismiss human matters and inquire into superhuman ones instead. He was amazed at their failure to understand that it was quite impossible for men to fathom such matters. According to this account, Socrates then pointed to the contradictions between the philosophical schools in questions regarding nonhuman nature—a mode of argument later to be characteristic of the theoretical resignation of Hellenism.

Still more important is the consideration closing this chapter, which appeals to the criterion of the applicability of theoretical insights: “He who studies human matters thinks after all that he will be able to apply what he learns for his own use and for the use of other men. On the other hand, it does not even occur to those who investigate divine matters to expect to derive any application of their knowledge of the causes of winds, waters, weather, and all that sort of thing, but they are satisfied merely to investigate their origins.” The catalog of the human matters of which Socrates is said to have treated in his conversations includes piety and impiety, beauty and ugliness, justice and injustice, virtue and foolishness, bravery and cowardice, the polis and the politician, government and the technique of governing, in other words, everything that makes up the difference between the excellent and the unfree. All knowledge is justified only by the gauge that it supplies for action, and the worthiness of the objects of theory to be known is determined accordingly.

The authority of this Socrates is appealed to by the Cyrenaics, who “abstained from inquiry into nature because of the obvious unintelligibility of the object, but occupied themselves with logic because of the usefulness springing from it,” and the Cynics, who discarded logic and all other traditional disciplines along with physics in order to concentrate on control over themselves. The formulation that Cicero gave to this picture of Socrates, according to which he “was the first to call philosophy down from the heavens, to make it at home in the cities, to introduce it into people’s homes and to require it to investigate life, customs, and the difference between good and evil,” was also distinctive in that it cited among the Presocratic objects rejected by Socrates not only the questions of natural philosophy in the narrower sense—that is, those regarding the origin and construction of the
cosmos—but also the purely quantitative elements of phronomonic astronomy: *siderum magnitudines, intervalia, cursus* [the sizes of, distances between, and paths of heavenly bodies]. On account of the great influence that Cicero’s formulas were to have, special attention must be drawn to this broadening of the Socratic exclusion.

The inconsistencies of the picture of Socrates conveyed to us in the various sources are not what we want to discuss here. But nevertheless it may well be assumed that they are due to stylizations of a mature figure who was to be made exemplary for posterity—stylizations in which Socrates’s own past was dissolved into variously accentuated contrasting positions. Xenophon’s Socrates, with his exclusion of the knowledge of nature from a philosophy concerned solely with human matters, represents the overcoming of Socrates’s point of departure in the philosophy of Anaxagoras, whose student he had been and whose interest in natural philosophy was still ascribed to Socrates and ridiculed in Aristophanes’s *Clouds*, which—produced in the year 423 B.C.—presents a picture of the philosopher that antedates the Platonic picture of the last years of his life by a quarter of a century. In Plato’s *Apology* also, Socrates does allude to earlier slanders and accusations directed against him, which had related to the impiety of his being occupied with the *meteora* [atmospheric and astronomical phenomena] and with what might lie under the earth. In the same passage, however, still another element of the Socratic past comes to light in the reproach that Socrates knew how “to make the weaker argument into the stronger.” This points to Socrates’s opposition (pushed into the foreground by Plato) to Sophism, to which in his youth he doubtless stood closer than can be admitted at the beginning of the *Apology*, which is directed against every kind of rhetoric. In any case even the Platonic Socrates still commands the whole range of the dialectical and rhetorical tricks that were marketed by the Sophists. For Plato the anti-Sophistic role of his Socrates dominates the scene so much that he could consciously abandon the rejection of natural philosophy as early as the *Phaedo*, when he made Socrates into the transmitter of a natural-philosophical total myth whose presentation seems to substantiate the reproach, rejected in the *Apology*, that he had done wrong by engaging in unnecessary inquiry into the things under the earth and in the heavens—a reproach to which Socrates had replied there that he had taken no part whatsoever in this variety of the interests imputed to him.
There is thus not only an inconsistency between Xenophon and Plato but also within the Platonic picture of Socrates, which incidentally Diogenes Laertius already noticed: "It looks to me as though Socrates also made the knowledge of nature an object of his discussions. He did after all go into explanations of providence, according to Xenophon's testimony, although the same Xenophon insists that his discussions were concerned only with ethics. The situation with Plato is similar. In the *Apology* he mentions Anaxagoras and other philosophers of nature, of whom Socrates claims to know nothing. But in spite of this, when he expresses himself on natural philosophy, he puts it all in Socrates's mouth." One will have to relate this additional interest (in natural philosophy) to an earlier phase in Socrates's life and thought in order to do justice to both of the close witnesses. The doctrine that is cited in order to justify attributing this interest to him, that of the providence of nature on man's behalf, which Diogenes of Appolonia seems to have been the first to formulate in connection with Anaxagoras's concept of God and in opposition to the Ionian natural philosophy, could have operated in Socrates's intellectual biography precisely in the direction of establishing the superfluousness of interest in the riddles of nature. This integral combination of a metaphysical dogma with a physical skepticism or indifference will indeed demonstrate its usefulness in Hellenism and in the patristic literature as well because it is precisely an anthropocentric teleology of nature that deprives man of the basis on which to argue that he needs to secure himself against nature, or at least against fear of its spectacular phenomena, by means of inquiry into them. The modern age, on the other hand, will attack this teleological element so violently precisely because it will see in it an inadmissible and false assurance about nature that pacifies and weakens man's claim to knowledge. Whether Socrates was "the real founder of teleology in reflection upon the world" (K. Praechter) or only the recipient of ideas from Diogenes of Appolonia (W. Theiler) is not crucial for this function—which at any rate first became recognizable in connection with him—of what was later so important an element in the tradition and the epochal break.

Diogenes Laertius's other argument, based on Plato, for the assumption of a Socrates who philosophized about nature—the argument from the difference between the *Apology* and Plato's later dialogues—is also hardly sound, but it does lead to an essential connection: That which, as natural science, had been recognized as just as impossible
as it is unnecessary can be perfectly legitimate and sensible if it is
given a different form of authority and relevance to what is humanly
essential as a myth functioning in the context of ethics.

This becomes evident in the very same Platonic dialogue that Di-
ogenes Laertius no doubt had especially in mind when he speaks of
the natural philosophy conferred on Socrates by Plato: the Phaedo. In
this last instruction session, Socrates tells his students once again that
in his youth he had been eager above all for the sort of wisdom that
people call natural history. He had been concerned more than anything
else with knowing the causes of things, of their coming into being,
persistence, and ceasing to be, and he had devoted all of his energy
to these questions. But finally he had come to understand that he
was as unsuited for this sort of investigation as he could conceivably
have been, in fact that in a peculiar way he was blinded by it to things
that he had earlier found quite obvious and immediately intelligible.
Socrates then depicts his experience with Anaxagoras’s world reason,
which he takes to imply a universally teleological way of seeing things.
However, his expectations were bitterly disappointed in his pursuit of
Anaxagoras’s theory of nature, which was unable to derive from this
principle any advantage at all in explaining the construction of the
world. Disappointment with the explanatory performance of natural
philosophy explains his withdrawal, indeed flight, into the realm of
concepts, so as to contemplate in them the truth of things. The
subsequent discussion gives an example of the efficacy of the use of
abstract concepts and their application to the problem of immortality;
that is, it justifies logic by demonstrating its human significance. But
with the assurance of immortality a secondary question comes up,
which can no longer be dealt with by rational means, namely, the
question of the fate of the soul after death. The topography of the
soul’s travel and introduction to Hades now requires—just as it did
much later in the case of Dante—that a whole cosmology be unrolled.
Socrates grasps this scanty point of departure with an enthusiasm that
only shortly before he had regarded as the youthful misplacement of
his philosophical interest: There are many and wonderful regions of
the earth, and these in general are differently constituted than is
thought by those who make a habit of talking about them. There
follows the well-known imaginary world picture, whose whole function
consists in being able to strengthen the hope of a virtuous soul for a
fair reward in the end. Socrates explicitly admits that it would not be
becoming to a reasonable man to assert seriously the reality of every-thing he relates there; it is not at all a matter of the correctness of the assertions but rather of being able to risk belief in a particular appropriate fate of the soul; and to take this risk is noble. One must therefore recite to oneself some such myth as the one he had contrived, and even swear to it.16

Here we have in a few words the entire justification for the fact that the Platonic Socrates, who had renounced all natural science, nevertheless in his last hour in prison expounds precisely a piece of ‘natural philosophy’—the mythical brackets, inhibition of the assertive character, exclusion of the theoretical will, and functional coordination with man’s ethical self-fortification justify this in a new way.

The readily employed schema of the duality of ‘Mythos and Logos’ does not suffice to comprehend adequately this change in the function of observation of nature. The myth serves hope. The theoretical elements of probability, of which it too has need, are properly employed in order to answer—or to place within the horizon of answerability—questions that under the strict claim to knowledge would not be answerable. In the myth of the judgment of the dead that is presented in Plato’s Gorgias, Socrates says that what may seem to Callicles to be a myth nevertheless counts for him as a ‘logos’17—understandably, since this myth is even more narrowly and precisely oriented toward the fundamental question of ultimate justice and thus of the rationality of moral action. It wards off the failure of the attempt to inquire after a historically immanent justice—in view precisely of Socrates’s own fate. But even here the myth is not really a logos. Socrates does not obscure this differentiation: We could scorn the myth if we could really find the better and truer solution that we seek and in exchange for which we would be willing to give it up.18 The floating, uncategorical, almost poetical form of assertion that is characteristic of myth is the vehicle by means of which, after Socrates’s great turning toward logic and ethics, the philosophy of nature returns to philosophical thought, widely visible and with lasting influence in the demiurge myth of the Timaeus.

This mythical cosmology also has a consistently Socratic function within the planned trilogy of dialogues, namely, that of preparing for the exemplary prehistory of Athens, to be presented in the second dialogue, the Critias. Accordingly allusion is made at the beginning of the Timaeus to the discussions held on the previous day, in which
Socrates had sketched the picture of an ideal state. Consequently the real theme of the myth of the demiurge is mediation between the ideal and the real cosmos by the world’s master builder, the archetypical original process, on the basis of which the translation of the ideal state into the real polis of Athens can also be pursued. Just as the real world of our perception stands before us as, so to speak, perceptual proof of the realizability of the ideal, so the history of the Athenian state should be taken as demonstrating the realizability of the ideal state that was developed earlier and briefly sketched once again at the beginning of the dialogue. Here again the myth’s probability is sufficient, allowing (indeed) that it may have been different, but not that it may have been different in kind. Both pretension and resignation are operative here: pretension to what it is essential for man to know of nature, resignation regarding what develops entirely within the immanent dynamics of questioning. For those who are recipients of such an evident myth, it is obligatory not to investigate beyond it. Both pretension and resignation are operative here: pretension to what it is essential for man to know of nature, resignation regarding what develops entirely within the immanent dynamics of questioning. For those who are recipients of such an evident myth, it is obligatory not to investigate beyond it.

The positive side of this is that when one holds a piece of scientific knowledge to be quite true, beneficial to the state, and thoroughly agreeable to divinity, then there is no other possibility than to let it be known.

Thus consistency with Socrates’s self-criticism regarding his past inquiries into nature is maintained by Plato in an entirely unexpected roundabout fashion. It is a separate question whether the original function of such an extensive construction as the cosmogonic myth endures in the tradition or whether, even before any misunderstandings, there enters in a process of separation from and defunctionalization of the whole. This question affects the tradition of the Timaeus all the more because over many centuries it served to isolate a relatively small piece of the history of the world’s production and thus (even just literally) made the functional context unrecognizable. Thus the history of its influence contributed hardly anything to the problem of the legitimacy of interest in knowledge of nature.

However, the recurrence of interest in the cosmos in the Platonic picture of Socrates can also be derived from the other aspect of his overcoming of his own biography: the counterposition to Sophism. The Socratic formula of the identity of wisdom and morality, of knowledge and virtue, can be understood as the overcoming of Sophism by its own means. The freeing of knowledge from its pragmatic employment in the service of political interests, the recovery of its im-
manent significance, gives to action a norm that is independent of partial ends. But this means that the objectivity of theory cannot be regulated primarily through the selection of an interest, which seeks only to procure justifications and techniques for its success. On the contrary, it must seek to grasp the universal order whose maintenance alone guarantees to human action that it draws after it eudemonia as the confirmation of its correctness. The appropriateness that governs action as its norm can no longer be defined as the pragmatic coordination of the means to particular occasional ends but rather as the subordination of all ends and means to the single highest end of man, that of achieving and maintaining his well-being within the cosmos.

Thus ‘nature’ as a theme recurs in the requirement of man’s self-knowledge, which is never the self-knowledge of an individual subjectivity but rather the knowledge of an essential nature and its naturally prescribed needs, even before the choice of particular existential ends. But this human nature is not yet—for the Greek—the singular definiteness of a subject standing over against the world and objectivizing it as the field of its risky or conditional self-realization; it is rather an element and constitutive part of the cosmos itself. Self-knowledge does indeed appear until deep into the Christian epoch as an alternative to knowledge of the world, and as a condition of securing one’s personal salvation, but nevertheless always, to judge from the logic of the rules that are derived from this imperative, in such a way that only the world in its pregiven order of essences can give particulars regarding what is appropriate or inappropriate to this self, what will fulfill or fail to fulfill its position in the order. Knowledge of the cosmos is implicated in the postulate of self-knowledge.

In the Phaedo the investigation of the logos that followed upon resignation from hopes of knowledge of nature turns into an argument for immortality that understands the evidence of logical, mathematical, and ethical knowledge as a state of certainty foreign to the conditions of the world of appearance and deriving from preexistent anamnesis. Anamnesis explains how man can ‘learn,’ how he grasps the necessary connections in given states of affairs and thus is able to confirm the intelligibility of his thought and his concepts amid the agitated variety of appearances: He carries in himself the dowry of the Ideas according to which everything that confronts him is constituted. The Platonic doctrine of the Ideas very rapidly lost its original limitation to concepts having force in logic and ethics and broadened the sphere of Ideas
into the world of the original images of everything in existence. But
in the process it divested the cosmos of the foreignness and sheer
externality that had driven the young Socrates to resignation from
the useless effort of trying to comprehend nature.

The unfolding of the Platonic doctrine of Ideas no longer allows
one to continue to draw an essential distinction between what essentially
concerns man and what in the guise of nature appears only to stimulate
his curiosity: When the agent conforms to the normative Ideas of the
moral virtues, in reality he only integrates himself into the universal
obedience in which nature—as the sum total of images—stands to its
originals. The doctrine of Ideas not only explains man’s learning and
inquiry as turning to the truth possession already latent within him;
it also legitimates them as the exhaustion of a potential that would
otherwise remain untouched. Even if anamnesis may only have had
the character of an episodic, quasi-mythical expedient in Plato’s
thought, still the foundation of the visible world in the world of Ideas,
which remains, cannot be easily reconciled with the Socratic position’s
exclusion of cosmological theory.

Seen in retrospect, from the point of view of the Platonic doctrine
of Ideas, Socrates’s recommendation that philosophy restrict itself to
logic and ethics appears after all as a transformation of Sophism, which
had relativized the universe of existing things to man’s purposes and
to the benefit that his will to live could derive from them. In contrast
to this, anamnesis made man’s cognitive drive a piece of the much
more narrowly intended Socratic postulate that man should concern
himself only with his own affairs.

It is quite consistent that Plato also provides an explicit legitimation
for man’s extreme claim to knowledge—his interest in the starry
heavens—in the myth of the demiurge. He has the world fabricator
produce the human soul from the material left over from the making
of the world soul and thus, through its kinship with the substance of
the world soul, guarantee it universal access to knowledge.21 Down to
the pedantic point of having the number of human souls correspond
to the number of stars, the myth carries out the basic idea that Aristotle,
by both the first sentence of his *Metaphysics* regarding the naturalness
of the appetite for knowledge and the fundamental principle of his
psychology that “the soul is, potentially, everything in existence,” was
simultaneously to formulate abstractly and to withdraw from any
further foundation. So the ideal of theory that was shaped for our
tradition by the ancient world first became formulable, precisely in its foundation on the nature of man and in its relation to fulfilling eudemonia, only in the countermove against the Socratic reservation.

At the beginning of the *Metaphysics*, Aristotle detaches the human striving for knowledge from coordination with self-knowledge and moral action. Man's essential nature justifies itself simply by being realized and has no need of relation to any other existential purpose. The naturalness of the cognitive drive is read directly from man’s relation to the perceptual world, from the delight he takes in his access to it through the senses. Something so natural and essentially appropriate is not grounded merely in the circumstances and needs of human life. The order of the senses themselves confirms this by the preeminence of sight, which stands closest to knowledge because it conveys the greatest number of differences between things. But the history of the human conduct of life also proves the essential superiority of purposeless knowledge, of knowledge unrelated to needs: If men have turned to philosophy so as to escape their ignorance, then they evidently sought knowledge for its own sake and not for its practical usefulness. "And this is confirmed by the facts; for it was when almost all the necessities of life and the things that make for comfort and recreation had been secured, that such knowledge began to be sought. Evidently then we do not seek it for the sake of any other advantage; but as the man is free, we say, who exists for his own sake and not for another's, so we pursue this as the only free science, for it alone exists for its own sake." Here the essential appropriateness of pure knowledge is related to the freedom of man, who exists for his own sake and whose self-realization is his only end. In a very subtle way, the principle of the likeness of the knowing subject and the known object comes into force once more.

But this autonomous significance of theory immediately falls under the suspicion that in it man goes beyond what is appropriate to his nature and thus invades the essential reserve of the divine. Aristotle at once takes up the question: "Hence also the possession of [such knowledge] might be justly regarded as beyond human power; for in many ways human nature is in bondage, so that according to Simonides, 'God alone can have this privilege,' and it is unfitting that man should not be content to seek the knowledge that is suited to him." The argument relieving this suspicion is derived from the experience of the human capacity for happiness through pure knowledge: "If, then,
there is something in what the poets say, and jealousy is natural to
the divine power, it would probably occur in this case above all, and
all who excelled in this knowledge would be unfortunate. But the
divine power cannot be jealous (nay, according to the proverb, 'Bards
tell many a lie'), nor should any other science be thought more hon-
orable than one of this sort. For the most divine science is also most
honorable. ..." But if this was correct, the conclusion also had to be
drawn that the difficulties that man encounters in investigating nature,
and in the face of which Socrates had renounced such investigation,
are not grounded in the subject matter but rather in man himself,
although men have a sufficient natural instinct for what is true and
can comprehend most of it.  

When Aristotle says in another passage that a life of pure theory
and thus of perfect happiness exceeds man's powers and is only made
possible by the divine reason that inhabits man, 25 then what this means
is not the erection of a limit to human pretensions, which it is blasphemy
to transgress—it does not propose a transgression of what is essentially
appropriate—but rather, as the Greeks conceived of the divine, it is
precisely a call to a self-deifying life, the possibility of which lies in
human nature. Aristotle again rejects the poets with their fiction of
envious gods:

But we must not follow those who advise us, being men, to think of
human things and, being mortal, of mortal things, but must, so far
as we can, make ourselves immortal and strain every nerve to live in
accordance with the best thing in us; for even if it be small in bulk,
much more does it in power and worth surpass everything. This would
seem, too, to be each man himself, since it is the authoritative and
better part of him. It would be strange, then, if he were to choose
not the life of his self but that of something else. ... That which is
proper to each thing is by nature best and most pleasant for each
thing; for man, therefore, the life according to reason is best and
pleasantest, since reason more than anything else is man. This life
therefore is also the happiest. 26 

Man's life is thus in principle capable of fulfillment in its essential
pretension to knowledge, and the objectivity to which he has access
exceeds neither his powers nor his finitude.

A further consequence of this position is that in the later history of
Aristotelianism, one man and his work, namely, Aristotle himself,
could be regarded as the complete determination of this claim and
realization of its possibility. The Scholastic authority of “the Philosopher” is preformed in the assumptions of the system itself. I quote (out of sequence) the “commentator” on Aristotle who was to appear to Latin High Scholasticism as the authentic interpreter of the system, the Islamic Scholastic Averroes: “Aristotle’s doctrine is the highest truth, for his spirit was the perfection of the human spirit, and thus one rightly says of him that he was created and given to us by divine providence so that we should not remain ignorant of what can be known.”

A later reflection (falsely attributed to Aristotle but probably stemming from the first century A.D.) of the beginning of the Metaphysics is given by the markedly Stoicizing treatise On the Cosmos, the first chapter of which expresses with fine pathos the philosophical spirit’s universal relation to the world and pretension to knowledge. Here philosophy again appears as a divine undertaking elevating man above himself when it rises to the contemplation of the world’s totality and apprehends its truth, even where all other types of knowledge fail. For it, the investigation of the cosmos is simply its appropriate mode of self-realization. Although man cannot bodily leave the earth and penetrate the heavens so as to observe the holy regions there, still the soul with the help of philosophy under reason’s guidance has found the path, has tirelessly taken flight and brought together in thought what was separated in space, indeed has easily recognized what was related to itself and grasped the divine with its godlike eye and proclaimed it to man. In spite of the unmistakable Stoic influences, the ascription of the treatise On the Cosmos to Aristotle has a core of justification: The cosmological truth-pathos is a phenomenon of historical delay, an attempted reaction against the disappointment and resignation, the imprint of which is recognizable in the various doctrinal schools of Hellenistic philosophy.

Even the Stoa is not free of it; though it was the first to make of the geocentric cosmology an anthropocentric diagram, in which man as the world’s privileged observer directs his gaze from the earth freely in all directions at the spectacle of the heavens, an element is taken up again in this teleology that had already been a motive of Socrates’s abandonment of the study of nature: the function of teleological trust as a way for man to reassure himself regarding the urgency of knowledge of nature. The Stoic life ideal of apatheia [nonsuffering, dispassion] is based on this fundamental trust in nature and presupposes that the
basic Hellenistic question of what the world’s events and the world itself mean for man can validly be answered in general, independently of the solution of individual physical questions. Trust in the teleological background hypostatized as Pronoia [providence] and Logos [word, reason] makes possible indifference as a mode of behavior toward everything that impinges on man from outside. An apocryphal remark ascribed to Ptolemy characterizes the basic Hellenistic concern with being unconcerned in such a way as to subsume even the Stoic in this totality: Inter altos altior est qui non curat in cuius manu sit mundus [Among the profound, the profoundest is he who does not care in whose hand the world is]. This multiply significant formula indicates what the Hellenistic attempts to unburden man metaphysically had in common and designates at the same time what, in the sense of the late term curiositas, is superfluous concern, extending beyond what is possible and needful for man.

The early Stoics already distinguished between ‘wisdom’ as the knowledge of divine and human objects and ‘philosophy’ in the narrower sense of the acquisition of a competence that is one of the necessities of life. Philosophy becomes a position prepared as a recourse against the uncertainty of theoretical success, an uncertainty that must not become palpable as a source of disquiet for man. This is also systematized in the Stoic logic, which, by ascribing an assertory character to judgment, inserts a volitional element between the idea and the act of judgment and accordingly provides for a third logical quality, a refusal to decide—that is, either to assert or to deny—which it designates by the term epoché [literally: holding back]. This possibility of theoretical reserve demarcates the ‘interiority’ of the subject as a sphere of pure disposition over oneself. It is the initial attitude of the Stoic wise man, which he can only be provoked into leaving by the evidentness of an idea. The precipitancy of judgment, which is (so to speak) seduced by the cognitive drive, is theory’s original sin, the anticipation of reason by the will, which produces an impotent surrender to the reality with which one is confronted. Accordingly appropriateness of judgment is what life gains from logic, the science of “when one may assent and when not,” which makes the wise man unhurried in judgment.

The same orientation is evident in the Stoic grammar with its doctrine of predicates that possess no assertory character, the doctrine of modalities with its ‘weak’ intensities of judgment, and the doctrine of
inference with its special cultivation (which was important for the history of logic) of the topic of hypothetical inference. The real interest operative in the Stoic logic is not in securing formal methods of proof but rather in exploring the scope of a theoretical ‘quietism’ that lies between abstention from and certainty of judgment, a region in which human insecurity and alarm are most apt to originate. The dogmatic impression conveyed by Stoic philosophy is superficial; its materialism and empiricism are economical minimal hypotheses, or are intended as such. This is where Stoic fatalism belongs as the metaphysical justification of a particular hesychastic [quietistic] attitude to the world: Nihil omnino agamus in vita [We should do absolutely nothing in life]. Here again Stoic logic provides a key to the Stoic maxims of behavior in its predilection for sophisms like the sorites. In the aporia [difficulty, embarrassment] of the sophism, one is driven step by step into and through the readiness to decide, to say yes or no. In connection with the sorites, Chrysippus says that when there is a slight difference between ideas, the wise man withholds judgment. At this point the Skeptics, emphasizing the privilege they derive from being free of dogma, joined in, saying that if even the Stoic dogmatists said in the case of the sorites that one must stand fast and refrain from judgment, then they themselves should do this that much more firmly.

The Stoic epistemology also corresponds to the presystematic unifying principle of what, after a fashion, one could entitle “existential economy.” This holds in particular for the controversial criterion of truth, whose existence—even before any definition—is inferred by regression from the certainty presupposed by action: If it is ever necessary to act at all (a premise that is shared by both Stoics and Skeptics), then there must also be a criterion for the certainty presupposed in action—an inference that in its turn functions only under a teleological universal premise for which the Stoic philosophy of nature had to take responsibility. According to anecdote, the definition of the truth criterion as katalepsis [a grasping] was illustrated with gestures by Zeno, the founder of the school: “After exhibiting the inner surface of his hand, with the fingers spread, he said, ‘Such is an idea [visum].’ Then, with his fingers somewhat bent, ‘Such is assent.’ Then when he had drawn them together entirely and made a fist, he said that that was katalepsis—it was thus that he coined the term ‘katalepsis,’ grasping, which was not usual before that; but when finally he used his left hand as well and tightly and forcibly squeezed the fist together with it, he
explained that this was the knowledge that no one but the wise man possesses. But what is meant by “grasping”? Who grasps whom? In Zeno’s metaphor this still seems fairly unequivocal, since “katalepsis” refers to the idea that grasps the object by making it present in the fullness of its features and thus totally subduing it. Later, however, the faculty of imagination that is ‘grasped’ by the evidence of the object gains currency in the Stoic system of metaphor, both in the imprint metaphor of the ‘stamp’ and also in Chrysippus’s simile of the idea that grabs a man by the hair and forces him down to assent. I mention these details here in order to mark the distance between the Stoa’s account of the cognitive process and the initial situation of the ‘naturalness’ of truth, which was characterized with the help of the metaphor of light.

If one keeps in mind these early declarations of the Stoic school with their tension between existential economy and metaphysical dogmatics, the palpable inconsistencies of later Stoic authors in regard to the theme of intellectual curiosity become understandable. For on the one hand this curiosity is subject to justification by the teleological principle, according to which such a deep-lying disposition cannot remain unfulfilled and cannot be contrary to nature; but on the other hand the cognitive drive also induces man continually to cross the boundaries of the immediately sensuous and obvious and to give himself over, in connection with vague and obscure objects, to the very precipitancy and excess that were supposed to be suppressed with the help of the Stoic logic and theory of knowledge. This aporia can perhaps be grasped most clearly in the case of Seneca. Little is accomplished here by tracing actually or apparently contradictory elements back to different sources or explaining them by a change of position on Seneca’s part, from following Posidonius to following Zeno and Chrysippus. The real problem, that of providing an argument for self-restriction of the pretension to knowledge, is unavoidable on the assumptions of Stoic teleology.

Nature has given us an inquisitive spirit (curiosum ingenium), and being aware of her own skill and beauty she has brought us forth as spectators of the great spectacle of things, since she would have sacrificed the enjoyment of herself if she had displayed her works so vast, so wonderful, so artfully constructed, so luxuriant, and so various, to empty solitude. That you may understand that she wants to be investigated and not only contemplated, notice the position she has assigned to
us: She has set us in her center and given us a panoramic view in all directions, and she has not only given man an upright posture but also an elevated head resting on a flexible neck, so that he can follow the course of the stars from rising to setting and let his face turn with the movements of the heavens.\textsuperscript{37}

Here again the teleological justification is sought out after the factual phenomenon has been exhibited; immediately before the passage just cited, Seneca refers each individual to the powerful appetite that lies in him to get to know the unknown, which makes many a person venture out on the sea and submit to the hardships of the longest journeys solely in order to discover something hidden and remote; which drives masses of people to the spectacles; which makes us rummage through what is locked up, search out what is secret, trace out antiquities and take in accounts of the strange customs of other peoples—all the possible directions in space and time in which the human appetite for knowledge can extend are comprehended in this phenomenology. In such a context curiositas still cannot carry a negative value; in the observation of the heavens it is the very highest objects that compel our intellectual curiosity (curiosos nos esse cogunt).\textsuperscript{38}

But in the 88th Letter to Lucilius, Seneca uses the same teleological premise to argue for theoretical self-restriction, for the economy of necessary knowledge: “Plus scire velle quam sit satis, intertemperantiae genus est” [To want to know more than is sufficient is a form of intemperance]. The resigned programs of the Skeptic schools, which have introduced nonknowledge as a new branch of knowledge (qui novam induxerunt scientiam nihil scire), appear to him to follow and to result from the preceding violation of this economic limit by philosophy itself. Dogmatic hypertrophy of intellectual curiosity and skeptical resignation are two aspects of one and the same process, of the loss of the norm of theoretical self-restriction: “Illi mihi non profuturam scientiam tradunt, hi spern omnis scientiae eripiunt” [The people I first mentioned provide me with knowledge which is not going to be of any use to me, while the others scratch away from me any hopes of ever acquiring any knowledge at all]. What is close at hand and what is closest of all is what concerns us: “Quid ergo sumus? quid ista, quae nos circumstant, sustinent?” [Then what are we? The things that surround us, the things on which we live, what are they?] This great summary critique of the artes liberales [liberal arts] presupposes the finitude of what can be known and is worth knowing in these
disciplines; they are what can be acquired and are therefore only a first step toward maturity of the spirit: "Non discere debemus ista, sed didicisse" [All right to have studied that sort of thing once, but not to be studying them now]. Their objects should not draw the spirit into the infinitude of the appetite for knowledge, or they lose their meaning, which is to make man free: "Unum studium vere liberale est, quod liberum facit" [There is really only one liberal study that deserves the name—because it makes a person free]. The economy of knowledge intervenes in the ordering of the course of education: "Rudimenta sunt nostra, non opera" [Our business is foundations, not constructions].

Here again a special status belongs to knowledge of the heavens. The treatment of this subject—the indifference recommended in regard to the possible connection between the heavens and men's fates—reminds one of the way Epicurus neutralizes the affective influence of natural phenomena. What is the use of knowing the meaning of the constellations of the stars, which are driven around in accordance with the continuus ordo fatorum et inevitabilis cursus [uninterrupted sequence of destined events and inevitable movement] and either call forth or announce events—what is the use of knowing the causes or signs of what is unavoidable? "Scias ista, nescias: fient" [They are going to happen whether you know about them or not]. What is necessary for man is not to be prepared for particular events but to be ready for anything. To this the interpretation of the stars contributes nothing; on the contrary, it is a hindrance. The principle of teleological economy is sharpened into the askesis [training, practice] of concern for what is necessary. The great integration of human culture into the meaningful context of nature, which had been carried out by Posidonius, is sharply rejected and analyzed almost with the modern category of the ideological: The extension of the teleological principle to the phenomena of human invention and cultivation is unmasked in its function of justifying existing cultural conditions. The concept of 'nature' is reduced to a critical function.

Translator's Note

a. Note that curiositas, "curiosity," derives from cura, to care.
Seneca’s morbus Graecus [Greek ailment] had already been diagnosed and subjected to therapy at the beginning of Hellenistic philosophy, by the Greek Epicurus. For Epicurus the appetite for knowledge is an important source of the affects of fear and hope that rule human life and cheat it of its potential happiness. But the method by which to get at the root of these disorders of the mind is not refraining from judgment but rather the technique of demonstrating the affective neutrality of all possible theories about the natural phenomena that surround man and fill him with uncertainty.

Epicurus’s physics, theology, and ethics are systematically homogeneous in the single tendency to neutralize the relevance of these phenomena. His negative concept of happiness is matched by his economy of cognition: Cognition is supposed to eliminate subjectively acute uncertainty but not to establish an objective kind of knowledge. Regarding the gods, it is enough to know that they are not curiosis [curious ones; colloquially: busybodies] like the God of the Stoics, who ‘pokes his nose’ into everything and whose providentia [providence], as the ground of hope for man, is purchased at the price of fear of the concrete and—for the individual—irrelevant rationality of his arrangements, which conserves only the cosmos as a whole and is thus not responsible to the individual. Cicero will sum up this line of thought in a passage that is instructive for the verbal and conceptual history of curiositas, where he makes the Epicurean Velleius argue against the Stoics’ concept of God that this God was imposed on man as something
incessantly dominating him, filling him day and night with fear; for who would not fear a God who foresees, considers, and looks after everything, considers himself competent in every affair, concerns himself about everything and is full of officiousness? Here *polypragmosyne* [officious interference], the antithesis of the philosophical life ideal, is projected onto the Stoic image of God, which in its central characteristic of *providentia* necessarily also involves *cura* [care, concern] and is consequently incompatible with the unencumbered bliss of the life of a god. Theological unrest, as a violation of the ideal of the god who is devoted only to himself, implies anthropological restlessness, and the therapy for the latter must attack this root. Gods and men—and this is good Greek theology—have at bottom the same existential disposition, namely, to be happy. They fulfill the conditions of the possibility of this disposition only by having nothing to do with one another. That Epicurus’s gods may not know anything of man and the world, if they are to be happy, does not distinguish them much from Aristotle’s unmoved mover, who seemed to Christian Scholasticism to be so similar to its God. For men, who cannot by nature be so sure of their happiness—because they do not live in the *intermundi* [spaces between the worlds], independent of the accidents of the world mechanism, but must rather live ‘in the world,’ that is, in one of the worlds—it is important to know of the existence of gods resembling them in form, as a comprehensible guarantee, not of their own actual happiness, but of its possibility.

Intellectual curiosity is now the disastrous drive that misleads us into violating the boundary settlement between the human and the divine sphere. The Stoics had, as it were, demonstrated how to do this with their derivation of theology from physics, with their pathos of observation of the heavens and admiration of the world as the motif of all knowledge of God. This was where the Epicurean therapy had to intervene. In spite of the enormous size, which we can only surmise on the basis of surviving fragments, of Epicurus’s *Physics*, with its thirty-seven books, the ‘economy’ of what elementarily concerns man plays a crucial role in this system. The *Letter to Pythocles* is at least close enough to Epicurus’s own work to allow us to discern in it the methodology of this physics. Its treatment of meteoric and stellar phenomena rejects every claim of theoretical curiosity and poses for itself, as its overriding purpose, the elimination of the emotional infection of the still more or less mythically associated realm of the heavens. This
philosopher, too, wants above all to convey ataraxia, a dispassionate ease in the world, and not science. The hypotheses regarding individual phenomena (already cataloged by Theophrastus) are placed alongside one another, without any judgment being passed. This procedure can afford to leave the pretensions of theory unsatisfied because theory's unrest appears secondary in comparison to the uncertainty as to what a phenomenon means (in each case) for man. The unstated auxiliary assumption that the catalogs of hypotheses are complete contains, of course, a teleological implication, which reminds one again of the way Aristotle had taken the tradition that preceded him for granted as a sufficient basis for his isolation of problems and overcoming of their aporias [difficulties]. Thus abstention from an interest in theory is not the initial attitude here; it only sets in in the course of running through the assembled physical hypotheses, as the result of their affective equivalence. The appetite for knowledge restricts itself, by stopping short of deciding between the hypothetical alternatives, and thus saving itself, through ataraxia, from the disappointment of the desire for definitive knowledge. The phenomena of the heavens and death designate the spatial and temporal boundaries where man's suspicion arises that this could crucially concern him; this is where knowledge of nature must prove itself critically; otherwise we would have no need of it.\(^2\) Physics as 'pure' theory possesses no legitimation, since the measure of the disturbance by fear and hope that is bound up with its phenomena is at the same time the measure of the urgency of their clarification—of the establishment of the irrelevance to man of their possible results.\(^3\)

One can regard the rules of theoretical procedure in Epicurus and his school as a canon, directed against the first sentence of Aristotle's *Metaphysics*, of the finitude of man's natural pretension to knowledge. In Lucretius this appears as an image in his polemic\(^4\) against Aristotle's recasting of the Platonic parable of the cave, which rightly looked to him like a piece of Stoic admiration of the cosmos, and whose allegorical structure he now appropriates for the Epicurean liberation of man—that is, recasts once more. The relation of the spirit to the new doctrine he is proclaiming, a doctrine that eradicates admiration of the cosmos, is compared metaphorically to one's surprise at the first sight of the world on emerging from the cave. Lucretius approves of the 'entropy' of beholding and being amazed by the world, the natural process of wearying and increasing indifference as one gets used to being in the
world, from which the Stoics always want to pull us out again so as to renew the quality of unusualness. This process of leveling off is even supposed to benefit the Epicurean physics that he expounds in his didactic poem, in that through the poet’s recommendation of it, the doctrine can lose its strangeness and its essence can become habitual and commonplace. The singular but fleeting shock of this novelty was supposed to relieve one once and for all of susceptibility to disconcerting aspects of the world.

The theory of the origin of culture, in the fifth book of De rerum natura, is also essentially directed against the positive quality assigned to the cognitive drive by Aristotle and the Stoics. This was the first appearance of a theme in the critical self-restriction of intellectual curiosity that was to be handed down to Rousseau, a theme that does not require the religious idea of a sphere reserved to divinity and therefore constitutes in a more precise sense the antithesis to the first sentence of Aristotle’s Metaphysics—to his joining of the appetite for knowledge to man’s essential nature. In his original condition man is supposed to have existed in a sort of blissful narrowness: “sponte sua sibi quisque valere et vivere doctus” [trained to live according to his own inclination and interests]. To this condition Lucretius ascribes as a crucial advantage the obviousness of everything given, the absence of the Greek astonishment that now appears as merely a metaphysical sanction for the internal irregularity of curiosity: “Non erat ut fieri posset mirarier umquam” [It could not be that he should ever wonder].

In the description of the primeval condition and its lack of need for theory, there is again hidden an analogy to the image of the Greek gods, an attempt to ascribe to man an original essential form of fulfilled existence in self-sufficiency, in autarky. Thus the theory of culture takes the field immediately alongside theology in the function of assuring man of his authentic capacity for happiness.

The exemplary directions in which man breaks out of this shell of his innate narrowness are seafaring and astronomy. In both cases it is instructive once again to confront the Epicurean position with the Stoic position. For Lucretius man goes to sea out of curiosity and in search of luxuries; in Cicero’s treatise on duties the seafarer becomes the executor of the teleology of nature, which does indeed bring forth all goods in sufficient quantity to satisfy man’s needs but does not do so at the same places where men have come together in communities, so that she leaves the transportation and distribution of goods to man
himself. With the question of the genealogy of seafaring, a lasting theme in connection with the question of the legitimacy of man’s curiosity is raised. For the negative significance given to interest in the heavens by Lucretius in his theory of the origin of culture, we again have a Stoicizing antithesis in the schema (transmitted by Firmicus Maternus in the fourth century A.D.) of the history of the world and of man within the individual cycles typically repeated between the world conflagrations of the Stoic cosmology. In this five-stage development of culture, each phase is placed under the authority of a planet. The primitive period—still without knowledge of the basic astronomical facts and regularities—is characterized by fear of the lawlessness and absolute facticity of events in the universe. The teleological function of astronomy in calming man’s consciousness of the world arises from the experience of a lawfulness that fills man with confidence in the periodic return of favorable living conditions and encourages him to emulate internally the lawful consistency of nature: “Omnia explicanda sunt, quae probant hominem ad imitationem mundi similitudinemque formatum” [all things must be explained that demonstrate that man was formed to imitate and copy the (orderly) universe].
Skepticism Contains a Residue of Trust in the Cosmos

Regarding the three great Hellenistic systems, those of the Stoic, Epicurean, and Skeptical schools, Karl Marx made the lapidary observation (in his Dissertation, in 1841) that “these systems are the key to the true history of Greek philosophy” — a thesis worth pondering, after the preference long accorded to ‘classical’ Greek philosophy, and which can certainly be made fruitful for the renewed interest in Hellenistic culture. It can be given greater precision. I would like to put it as follows: Skepticism in particular—and specifically in its differentiation into Academic and Pyrrhonian Skepticism—represents such a key because of the way it uncovers previously unquestioned assumptions of the classical manifestations of Greek thought.

Skepticism systematizes most resolutely the disappointment of the great pretension to truth that philosophy had introduced into the world. The signature of the epoch following Plato and Aristotle is the common possession of the characteristic Hellenistic idea of philosophy, which can be described as its therapeutic conception. Whereas for Plato and Aristotle philosophy was supposed to provide fulfillment, through the truth it conveys, of the essential needs of the spirit, philosophical understanding now becomes the corrective of a mistaken orientation of man precisely in his theoretical endeavor, an endeavor in whose realization the experience of disputes and entanglement in doubt, of the all too obscure and the all too distant, the alarming and the superfluous, leads to a new basic attitude of ‘caution.’ This caution was indeed differently realized, both methodically and in the degree
of its intensity. But from the *epoche* [holding back] as the ‘normal quality’ in the Stoics’ doctrine of judgment, and ataraxia in the neutralization of dogmatic results in the Epicurean natural philosophy, to the *epoche* as the condition of happiness in Skepticism, this becomes the basic attitude in relation to reality in the three school systems.

If we are going to have to regard Augustine’s concept of *curiositas* as the formulation of the upshot of the authentic human struggle for truth apart from faith that was largely binding for the Middle Ages, then attention must also be given to the importance of the Skeptical phase of the young Augustine. His biography has not yet been adequately understood in its logical sequence. The attempt to understand this sequence should not allow itself to be forced into the use of the theological schema of *conversio* [conversion]. Between Augustine’s Gnostic, Skeptical, Neoplatonic, and finally Pauline phases, there are intelligible structural-logical connections. We should not accept uncritically the accents and weights that Augustine himself assigned to these phases in his *Confessions*; this also holds for the role of Academic Skepticism, which may have influenced him much more profoundly, in preparing the way for his readiness for faith, than he admits.

Augustine’s conversion to Christianity reflects in exemplary fashion the conditions under which Christianity could appear to the Hellenistic spiritual world less as a ‘breach’ than as a logical consequence. For “the victory of Christianity over ancient philosophy cannot be explained solely by the more or less successful attempt of the patristic writers to interpret Christian teachings in terms of the Hellenistic world of concepts. The conceptual translation would in itself only have sufficed to add another to the already existing schools.” 1 For Christianity’s onset in the Hellenistic world, it was to be decisive “that in late antique thought, philosophy, understood as knowledge of the true structure of what there is, had to give up its claim to be the way to happiness, and thus freed the position for the Christian teaching of faith.” It is true that Augustine left Skepticism initially for Neoplatonism, but theory as ‘natural’ access to truth and thus to existential fulfillment was not to be recovered. The essential relation of a condition to what is conditioned that obtained between theory and eudemonia had been dissolved. Appealing to Cicero, Augustine sees precisely in Skepticism the absolute precedence of the accomplishment of happiness, no longer mediated by theory but separated out as man’s existential pretension.
Faith becomes the new condition of happiness, no longer vulnerable to skepticism and no longer requiring worldly confirmation.

Thus the outcome exposes the basic problem of late-antique Skepticism: the relation between truth and happiness in life. The increasingly prevalent experience in the history of Greek philosophy of undecidability between the dogmas of the respective schools had not primarily made the problem of knowledge a source of discomfort—only when, as in the modern age, a form of life first begins to depend on science for the conditions of its possibility does the problem of knowledge as such become so elementally acute for it that the problem of the possibility of life poses itself even before that of happiness in life. The unquestioned obviousness of the assumption that existential fulfillment comes only through the possession of truth forced the inference from the evident failure of philosophy that the human claim to happiness was in vain. The first sentence of Aristotle’s *Metaphysics* could no longer be the first possible assertion about man without abandoning experienceable existential fulfillment as the cosmic confirmation due to each nature. Diderot’s observation that “skepticism is therefore the first step toward the truth” distinguishes itself precisely by the fact that it is not appropriate to skepticism in general, certainly not in its ancient form. For this ancient Skepticism is not a way into philosophy but rather a way out of it; and it accepts as its inheritance, in the extreme case of the later Pyrrhonian Skepticism, only a vague concept of happiness, which has this in common with Epicurus’s: Happiness is, so to speak, the ‘remainder,’ which is left over when one succeeds in eliminating disturbing factors such as repugnance and pain, curiosity and the cognitive drive. What such a negative definition leaves unclear was of no concern once one recognized the therapeutic function of philosophy, in which it shares with medicine the unproblematic nature of the positively defined good that it seeks to restore, namely, health. The therapeutic function of philosophy implies that philosophy itself has no relation at all to the essence of happiness in life but represents only a technique of eliminating impediments to it.

The dogmatic Skepticism that became dominant in Plato’s Academy soon after his death did not reverse the movement away from Socrates, as Cicero, for example, claimed; rather it was a thoroughly logical consequence of Plato; that is, it was not merely a revolt of the sons against the fathers but the answer to the increase of the essential distance between man and the truth that we can observe in Plato’s
later works. The anecdote, never taken quite seriously, that is told by Sextus Empiricus about the first Skeptic of the Academy, Archesilaus—according to which he continued to preach Platonic orthodoxy to a narrow circle of selected students while publically professing Skepticism—is illuminating, quite independently of its historical accuracy, in this context and in connection with the transition from Classical to Hellenistic philosophy. Only the transcendental character of truth allows the dogmatic assertion of the impossibility of a certainty whose characteristics were specified with the aid of the Stoic doctrine of the “cataleptic” idea.

The superfluity for people in general of something that can only fall to the lot of a chosen few was indeed already presupposed by the increasingly ecstatic/esoteric position of the philosopher as it emerged in the development of Plato’s thought. Was not the myth of the demiurge something like the report that might have been given to the chained inhabitants of the cave (in the simile used in the Republic) by their escaped comrade after his return from the real world outside—that is, communication by the one, who had seen, to the many, who could only hear? Socrates had still been able to practice maieutic on everyman and had exalted the inner treasures of anamnesis in which even a slave had his share. The situation is entirely altered when there is immediate and mediated knowledge of truth, that of the philosopher and that of those who have to depend on him. The myth offers the probable as true, because at least it saves the recipients from the perplexity of the “strange and unfamiliar” questions being investigated, because it could be the graciously granted ‘representation’ of the true, in response to an appeal to the god—a representation that is adequate to man’s station ‘even now,’ whereas he can achieve certainty only by a special concession on the part of the divinity.  

The Skeptical reversal in the Academy would then be simply the ‘demythologizing’ of this very probability, insofar as life is dependent on it. That such probability can be, not misleading appearance, but rather a reflection of the true, and thus sufficient for man’s action and for his happiness—therein lies the whole of Platonism with its relation of correspondence between Ideas and appearances, between what really exists and its images. All the contradictions in which Academic Skepticism became entangled, and had to become entangled, are due to its Platonic residues, although this fact is linguistically disguised by its opposition to the Stoa. Thus it is, for example, in the
attempt to prove that the characteristics of a cataleptic idea could also
belong to false ideas. This argument involves the Skeptic in a burden
of proof whose definition is self-contradictory because it presupposes
the very distinction between true and false whose possibility it is
supposed to be refuting.

At bottom, dogmatic Skepticism is an attempt to save the constitutive
elements of the ‘classical’ philosophy by putting them back into effect
on a lower level, with a stepped-down claim to certainty. In the process,
above all the relation of foundation between knowledge and eudemonia
is preserved in analogous form: “The contradiction in Academic Skep-
ticism is due in the last analysis to its holding fast to the dogmatic
premise that true knowledge is necessary because it is the condition
of the possibility of becoming happy.” Thus it is not surprising that
from the “denial of finding” there arose what was admittedly a re-
stricted, but not for that reason less ‘scholastic’ philosophy, in the
tradition of which the ultimate return to dogmatism, under Antiochus
of Askalon, is no more surprising than was the detour through Skepticism.

The development was evidently in the reverse direction in the Skep-
tical school founded by Pyrrho of Elis about 300 B.C., revived in the
second half of the first century B.C. by Aenesidemus and then persisting
into the second century A.D., in which one can see the consistent result
of the positions of Democritus and the Sophists that were repressed
by classical Greek philosophy.

Here also man was assumed to be an inquisitive being, naturally
inclined toward theory. The first sentence of our main source, the
Pyrrhonian Hypotyposes of Sextus Empiricus, sounds like a commentary
on the first sentence of Aristotle’s Metaphysics with its statement that
man essentially seeks knowledge, in that three possible results of such
a search, in the broadest sense, are specified: the ‘finding’ that is
promised to the seeker by the dogmatists of all tendencies, the cat-
egorical denial of finding that is pronounced by Academic Skepticism,
and the indefinite continuation of the search, whose establishment as
the factual state of affairs is the point of departure of Pyrrhonian
Skepticism. The pretension of man’s cognitive appetite to knowledge
is not disputed or restricted. But the preeminence of the striving for
eudemonia is maintained, and it is freed from the threat posed by
the factual state of indefinitely continuing search by loosing it from
the condition of the accessibility of knowledge. Concern for what is
possible or impossible in the future, the root of *curiositas*, is eliminated through a resolute restriction to what is given in the present. For the Academy a ‘new’ event in relation to the truth is excluded, but not for the Pyrrhonian Skeptic; he does indeed bring the cognitive process to a standstill in his *epoché*, in that he neutralizes the value goal of truth by denying the dependence of happiness upon it, but he remains attentive to the truth that becomes evident from itself. In this understanding of truth, there still lives the inheritance of the hypothetical initial situation of Greek thought, in which truth was thought of as that which prevails of its own accord, even if from now on it is reserved for an as yet unknown experience.

The methodical meaning of this Skepticism, a meaning that is (so to speak) still realizable as philosophy, can only be to destroy every remnant of the suspicion that a relation of foundation could subsist between theory and eudemonia. But for this very purpose the residual dogmatism of the type of Skepticism taught in the Academy must be eliminated, a residue that consists in the dependence of human self-reassurance on the single ‘truth’ that truth is inaccessible. Thus the radicalization of Skepticism by its application to its own dogmatic employment is not primarily motivated by logical/systematic consistency or by epistemological resignation but rather by the precedence of existential fulfillment over every other human interest. The screening out of the future as a dimension of ‘concern’ inaugurates pure presence as a giving oneself over to the given, an attitude that is indeed designated (in the Stoic terminology) as “assent” to the phenomena, but is not seen as an act of the free disposition of the subject over his ‘circumstances’ but rather as the renunciation of the useless exertion of ‘taking’ definite ‘positions.” Because eudemonia depends entirely on the favor of what is present, to promote it to a ‘value’ and thus to something that induces an aspiring effort is to render it impossible.

This Skepticism is at bottom so little interested in epistemology that the object of its skeptical destruction is not what is given but what is sought; expressed in terms of modern philosophical anthropology, this would mean that man is brought back from his exposed ‘involvement with the world’ [Welthaftigkeit] into the sheltering presence of the ‘surrounding world’ [Umwelt], in which the phenomena remain ‘uninterpreted,’ indeed are let be not even as *phenomena* but rather as *circumstances* of the subject (we would say: in their immanence to consciousness). So appearances themselves cannot be delusive and dis-
turbining, but only assertions regarding them, which inevitably relate what is present to what is not and are thus the root of 'care.' The fundamental question that is supposed to be the theme of every skepticism, the question whether something really is the way it appears to us, is itself the 'original sin' of theory from which Skepticism promises to deliver us.

If Greek philosophy began with astonishment at the 'performance' of the little word "is," it ends with the condemnation of that little word as the source of every seduction into dogmatic precipitancy, the essence of which lies in the transition from the pure presence of the appearance to the assertion that what is apparent relates to something that is not apparent—the logos as such, not just as a specific word, is seductive. "Holding back," as a Skeptical maxim, is, measured against its voluntaristic sense in the Stoic logic, more an abandonment to the immediacy of life, an unconditionality of obedience to whatever suggests itself first. But in this self-abandonment to life, compared to which even the maxim of ataraxia implies a dogmatic anticipation, a ground of its possibility makes itself felt that would not have been able to bear the weight without the help of the Greek trust in the cosmos. When the Skeptic rejects even ataraxia as a maxim—specifically because he sees the possibility of indifference threatened by the axiom of indifference—he falls into a self-surrender and incompetence for his own existential fulfillment, in which the identity of his person as expectation and as memory threatens to dissolve into an atomism of moments, from which neither confirmation nor disappointment of the faith in the cosmos that no longer ventures to make itself explicit may be expected. To put it another way: The Skeptic now sees the sole possibility of his happiness in the circumstance that he himself is no longer responsible for it.

For the question of the legitimacy of theoretical curiosity, the consequence is that such curiosity is no more defensible, critically or ethically, than the other 'states' [Zustände] in which phenomena show themselves as supposed 'objects' [Gegenstände]. The renunciation of principles, objects, and values leaves only one thing behind, namely, that the Pyrrhonian Skeptic registers himself in each of his present states: "... whenever the Skeptic says 'I determine nothing,' what he means is 'I am now in such a state of mind as neither to affirm dogmatically nor deny any of the matters now in question.' And this he says simply by way of announcing undogmatically what appears
to himself regarding the matters presented, not making any confident declaration, but just explaining his own state of mind. Here it almost looks as though the Socratic alternative to knowledge of the world—self-knowledge—is opening up again, and indeed this time really as ‘inner experience.’ But that is a mere appearance; the differentiation is not between world knowledge and self-knowledge but between the theoretical attitude and an unphilosophical attitude. At this point in the history of ideas, this is a ‘postphilosophical’ attitude, a conscious leveling of the differences opened up by philosophy, even the difference between self and world, both of which are reduced to the level of the phenomenon, which means less the ‘appearance’ that ‘confronts’ me in the strict sense than the state in which I find myself at the moment. But as much as this reduction of the subject to its states after it had opened itself to theory is motivated by a longing for a matter-of-course existence that wants least of all to conceive of itself as called upon to make a choice between attitudes, it was equally impossible for the return to the ‘life-world’ (to use a term from modern phenomenology)—perhaps the first attempt at escape from history in the form of a ‘return’—to succeed.

The indifference [Gleichgültigkeit] of the Skeptic cannot deny—if only because it derives from the method of the equal validity [Gleich-Gültigkeit] (Greek: isostheny) of contrary and contradictory propositions—that it is the indifference of one who, disappointed by history, falls back on ‘nature’ without wanting to admit it and without wanting to give content to this concept. When the Pyrrhonian Skeptic left uncertain even the relation of conditionality between ataraxia and eudemonia, and thus deprived himself of the only remaining possibility of a maxim for conduct by means of which he himself could attend to the fulfillment of his existence, then the totality of the given conditions of his life, to which he thus abandoned himself, had to have some more or less dependable basic disposition—let us say, one that held out some prospect of eudemonia’s presenting itself—however one might describe this disposition (if one described it at all). Here, for the last time in our tradition down to Nietzsche, knowledge of reality was, in a precise sense, renounced; for the subsequent theological epoch only exchanged the cognitive claim for transcendent guarantees and expectations that appeared more certain to it and did not so much ‘hold back’ theoretical curiosity as it discriminated against it and denied it to itself in favor
of a salvation that was not only independent of it but in conflict with its satisfaction.

**Translator's Note**

a. "Dass solche Wahrscheinlichkeit nicht der irreführende Schein, sondern der Widerschein des Wahren... sein kann." A play on the many kinds of *Schein*, which cannot be reproduced in English. For an account of the history of the concept of probability, with special reference to Platonism and Skepticism, see the author's "Paradigmen zu einer Metaphorologie," *Archiv für Begriffsgeschichte* 6 (1960): 88–105, chapter 8: "Terminologisierung einer Metapher: 'Wahrscheinlichkeit.'"
Preparations for a Conversion and Models for the Verdict of the 'Trial'

For the further history of the problem of the legitimacy of theoretical curiosity, Augustine's conversion is the key to, or at least the appropriate focus of, new formulations. The ancient points of view on the question, which I have tried to lay out, were conveyed to Augustine primarily by two sources: Cicero and Plotinus. For Augustine, Cicero awakened a greater intellectual agility through the course of instruction in rhetoric; and Plotinus prepared, to the point where it could easily be confused with Christianity itself, the theological alignment toward transcendence. But this path is also and above all a passage through Manichaean Gnosticism and an alienation from it in a transitional period of Skeptical resignation. Augustine's own statements regarding this phase of Academic Skepticism, in particular, remain unclear; but if we bear in mind the 'Platonic remainder' in Academic Skepticism, the turning toward transcendence appears less miraculous and can be made intelligible as the reactivation of this residue.

Cicero is not only the actual transmitter of the philosophical tradition to Augustine but is also, beyond the eclecticism ascribed to him by the analysis of sources, the originator of an authentic conception that allows us to trace the immanent unity of the problem of Hellenistic thought behind the heterogeneity of the school dogmas and the disputatiousness of the sects. The idea of an 'economy' of theoretical activity most nearly conforms to the breadth of variation of the Hellenistic formulas with which we are already acquainted for the threat posed to human eudemonia by the appetite for knowledge. The root-
edness of the cognitive drive in human nature remains undisputed here. Knowledge of nature (explicatio naturae), says Cicero, not only liberates from fear, as Epicurus thought, but leads, especially in astronomy (cognitio rerum caelestium), to a certain self-control on man's part and to justice. Noticeably subordinated to this moral interpretation of natural science is the remark that an inexhaustible pleasure is to be had from the investigation of these objects, in which by itself it is possible to live an honorable and free life, once the necessities and duties of life have been disposed of.

At first glance it looks as though this could have been copied from the passage cited earlier from the second chapter of the first book of Aristotle's Metaphysics, where Aristotle connected the origin of the human disposition to inquiry with the precondition of the satisfaction of vital needs and an easier conduct of life. But in Aristotle's case this was related to the history of human culture and was meant as an argument in favor of the theoretical interest as an end in itself, whereas in Cicero it relates to the individual life and its coordination of necessity and freedom, of public duty and private interest. Knowledge of nature is indeed immanently meaningful here too, but it has need of a legitimized 'position' in the context of the inescapable obligations that are laid on the individual. It achieves its freedom only by paying tribute to necessity. Aristotle's statement regarding the beginning of the cognitive drive was historical; Cicero's is moral and political in the broadest sense. I am therefore unable to discover any contradiction between this passage from De finibus and the corresponding passage from De officiis, where in connection with the derivation of the doctrine of virtues from the propria hominis [characteristics of man], a steady, but not unconditional, hold is kept on the Greek primacy of research into the truth (veri inquisitio atque investigatio). This precedence is valid here only on the assumption that we are unoccupied with necessary obligations and concerns. This restriction has two meanings: On the one hand it contains the basic Greek idea that only leisure frees man to realize his essence in knowing, but on the other hand it also implies the critical principle that we ourselves may give way to the appetite for knowledge of hidden and marvelous things (cognitio rerum aut occultarum aut admirabilium) only in the leisure that is appropriate vis-à-vis other human and civic demands. Thus the statement, so similar to the first sentence of Aristotle's Metaphysics, that "we are all drawn and directed to the appetite for knowledge and science" is not the
justification of a primary and unconditional practical principle but rather stands under moral conditions that legitimize the cognitive drive as a mean between two extremes—that is, in accordance with the mesotes [mean] of Aristotelian ethics, although at this very point Aristotle himself had not proceeded in accordance with this schema. Two errors are to be avoided in the realm of what borders so closely on human nature (*maxime naturam attingit humanam*): the one already familiar from the Stoic ethics of knowledge, that of precipitate assent,⁵ and that of immoderate concessions to curiosity in connection with obscure and superfluous subjects.⁶

But where is the criterion of differentiation and restriction to be found? There is no objective thematic boundary; Cicero explicitly counts astronomy and geometry, dialectics and civil law among the activities recognized as belonging among the moral and worthy cognitive enterprises, to which exertion and care can rightly be applied. The immediately appended restriction does not relate to an exclusion of a realm of objects but rather to the economy of the active subject: Taking pains to acquire these skills in the investigation of truth should not keep one from everyday duties since the commendation of moral quality pertains only to action.⁷ The naturalness of the cognitive drive is thus both a justification and a danger; man should not uncritically abandon himself to his nature, if only because it consists of a plurality of abilities and drives, which collide with one another if each is actualized for itself in isolation from the others.

Cicero portrays the danger threatening the curious man by the Homeric image of Odysseus lured by the Sirens, not only by their song but also by the promise of knowledge of all earthly things. Here also Cicero proceeds from man’s innate love of knowledge and science, which is not determined by any prospect of profit.⁸ That toil and worry can be involved in the theoretical effort, and are only compensated by satisfaction at the acquisition of knowledge, is more strongly emphasized than it could have been in Greek texts. But it is not only the expense in time and energy withdrawn from the claims of practical and political life that creates the competitive situation; a negative element also comes into play, which is the absence of the Platonic assumption that only one who was fully initiated into theory could be a truly practical man and politician. The positive character of the return from pure theory to the life situation—in Platonic terms, the return to those chained in the cave of the one who has been
brought to the world above and has risen to the level of philosophy—is missing. Odysseus's conflict in view of the enticements of the Sirens is not a conflict between the aesthetic and the ethical in our sense but rather between his theoretical curiosity and his native country. Although Odysseus does not succumb to their enticements, it is suggested by the length of his wanderings alone that knowledge was more important to him than his native country. In this context there emerges, in connection with the term curiousus, the negative characterization of curiosity as the longing to know everything. However, this negativity is seen as quite close to the quality of greatness, since being driven by the perception of sublime objects to desire knowledge is characteristic especially of important men. Although he is not explicitly condemned, even Archimedes seems not entirely beyond criticism, since the ardor studii [ardor for study] caused him to forget the conquest of his city while occupied with his diagrams.

He who sees primarily inconsistencies and contradictions in these texts fails to notice, as a result of preoccupation with the philological problem of sources, how clearly Cicero himself is marked by the conflict he describes, which allows him to condemn the excess of curiosity more easily in the mythical poetic figure than in historical individuals. Personal experience stands forcibly behind the caution of the evaluations: "Quae qui non vident, nihil umquam magnum ac cognitione dignum amaverunt" [Those who are blind to these facts have never been enamored of some high and worthy study]. Alleviation of doubt about the tasks to which life should be devoted can only come through being convinced of an immortality that promises compensation for everything that curiosity's self-restraint denies itself in view of political duties. Even this Platonizing solution has acquired a different function in Cicero than it could have had in the Greek world. The renunciation of theory seems to be something one can perform without prejudice to one's political and practical capability, so that relegation to the Beyond really can resolve the problematic: "...as happens now, when the burden of care is relaxed, we feel the wish for an object of our observation and attention, this will happen much more freely then, and we shall devote our whole being to study and examination, because nature has planted in our minds an insatiable longing to see truth; and the more the vision of the borders only of the heavenly country, to which we have come, renders easy the knowl-
edge of heavenly conditions, the more will our longing for knowledge be increased."

Here the transcendent deferment of the satisfaction of theoretical curiosity, whose pursuit in the circumstances of civic life could only be an exceptional situation like that of Cicero’s enforced leisure, does not yet have the Christian visio beatifica’s essential differentiation from all earthly access to truth. It is only a matter of degree, a drawing near and improvement of the standpoint of the knower, with, in fact, a clear opposition to the immanence of the Stoa, according to which the human observer was guaranteed the favored standpoint of contemplator caeli [observer of the heavens] by his central position in the universe. At the same time the text makes clear, with the antithesis of care (cura) and contemplation (contemplatio), the basis on which the new formation of curiositas comes about: In illegitimate curiosity the place of the civic/practical concerns and chores is occupied precisely by the theoretical attitude, so that this latter, contrary to its nature, itself becomes a care dominating one’s life. This happens all the more, the more strongly the theoretical attitude allows itself to be affected by the ‘obscurity’ of particular realms of objects.

This obscurity is still not the stigma of something ‘reserved’ to divinity, but it certainly is the sign of a negative teleological quality in comparison to the urgent things in man’s life. In the hiddenness of the res obscurae [obscure subjects] from human understanding, there lies a sort of natural prescription of the region to which the cognitive will should remain restricted by practical reason. The localization of objects in relation to the range of the human capacity for knowledge is the index of a metaphysical relation that can indeed be described as the will of divinity but that does not proclaim a sort of jealousy as the motive of its secret preserve. The obscurity in which the truths of nature can be enveloped demarcates a realm in which man can be the beneficiary of its potential for service and use without also possessing the authority of theory. This lack of congruence between knowledge and use, between scire and uti, designates a relation to reality that the modern age was no longer to consider possible and to which it was to oppose its deep mistrust of any teleology not verifiable by theory. The curiositas conception has a connection with a differentiation that will recur in Augustine with the opposition between use and enjoyment, uti and frui. Just as for Cicero theory usurps the position of care in the framework of life, so in Augustine the enjoyment of purely theo-
retical activity appears as, instead of a trusting use of things, an antici-
ination of something that is possible only through transcendence.

Ambrosius of Milan (333–397 A.D.), whom we can regard as the
Christian transmitter of the ancient tradition to Augustine, took sig-
ificant and influential offense at Cicero’s admission (in his treatise on
duty, which Ambrosius was paraphrasing) of astronomy and geometry
to the catalog of things worth knowing.18 It is true that he holds to
the preeminent ‘virtue’ of the theoretical attitude, but with the explicit
exclusion of these two disciplines. Anything so obscure as astronomical
and geometrical investigations, in which one measures the depth of
spaces and comprehends the heavens and the sea in figures, makes
the matter of human salvation retreat from its unique and absolute
preeminence. Here the theological economy has taken the place of
the teleological. The conditioning of the theoretical attitude by the
requirements of the practical civic attitude has turned into an exclusion
of specific objective realms. While there is no Gnostic demonizing
of the attraction of the starry heavens, there is nevertheless an equivalent
reordering of man’s ‘spheres of interest,’ a reordering clearly based
on a break with the ancient ascription of predicates of divinity to the
stars.

In Ambrosius we can reckon with the influence of Philo of Alexandria
(ca. 25 B.C.—ca. 50 A.D.), whose transformations of Hellenistic philosophy
into the biblical medium were to have a manifold influence in the
patristic literature. The Augustinian conceptualization of curiositas had
its most suggestive precedent in Philo’s allegory De migratione Abrahami,
even if we cannot assume that it directly influenced Augustine. Abra-
ham’s travels from Chaldea via Haran to Sichem and finally to Egypt
give Philo the ground plan for a representation of the spiritual path
from self-estrangement to self-appropriation. Chaldea is the land of
curiosity (periergia), and specifically in the form of astronomy. Curiosity
is understood as the independence of the senses, which have evaded
their subordination to the intellect and instead of this deliver man up
to what accords with them.14 Abraham’s path leads from sense per-
ception to spiritual wisdom. The sojourn in Haran represents a turning
from astronomical curiosity to self-knowledge, which in turn leads
through the self’s discovery of its ignorance to recognition of God,
and finally through this last to recognition of the world as God’s work.
The requirement of this detour on the way to the cosmos is explained
as legitimate because of the Author’s ‘ownership’ of the truth of His
work, which can become accessible only through Himself. Philo’s God does not, like the Platonic demiurge, find the cosmos already in existence in the form of the ideal reality of an independent objective sphere; rather He Himself produces even the spiritual plan of His Creation, the science of its coming into being.

This is a train of thought that leads to the critical epistemological principle of the identity of verum and factum [truth and fact], to the solus scire potest qui fecit [only he can know who makes (the object)]; but here it still stops with the metaphor of property and its reserved character: Legitimate knowledge can only derive from God, the origin and source of all skills and sciences, and should not try to found itself on unmediated, as it were, unauthorized inspection of the cosmos. The pseudowise men of Egypt stand for the dishonest and unjust claim to have seen ‘directly’: Their theories about the cosmos rest on the eyewitness claim to truth, since they presume to know the grounds of everything, “as if they had been present at the origin of the cosmos or had even helped the world’s master builder with advice in his work.”

God’s sovereign right to the secret of His creation, which is communicated by Him alone on the condition of knowing and acknowledging His authorship, is one of the enduring themes that were to enter into the curiositas complex. It found a place in the exegetical question why man came into existence as the last in the order of creation, the answer to which could be, so that he should not witness the work of creation and its secrets. This theme has not outgrown the mythical idea of the gods’ jealousy of man. It still plays a role in the ideas of divine majesty held by late-medieval nominalism, to which admittedly man was no longer to submit with humble resignation, but which he would rather oppose with a new epistemological conception of the possibilities left open to him even with this reservation.

For Philo the ‘omnipotence’ of allegorical interpretation still permits the idea that the truth about the questions of cosmology is not entirely forbidden to man but only hidden in the images in the biblical accounts. The exegesis that ventures into such multiple significance is rewarded in proportion to its humble exertion; curiosity, however, remains the ‘precipitancy’ that does not want to share the hardship of Abraham’s long wanderings but rather wants, as though by a coup de main, to raise itself from the earth to heaven, as it says in the lecture addressed to the “Chaldeanizers” that Philo puts in the mouth of Moses. When
Philo makes Moses admonish those who flirt with Chaldea’s astronomy that they should come back down from heaven, this is not just a rhetorical figure; in it lives the suspicion of the transposition magic that conceals itself, as though ‘ideologically,’ in theory. This suspicion was to be fixed for the medieval tradition by Augustine when he imputed to the astronomers’ cognitive arrogance the immanent pretension, which is a prospect held out in Cicero’s Tusculans only to the soul freed from the body, of seeing itself transposed to the place of the highest object of its cognitive drive: “... ut in ipso coelo, de quo saepe disputant, sibimet habitare videantur” [They imagine themselves dwelling in the very heaven they so often discuss].

The homoiosis [assimilation] implied throughout ancient epistemology potentially combines theoretical curiosity with magical self-surnounting in that it considers the cognitive faculty capable not only of possessing its objects but also of becoming them. But precisely here lies the violation of the cosmic self-localization of man that is to be gained from self-knowledge and that identifies him with a particular position in the order of reality and makes adherence to this position the essence of the ethical implementation of self-knowledge. This background helps us understand why Philo makes self-knowledge the specific antidote to curiositas and admonishes the “Chaldeanizers” to cease desiring astronomical knowledge and find shelter in themselves. In its secret urge toward ‘transposition,’ curiosity will of course not admit to itself that it does not want to accept the cosmic position that would specify what is ‘above’ and what is ‘below’ man, what he must submit to and what he must master.

Self-knowledge for Philo, too, is a kind of vision; the wise man is defined by the fact that he sees, and thus has gone beyond hearing, whose data can only be like the Platonic doxa [opinions]—that he has “exchanged his ears for eyes” and now himself perceives what he had previously only heard about. But vision depends on the light in which its objects are ‘shown’ to it; Philo’s Hellenization of the biblical testimony, his often noticed transformation of biblical expressions involving hearing into ones involving sight, is limited by the fact that the basic Greek idea of the things showing themselves no longer governs but rather the idea of their being shown. The God Who, in the beginning, creates light, is the one Who shows. Through its new correlation with God’s allowing things to be seen, ancient theory loses an implication: It loses the ‘naturalness’ of access to things and acquires a
voluntaristic aspect on which their admissibility depends. The obscurity and distance of objects decrease the degree to which they are evidently allowed to be seen, and thus their openness to theory.

Even self-knowledge, then, remains a kind of vision, since wisdom is not only, like light, a medium in which one sees, but it also sees itself. Accordingly, there is a limitation on self-knowledge just as there is on knowledge of the world; in the context of an allegorizing polemic against the sciences, Philo brings out the failure of astronomy and says that it is the same with the heavens above man as with the spirit within him, since both transcend any knowledge that aims at their essence. Thus what is accessible to human theory, because God lets it be seen, lies between two boundary transgressions. In this symmetry the Gnostic metaphysical topography is prepared, just as the Talmud's warning against Gnosticism is formally implicit in it: "He who inquires after four things had better not have been born: what is above and what is below, what was before and what will be after." Thus what is new in Philo, and preformative for the patristic tradition, is not only this delimitation of the field of theoretical activity but also the specification of a sequential order of the stages in which knowledge has to be realized. A realm of objects does not legitimately offer itself, independently and as such, to anyone who is interested in it; it does so only on the assumption of passage through a previous stage: Theoretical contemplation of the world is conditional on prior self-knowledge and knowledge of God. The difficulty lies in the logical circle that self-knowledge has not yet been extracted from its ancient connection to cosmology and delimited as inner experience; it is supposed to precede cosmology, so as to provide the prerequisite knowledge of the ground of the cosmic creation, but it still depends on cosmology as the system of natures, to see oneself subsumed in which constitutes the essence of self-knowledge. Augustine's memoria [memory] specifies for the first time an organ and a content from which something that can be described as "inner experience" can constitute itself. Here already we can see in negative form the potential significance of the coordination of curiositas and memoria in the argument of the tenth book of the Confessions.

This coordination has its systematic foundation in the 'soul drama' of Neoplatonism. In the Neoplatonic antitheses of unity and multiplicity, of spirit and matter, the scenario of the history of the soul is marked out. In contemplating the unity of what is spiritual, the soul fulfills its
essential destiny; as world soul it achieves its unity because it is not in the world but rules throughout the universe by virtue of its union with the divine spirit.26 But if it declines into the separation of individual human souls, if it becomes itself multiplicity in the manifold, then it is within the world and endangered by the world and can only protect itself by thinking back to its origin, by not losing itself in its temporary abode, but remaining concentrated on itself. The definition of alternative attitudes indicates how the soul can protect itself from infection by the world, and in this prophylaxis curiosity has its systematic place.

As a part of the world, the soul is isolated, weakened, and delivered over to its own restlessness. Curiosity is only secondarily attraction by the object; primarily it is spontaneous unrest, dissatisfaction with oneself, being driven about. This polypragmonein [busyness, meddling] is the equivalent of periergeria [overcarefulness, superfluity, investigation of ‘curious’ matters]: It is a sign of the human existence that is losing its essential centering, that seeks to be satisfied from outside, by external things—that has ‘forgotten’ its origin and its original relation to what is spiritual and has fallen into dispersion. Dispersion is brought about by seeing the many instead of the one. The being of the one who sees is not only affected but also ‘effected’ by what he sees; the seeing is not accomplished as theoretical distance from the ‘object’; rather it is a pathos [passive condition] of surrender to the object, a homiosis [assimilation] once again, to it and to its metaphysical quality, which is determined by the systematic order of the Neoplatonic “hypostases.”27 If the soul turns from what is spiritual to what is material, it confuses what is above and what is below it and is entirely penetrated, in the instant of its turning, by obscurity and indefiniteness, the qualities of the hyle [matter].

A precondition decisive in preparing the way for the conceptual history associated with the term curiositas is that on the basis of Neoplatonic metaphysics there no longer exists, and can no longer exist, the self-confident and reposeful attitude of the onlooker of the world, that every theory is ‘ecstatic’ [displacing, changing] vis-à-vis its object and must lead, depending on that object’s quality, to the soul’s either winning or losing itself. It is noteworthy that the Greek equivalents of curiositas take as their point of departure the external condition and behavior of the busybody in his dispersion and still formulate this phenomenon basically from the point of view of the ideal of theoretical leisure; this produces for Plotinus the difficulty, indeed the impossibility,
of describing the soul’s turning of its gaze as an inner event, although this is evidently precisely what he needs to do. There is a gap in the process by which the soul’s isolation and debilitation are converted into bustling inquisitiveness, a gap that looks like the position later to be occupied by ‘inner decision.’

In the description of the origin of time from the self-alienation of eternity, also, the guiding idea is still the ancient contrast typology of the bustling inquisitiveness that forgets its own business. But here an attempt at motivation does after all show through clearly: The reposeful presence of eternity is perceived as a reservation, awakening the vague idea of a possible greater possession, which seems graspable by the bold venture of self-appropriation (idiosis). Thus the repose of possession gave rise to motion, in which eternity ‘temporalized’ itself. The world arises from eternity’s venturing forth into time as a result of a restless passion for the incommensurate, a passion that, as it were, produces its own objects and in its enjoyment of them goes outside itself. If this mysterious unrest in the essential self-sufficiency of the eternal is the origin of the hypostatic surplus, as which the cosmos is now conceived—and thus defined, in terms of its origin alone, as the object of an equally surplus interest—the peripeteia of this process is the equally mysterious recollection of the truth of its origin, by which the degenerate being is awakened to itself and brought back. “Anamnesis” is the recovery of metaphysical orientation, self-discovery, the renewed presence of the authentic potential of being. Lacking in Plotinus is both an explicit motivation for the unrest leading to degeneration and a recognizable agent to induce “anamnesis,” a role that is filled in the Gnostic systems by the bringer of salvation and awakener.

In Neoplatonism curiositas and memoria had become the decisive acts of the soul’s history, which is constructed symmetrically of descent and ascent. The task that remained for Augustine was to complete the removal of the cosmos from this history of the soul in which the phase of individuation had been identical in itself with the loss of the primeval status. Augustine’s readiness to make the peccatum originale [original sin], as ‘the species’ sin,’ into the pivot of his entire theology and of its absolutism of grace is certainly to be understood in one essential respect in relation to the Neoplatonic account of the soul’s history as the process undergone by the one world soul. The difficulty that arises for him from this presupposition, that of representing with
these categories the process undergone by individual souls, could probably only be repressed by means of the focus on the subject of his own life history in the *Confessions*. The ontological prehistory of the world and of the world's time turns into the experienceable content of the tension within each existence. Thus the potential for 'temptation' comes to be seen in the same perspective as 'conversion.' Since the emphasis on the grace that is the source of 'justification' removed it more and more from empirical accessibility, the landscape of the pitfalls of evil attracted more attention on the part of the descriptive and classifying faculty of orientation. What was to be grasped was no longer a condition or situation but rather a field of possibilities, each of which still, and over and over, encloses within itself the whole drama of self-loss. Here lay the point of departure for the reception and further elaboration of the idea of *curiositas*.

Augustine's biographical attitude to the power of the cognitive appetite as human temptation was to be determined by his adherence to Manichaean Gnosticism. Alongside other, mainly mythological features, the basic conception of the Gnostic systems was the identification of knowledge and salvation; this was what they had in common with Neoplatonism. In Gnosticism as in Plotinus, recollection, as an act of intellectual bringing to mind, required no further practical taking of 'positions.' Remembering, as such, is recovery of the origin. The realm of the spiritual that comes into view again in anamnesis fulfills the soul by its mere presence and determines the soul's being and its path in exactly the same way as, at the beginning of the soul's history, a mere curious sideways glance at the *hyle* [matter] was sufficient to drag the soul from itself into captivity in the world. Where it looks and what it sees—this by itself decides whether it will be saved or the reverse. The equivalent aspect of the Gnostic mythologies is that merely hearing the call already *is* redemption, to know of the bringer of salvation already *is* the whole of salvation. Thus cosmology and the doctrine of salvation can no longer be separated; knowledge of the world itself becomes the central theme of theology.

What had been said about the origin of the world matter in the system of the Gnostic Valentinus (about 150 A.D.), according to the account given by Irenaeus, bears a remarkable similarity to the system of Plotinus a century later. In the hierarchical sequence of the twelve eons in this system, the Forefather at the head can only be known through the *Nous* [mind], whom he begat, and only the *Nous* "enjoyed
the vision of the Father and took delight in contemplating his immeasurable greatness." The communication of this enjoyment to the remaining eons was thwarted, according to the Father’s will, by Sige, the hypostasis of silence, “who was to lead them all to reflection and to the desire to seek after their Forefather.” The twelfth and last eon, Sophia [wisdom], did not want to be satisfied with this situation, but became passionately agitated from jealousy of Nous’s communion with the Father and tried to leap over the gap. “Since she strove for something impossible and inaccessible, she brought forth a formless being. . . . When she saw this, at first she grieved because it was an imperfect creature, but then became frightened that it did not even fully possess being. Then she became extremely embarrassed, while looking for the cause and for a way of hiding the creature. Now she reflected on her feelings, turned about and sought to return to the Father, but after a certain distance she became weak and humbly entreated the Father. . . . Thence, from ignorance, suffering and fear, matter had its origin.” So in this myth also the origin of the visible world lies in (erotically transposed) theoretical hubris. But the disapproval of Sophia’s presumption does not seem unambiguous since the Forefather himself saves her from the great danger into which she falls when she ventures into the abyss of the unfathomable.

This unmistakable sympathy of Gnosticism with the pretension to knowledge of the ‘unfathomable’ is now made, especially by its Christian critics, into the central focus of their attack upon it. In the Gnostic speculation there seems to emerge for the first time a concept of knowledge that is prepared to pursue the appeal of its object even into the infinite. Two formal characteristics of the Gnostic systems continually bring forth new speculative elements of mediation and transition: their dualism and their emanatism. Irenaeus of Lyon (ca. 130–ca. 202 A.D.) warns, in connection with the speculation about the so-called pleroma [fullness], that “if anything else exists, apart from the pleroma, then the pleroma must be contained inside it and surrounded by it. But by pleroma they understand the first god. Or perhaps the pleroma and the other thing are separated from one another by an infinite distance. But then some third thing would have to exist, which would hold the pleroma and the second thing at an infinite distance from one another. This third thing would then encircle and include both the others and would therefore have to be greater than them, since it contains them both as though in its womb, and this goes on
in the same way, with that which is included and that which includes, to infinity." Such a form of knowledge, which is unable to reach a final ground and a primary authority, is perceived as the exact opposite of the ‘achievement’ of faith, the essence of which is supposed to be stopping and standing fast with a dependable quantity; the Gnostic cognitive drive, on the contrary, ‘overwhelms’ its object with questions and consequently ends up in the realm of the insubstantial and futile.

Irenaeus correctly saw that the philosophical root of the Gnostic multiplication of spheres of being lies in Platonism and its original/image relation between Ideas and appearances. He drew from this the conclusion that thought should not assume an objective sphere of originals (Ideas) as an ultimate binding authority but should rather assume a personal ‘inventor’ even of these originals. For Plato the quality of originality had become a ‘real predicate.’ The Ideas carry in themselves the obligatory quality of being originals that may only be imitated once, while the resulting images no longer carry this obligatory quality in themselves. Images of these images are thereby ontologically disqualified; this is made explicit as a critique of artistic mimesis in the tenth book of the Republic.

Neoplatonism and Gnosticism, on the other hand, made original and image ontologically indifferent and understood their connection as purely relational, so that every image becomes a superfluous and unobligatory multiplication of the original. This brought into play the possibility of arbitrary iteration and speculative infinity [infinite regress]. It is not in gnosis [knowledge] but rather in pistis [faith] that the rational interest in the theoretical economy of questioning coincides with the theological interest in the absoluteness of the concept of God. In this front-line position, the postulate of an ordo scientiae [order of knowledge], with a finite relation of rank and dependence between the Creation and the Creator Who—unlike the Platonic demiurge—can no longer be questioned about the source of His world plan, acquires the appearance of good critical sense.

A further example of the concept of ‘rational’ self-restriction with which the Christian polemic attacked Gnosticism is given by the critique of number speculation: rules for relations of fact should not be derived from numerical relations; on the contrary, numbers must themselves be understood in terms of the rule from which they arise, and this very relation between rule and multiplicity is comparable to the relation between God and the universe. Surprisingly seldom is any reference
made, in the polemical texts against Gnosticism, to the eschatological reservation, that is, the solution in the next world of the 'remaining problems' of existence in this one, as an argument against the Gnostic claim to see all questions already resolved here.\textsuperscript{37} What stands in the foreground just is not man's interest and his striving for knowledge but rather the protection of God's sovereign rights. This shift of accent, from the preaching to man of his salvation to the supposed protection of God's interest by man, enters into the whole curiositas tradition.

The political metaphor of sovereignty overlies a theologically legitimate kernel of this anti-Gnostic polemic, which consists in the fact that the unsatisfiable claim to knowledge seems to be permeated with a deep mistrust of the Divinity's will to revelation and of the 'adequacy' of His measures toward salvation. The idea of a 'secret' revelation made accessible only by human wit applied to exegesis and allegory contains an evident contradiction, though one that is seldom pointed up on account of the critics' own lack of understanding. The essence of such revelation, given by God and made necessary by Him for salvation, should have been easily accessible and not dependent on the Gnostics' speculative elucidation. But such thoughts remain in the background.

The Christian critics' own attitude was meant to be distinguished from that of the Gnostics primarily by the fact that they had 'relinquished' their cognitive pretension to divine majesty and urged the Gnostics to do so as well: "Cedere autem haec talia debemus deo..." [But we must yield this sort of thing to God].\textsuperscript{38} This theological model could be carried over, without further ado, to knowledge of the physical world, where much even of what lies before our feet is withheld from our knowledge and left to God as an acknowledgment of His preeminence.\textsuperscript{39} In his language and education Irenaeus is a Greek, and that may explain why he does not declare theoretical curiosity as such to be a sin. One would rather say that he tries to argue rationally for its self-restriction through faith because its transformation into an infinite undertaking appeared to him as a new absurdity in its consequences, one that had not yet been suspected by the classical authors.

The hypertrophy of theoretical accomplishment is a new historical experience, one that is derived from Gnosticism; it was only through it that the competition between the pretension to knowledge and the acknowledgement of faith became acute. This competition requires a decision: "It is better if someone knows nothing at all and does not
recognize a single cause of created things, but perseveres in belief in
God and in love, than if, being swelled up by that sort of knowledge, he falls away from love, which makes men live... and (it is also better) than if by the subtlety of his inquiry and by splitting hairs he falls into impiety." But even when Irenaeus appeals to the biblical saying that "all the hairs of your head are numbered," his alternative to Gnostic curiosity—to the curiosi inquire to that undertakes to count "how many hairs each person has on his head and what the cause is for this person having so many, that one having so many, and not all having the same number, so that he would find many thousand times a thousand different numbers"—is not what was meant by the biblical saying, namely, trust in the Creation and the providence of the Divinity, but rather the sensible economy of resignation, the self-discipline of theory, which is not the avoidance of sin but simply keeping to what is humanly possible. "Healthy, unthreatened, cautious, and truth-loving reason eagerly concerns itself only with what God has placed in man's competence and subjected to our knowledge, and in this it will go on ahead and easily acquire more knowledge through daily exercise. To this belongs what evidently and clearly meets our eyes and what is unambiguously and explicitly said in the divine writings." Resistance to Gnosticism is understood as the self-maintenance of reason by adherence to its teleological economy. He who goes beyond the region of what lies open to man and seeks what is withdrawn from him (quae non aperte dicta sunt neque ante oculos posita [what has not been plainly said or placed before our eyes]) is one who prefers seeking to finding. The overcoming of Gnosticism as the 'suspension and carrying forward' [Aufhebung] of its pretension to knowledge in the Christian teachings, is the attitude chosen by Clement of Alexandria (ca. 150–ca. 216 A.D.). Although ancient philosophy, as the epitome of man's self-arrogated theory, is now admitted to a propaedeutic role in the form of Christian Gnosticism, it is not freed of its ambiguity by such mediation. This becomes most evident in the mythical conjecture that philosophy was conferred on the Greeks by a fallen angel as stolen property from heaven. But this thoroughly Gnostic-sounding illegitimate origin is made good again by permission from God, of Whom one certainly could not assume that He was ignorant of this event: "For in those days the stolen property was of some use to man, although the thief had not intended this, since providence turned his
sacreligious deed to a beneficial end.”

From this source, the fallen angels “who, so far as they were acquainted with the secrets, blabbed them to the women,” not only the doctrine of providence but also the disclosure of the phenomena of the heavens are supposed to have reached the Greeks.

It would be surprising if, in the rich and motley educational landscape that Clement spreads before his readers (it was not accidental that he named the third of his major works the Stromateis [Carpets, Tapestries, or Miscellanies]), the figure of Odysseus did not also emerge again, the figure in which we saw Cicero critically exemplify the order of precedence that he ascribed to curiosity and civic duty. Reference to the great figures of human imagination and memory may in each case be intended only as rhetorical ornament, but the validity and richness of interest of such a figure themselves force the author, who seems ready to involve himself with them only in passing, to come forth unintentionally with his concept of man and man’s proper form of existence and play it through in a thought experiment.

In the Speech of Exhortation to the Greeks, the first part of Clement’s three-part principal work, Odysseus appears—in the reverse of the reproach pronounced by Cicero—as prefiguring those who do not want to pay the price of eternal salvation but rather “cling to the world, as certain species of seaweed cling to the rocks in the sea, and do not trouble themselves about immortality, since like the old one from Ithaca they do not long for the truth, the heavenly fatherland and the true light, but only for the smoke (of the hearth at home).”

Here Odysseus bound to the mast is seen as a man who is ruled by the will to return to his earthly home, who does not take the apparently fatal risk of truth. In the Stromateis, however, Odysseus appears as the figure of the Gnostic who does not need to stop up his ears anxiously when they are exposed to the worldly wisdom of the Greeks but rather listens to the voices of Hellenism while nevertheless holding to his course aimed at returning home to the truth:

Most of those who claim the name of Christian seem to resemble Odysseus’s comrades, in that they make for the Logos without taking any interest in a more refined culture; they pass by, not indeed the sirens, but rhythm and melody, and stop up their ears with rejection of knowledge [amathia] because they know that they would never again find the path to their homeland if they should open their ears to Greek wisdom even once. But he who selects what is useful for those who
need instruction—especially when they are Greeks—cannot turn aside from the love of knowledge [philomathia] like an unreasoning animal but must rather collect as many helpful ideas as possible for his listeners. But one should not continually remain and linger with these ideas, but only as long as one can draw benefit from them, so that as soon as one has derived this benefit and appropriated it, one can return to the home of true philosophy, after extracting as solid conviction the certainty for the soul that arises from all of this.

Clement’s advice to the Gnostic in his relations with the Greek tradition, aimed at the self-restriction of the theoretical interest that lives in that tradition, fits into this design: “Thus our Gnostic will have a many-sided education, not because he wanted to acquire the cognitive disciplines as virtues, but rather because he uses them as assistants; and since he distinguishes between the universal and the particular, he will find his way to the truth. . . . On the other hand, one should avoid useless busybody activity, which concerns itself greatly with what is entirely insignificant; the Gnostic must rather occupy himself with the various sciences as a preparatory exercise, which on the one hand helps the truth get passed on as accurately and clearly as possible and on the other hand is a protection against words that are intended, with their pernicious tricks, to exterminate the truth. By making the theoretical interest that he finds embodied in the traditional system of education useful for Christian purposes, Clement is able to set up this interest not as an end in itself but as a ‘second duty’ under the circumstances.

The curiosity by which false doctrines seem to be motivated is regarded not as an inevitably misleading drive but rather as a neutral motive that can just as well be made to serve the truth if it is only made to function in the right way: “For while the truth that comes to light in Greek philosophy extends only over limited regions, the real truth puts in the right light all the deceitful attempts of Sophism to make something credible, just as the sun brilliantly illuminates all the colors and shows clearly how both the white and black are constituted.” Once again the simile of the sun serves to clarify the relation of the absolute truth—to regard which directly is to risk being blinded—to the worldly partial truths, over which the absolute truth has precedence, without excluding them.

The familiar distinction between wisdom and the sciences also helps Clement to ‘save’ the controversial disciplines of astronomy and ge-
ometry: He who doubts that it is useful to know something about the motion of the sun and the stars and their causes and to consider geometrical theorems runs the risk of falling into error regarding the freedom of the spirit as well. Apparently we are to understand that scientific knowledge frees one from the suspicion that human action might be conditioned by combinations of cosmic factors, that is, that—as Epicurus had taught—physics ‘neutralizes’ its object for man.\textsuperscript{50} For Clement the Gnosticism that is legitimized by Christianity not only has individual significance in relation to salvation; it also discloses the educational meaning of history. The discussion with Greek philosophy must try, by means of loving criticism, to enable the adherents of those teachings “finally, even though late, to understand the true value of the erudition to attain which they undertake journeys over the ocean.”\textsuperscript{51} But \textit{gnosis} [knowledge] here is not recommended to everyone; it is the highest challenge of Christian self-realization, not a universal condition of salvation. This is illustrated again by Odysseus, who alone among his companions can endure the danger posed by the Sirens, following the motive of his curiosity, as a representative who demonstrates once and for all that temptation can be overcome: “It is enough that one man has sailed past the Sirens.”\textsuperscript{52}

This salvation formula extracted from the \textit{Odyssey’s} scene of the Sirens provides the occasion for a justification of the lack of literary pretensions of the \textit{Stromateis}, and likewise of the whole genre of literature concerned with salvation: “I know well that to be saved oneself, and in the process to be helpful to others who want to be saved, is the most important thing. . . .” Pythagoras had recommended giving preference to the muses over the sirens, by which he meant “that one should cultivate the sciences, but should not seek in them the satisfaction of a desire for pleasure”—here again the differentiation of use and enjoyment is in the background. The vital point is that with the role given to individuals by Gnosticism the basis for a statement about ‘human nature’ like that at the beginning of Aristotle’s \textit{Metaphysics} has been abandoned: Odysseus and the Sirens, Oedipus and the Sphinx—the human interest is delegated to these solitary representatives as it is to the Gnostic, of whom it is said at the same time that it is enough if he finds even one single listener. In other words, there are exposed human positions, in which temptation cannot be avoided but must be endured, apparently because there is an economy of what humanity has to accomplish, a set of historical tasks, as it were. When the
polemics against Gnosticism deny this special role of certain individuals, the accent in the exegesis of the Oedipus figure alters: Now he is praised only for the 'pastoral' action of stopping up the ears of his companions, while his own exposed position is ignored.58

In the Latin patristic literature, the term *curiositas* receives its specifically anti-Gnostic aspect of significance from Tertullian (ca. 160–220 A.D.). Here the characteristic imprint that the word had been given in Apuleius's *Metamorphoses*, which were produced between 170 and 180 A.D., may have had an influence.54 The process whereby the cognitive appetite that was naturally and essentially appropriate to man was transformed into a constituent element of the catalog of vices took a decisive step forward here, in that *curiositas* became the dominant trait of a character, of a type.

This had been prepared for, in the conceptual history of the Greek *polypragmosyne* [officious busyness, meddling], by Plutarch (ca. 45–ca. 125 A.D.), in a treatise that had described busybody activity as harmful, particularly in the realm of human relations. Plutarch's suspicion of this characteristic takes as its point of departure the assumption that man's supposed 'interest' in other men is directed especially at hidden wickedness, which it seeks to bring to light and publicize through 'gossip.'55 This gossipy curiosity is directed at the intimate sphere of one's fellow man and penetrates the secrecy (which is, in its own way, humane) of human wickedness. It puts into words, and into the circulation of talk, the unspeakable things that pertain to others, so that, in an extreme comparison, adultery can be described as a sort of curiosity about someone else's carnal pleasure.56 It is characteristic of Plutarch, the Greek, that he recommends as a means of curing such gossipy curiosity the diversion of interest by other objects, and explicitly mentions the heavens, earth, air, and sea. He assures us, in this connection, that nature has nothing against the cognitive appetite diverted toward it; however, no hidden wickedness is to be found there, and he who cannot do without it will have to stick to history.57

In Apuleius's novel, *curiositas* is radicalized; its magical potency—which Philo earlier thought he had recognized in its secret drive toward transposition—is made thematic. One of the ironies with which the author treats Lucius's curiosity—animallike, credulous, and capable of any indecency—is that he counts among his famous ancestors not only the author of the treatise on curiosity, Plutarch, but also the Skeptic Sextus Empiricus. For even the hero's immoderate lust for
knowledge is exhibited as the degeneration of the philosophical appetite for knowledge when he introduces himself as "not indeed curious but still desirous of knowing everything, or in any event a great deal." Elsewhere he does not shrink from describing himself as possessed by an innate curiosity. The 'ontological' precondition of the hero's immoderate curiositas and of his magical inclinations is the vanished firmness of the contours of the world's constitution, the suspension of the cosmic quality of reality and the resulting explosion of the horizon of possibility, which creates a space in which what man can look forward to is indeterminate: "Nihil impossibile arbitror..." [I think that nothing is impossible]. What is unexpected in common experience, happens. Of the voluptuousness of a feast it is said, "Quicquid fieri non potest ibi est" [Whatever could not possibly come into being is there]. Curiosity seeks no longer what is admirable and wonderful in the cosmos but rather the strange, the peculiar, the curious (in the objective sense), that which can only be gaped at, in a structure of reality that is dissolved into transitions and alterations of form. The hero also describes himself as "all too eager to become acquainted with strange and astonishing things."

Augustine himself suggests to us that he knew this work by referring to the fact that Apuleius and he were fellow Africans. This may be regarded as no less probable in the case of the Carthaginian Tertullian.

The intellectual biography of Tertullian, who first became a Christian as a mature man and in his old age turned to the Montanist heresy, can be described as a strenuous effort to think and to exist against his own nature. This highly complicated thinker, practiced in every finesse of juristic and rhetorical technique, commits himself to the program of a 'simple' faith, in which all questioning has come to rest, and in fact as a result not so much of the demonstrable and reassuring possession of the truth as of a conscious surrender, contradicting what was 'natural' to him, of the cognitive pretension that urges one in the act of questioning. For Tertullian, Gnosticism has its root in the obstinate insistence on further questioning. He denies ever having raised the problems that he deals with himself; all objections and difficulties have been imposed upon him by others. The desire, for example, to know more about the soul than is contained in the simple statement that it derives from God's breath (ex dei flatu) leads into the boundless waste of argumentation about positions decided upon in advance and, where
argument does not suffice, to the summoning up of rhetorical persuasion.61 Tertullian holds the heretics responsible for the reception of ancient philosophy within Christianity; the pluralism that they produced forced people to make use of the preexisting means of intellectual argument. A homogeneous religion would not have needed to interest itself in philosophy. Tertullian sees the difference between Gnosticism and his faith as reduced to differing interpretations of the biblical command “Seek and ye shall find.” Gnosticism perennializes this relation of conditioning. To the restlessness of seeking it holds open one chance of finding after another, whereas Tertullian localizes the end of seeking and the totality of having found in the single act of accepting faith. “In a single and definitive system of doctrine, there cannot be an endless search. One must seek until one finds, and believe when one has found, and then there is nothing more to be done but to hold fast to what one has grasped in faith, since after all one also believes that one should not believe, and consequently should not seek, anything else, since one has found and faithfully accepted what was taught by him who commands us to seek nothing but what he teaches.”62 The model of the ancient conception of motion, according to which rest in a goal state teleologically determines the process, is unmistakably at work here. There lurks in man an instinctive readiness to yield to the “tickling of his ears” by the philosophy that is born of “the cleverness of earthly knowledge” and to submit to the canon of its questions as the embodiment of what man has a legitimate need to know. But philosophy is a “rash interpreter of God’s nature and arrangements,” and by these rash interpretations it furnishes the heresies with their “equipment.”63 Tertullian exhibits a clear awareness of the fact that the historical process stabilizes the system of questions once raised and thus exercises a pressure toward answers, which imposes the ‘settling’ and reoccupation of systematic positions that have become vacant. Thus it is no longer ‘human nature’ that unfolds its appetite for knowledge in a catalog of pretensions to knowledge that can be gathered from history; rather it is the factual antecedence of schools of dogma that imposes upon what is new a framework of continuity that is just as unfulfillable as it is demanding of fulfillment. Curiosity is the result of the unresisting reception of the inherited system of ‘nonnegotiable’ questions. Tertullian seeks, with his characteristic radicalness, to cut this burden
loose. The opposition that he encounters in this effort is conditioned by the fact that in Gnosticism the ancient tradition is already assimilated and has unfolded its immanent logic. Thus the field of the discussion and the rules of the game are pregiven. Tertullian would like to make it plausible to his readers that he is an early Christian author delayed for two centuries, with a longing for the simplicity of the language of the Bible, and that it is only against his will that he summons up rhetorical and dialectical brilliance against the Gnostics' instruments of persuasion. Tertullian made one attempt, in his treatise *On the Testimony of the Soul*, to demonstrate how much he despises the otherwise so trustworthy method of convincing opponents by turning their own logic against them. He practices the maxim "Nobis curiositate opus non est post Christum" [After Christ, we have no need of curiosity] by excluding the very zeal for knowledge (*magna curiositas*) with which the Christian apologists wanted "to extract testimony for the Christian truth from the most widely known writings of the philosophers, poets, and other teachers of worldly erudition and wisdom."

The *magna curiositas* stands at the beginning of the treatise on the 'simple' self-evidence of the soul as the great reproach not so much against the heathen philosophers as against the Christian protagonists who with their inquiring diligence had subjected themselves to the constraints of the prevailing rules of argument. Against this Tertullian poses the unconscious testimony of the soul, which is just as uneducated as it is unmiseducated: "It is to you that I speak, you who are simple and unformed, unpollished and uneducated, as with people who have you alone and nothing more, the soul, just as it comes from the alley, from the street corners, from the workshop. It is your inexperience that I need, since your experience, as little as it is, is believed by no one. I want to question you as to what you bring with you into man, how you have learned to feel, whether from yourself or from your author, whoever he may be."

The anamnesis ascribed to the soul, and to attest to which the soul is summoned, no longer has anything to do with the Platonic 'remembrance,' inasmuch as it has no reference to the world; it no longer mediates between appearance and Idea but rather serves exclusively to secure the soul's derivation from its creative origin. Thus self-knowledge as the alternative to knowledge of the world acquires a dimension quite heterogeneous to and independent of the latter. But *curiositas* too, as the contrary of such self-exploration, is not primarily
directed at the world; for Tertullian it has scarcely anything to do with the Augustinian "pleasure of the eyes" but exhibits a more 'literary' character, comparable to the vanity of education and the pleasure of dialectical activity. To this the simplicity of the anima idiotica [uneducated soul] is contrasted. To the extent that the cognitive appetite directs itself at nature, it is reprehensible not on account of the nature of its objects but rather because it prefers the inferior realm of the dependent and the conditioned to the immediacy of its relation to its author. Thales's astronomical curiosity is reprimanded for this metaphysical short-sightedness. The physician and anatomist, on the other hand, who is apostrophized as the inspector curiosissime [most curious investigator], is in danger of equating what is visible and discoverable with everything that exists and also of forgetting that his object is altered by death and dissection and is consequently no longer able to provide an answer for every question.

Thus curiositas is rejected here only conditionally on account of the specific objects it prefers, to the extent that these have the concealed and concealing function of absorbing or misleading the cognitive appetite. It was in his concept of truth and the value judgment bound up with it that Tertullian defined most radically what he meant to exemplify with all of this: For man truth as such is not unconditionally worth striving for, but only the truth that refers explicitly to its divine derivation and foundation and is represented in relation to that origin. If one wants to know something about the soul, then one must rely on its author: "Quis enim revelabit quod deus texit?" [For who will reveal what God has hidden?] This has the appearance of an epistemological reflection. But that is not what concerns Tertullian; what he wants is to transform the act of knowing into an act of acknowledgment. This rigoristic interest in form makes the possession of truth irrelevant for man in comparison to submission to its absolute master: "Praestat per deum nescire, quia non revelaverit, quam per hominem scire, quia ipse praesumpserit" [It is better to be ignorant through God because He has not revealed than, because man himself has presumed, to know through man]. Even knowledge about the soul loses its value, even if it is the truth, if it does not derive from the legitimate source of divine revelation but rather from man's presumptuous authenticity. Freely chosen ignorantia [ignorance] can thus become an act of acknowledgment of the exclusively divine right of possession of the truth and disposition over it.
The value of truth, for Tertullian, is formal, not material: Not that one may expect accurate objective statements only from God—but only what one receives from God is the obligatory and beneficial truth for man, and it is so only because one receives it from Him. Hence Socrates's daimonion [genius, guiding spirit] could not convey any truth, no matter what it said, because its essence was praesumptio, not revelatio [presumption, not revelation]: “Cui enim veritas comperta sine deo?” [For to whom is truth revealed without the aid of God?] What it is necessary for man to know is shown to him only by its source; all ‘knowledge’ consists in knowing what one does not need to know and should not strive after. Still there is also for Tertullian, as there was later for Augustine, a kind of justification and coordination of curiositas as a means to salvation. Thus the cognitive appetite was the power in the ancient authors that drove them to draw secretly from the wellspring of the prophets; but in this they were only intent on their own fame and eloquence, so that they overlooked the simplicity of the truth and converted their curiositas into mere scrupulositas [concern for minutiae]. Only it is remarkable and contradictory that the heathens’ natural appetite for knowledge of the Christian’s “hidden blessing” grows weak prematurely and they prefer not to know anything more about it, while with the Gnostics the same appetite for knowledge swells beyond measure into an enormitas curiositatis [enormity of curiosity]—a contradiction that Tertullian cannot explain without recourse to demons.

The basic idea, that the truth is God’s property and subject to His disposition, not only made theoretical curiosity appear to be a striving for an illegitimate acquisition but also combined with the technique developed by Philo of tracing Greek philosophy’s possession of truth (which had willy-nilly to be recognized) back to the concealed reception of biblical sources, that is, characterizing it as illegitimate use. From this it could be deduced that Christian doctrine demands that philosophy ‘restore’ this property to its rightful master.

By raising the question of origin and ownership, Christian apologetics found a way out of its embarrassment in the face of the pagan reaction, which only too often responded to the doctrine that was offered as a promise of salvation with a shrug of the shoulders and the observation that it had heard all that before. But the result was that human knowledge as a whole came under the pressure of the analogy of the theological state of grace. God gives what is His to whomever He chooses,
and he who lays claim to it and wants to attain it under his own power puts himself in the wrong.

For Lactantius (ca. 250–ca. 325 A.D.) the truth is an *arcanum summi dei, qui fecit omnia* [a mystery of God in the highest, Who made everything],77 and consequently only the acceptance of divine revelation gives legitimate access to it. That God wanted to keep something secret from man, and that this is quite in keeping with the idea of His majesty, indeed that this majesty is attested precisely by the inaccessibility of the mystery for man, is the premise that remains entirely unquestioned in the context of these discussions.78 Here the question whether God’s keeping the truth secret in this manner could be intended as beneficent protection of man does not yet play any role at all; for this kind of motivation is not necessarily already implied by the fact that the information that is necessary for human life is excepted from secrecy and made easily accessible for man. This is especially true if one proceeds from the ancient assumption that the securing of vital necessities can be only the *terminus a quo* [starting point] of the theoretical attitude.79 Against those who nevertheless wanted to investigate what was not granted to them, God had protected Himself by making man the last of His creations so that he should not acquire any insight into the process of creation. This observation is directed against Epicurus’s denial of creation, which among other arguments had used that of the unimaginability of how it was done.80

The idea that God had wanted to deprive man of insight into the work of His creation and had consequently made him the last of His creations must have alarmed its author almost before he had written it down. Without wanting to relinquish entirely the point aimed at Epicurus, he gives it a turn toward thoroughly customary Stoic teleology: Man could hardly be introduced into the world before it was completed, for how should he have kept himself alive in an unfinished world? And vice versa: If man had been able to live in the world before it was completed, then everything that would have been created after him could not have been created for his sake: “*Itaque necesse fuit, hominem postremo fieri . . . illius enim causa facta sunt omnia*” [And so it was necessary for man to be made last . . . because everything was made for his sake]. But if it was impossible for this reason to introduce man into the world any earlier, then the interpretation of man’s position at the end of creation directed against Epicurus loses its basis. The pragmatic teleology benefiting man, expressed in his
position at the end of creation, is supposed to appear to him as gracious compensation for the fact that the jealous withholding of the mystery of the Creation leaves his theoretical curiosity unsatisfied.

The mortgage of Gnosticism falls on man; he is the one affected by exclusion from cognizance of the act of creation, an exclusion originally meant to demonstrate the impotence of the demiurge with respect to the 'accomplishment' of the work of creation. The human spirit is 'taken into custody' (quasi custodia) by the body precisely so that it cannot 'see everything,' and in view of such a painstaking exclusion from the secrets of nature, it would be foolish to inquire after what has after all been removed into the realm of the unreachable.\(^{81}\)

The more subtle form of divine jealousy regarding the secret of the Creation is the elimination of the Platonic presupposition of the demonized Gnostic demiurge: He is able to set up the world and counterfeit its ideality only because kosmos [order] is thought of as an objective, universally accessible stock of realizable possibilities, which the demon no less than God can take as his 'prototype.' Only when one makes God the 'inventor' of the world can one dispute the demiurge's insight into the world concept, which is now a 'subjective' plan, and thus call into question his ability to usurp the genuinely divine competence. This crucial step toward the conception of spiritual originality was first made, for purely defensive purposes, by Irenaeus.\(^{62}\) Since 'having the idea' and doing the deed coincide, the hypostatic preexistence of the ideal cosmos is abolished and the world eidos [Idea] becomes a 'fact' that is no longer intelligible. But this means that every claim, even the human one, to the intelligibility of nature must be rejected because it would allow demiuritic activity (human as well)—secondary creation—to appear possible in principle. Thus a basic decision is made in the opposition to Gnostic dualism, a decision that was to determine not only the Middle Ages but also the beginning of the modern age, with its rebellion against this decision.

Truth can no longer be metaphorically represented by the brightness of daylight, which makes everything visible—both what there is and how it is—but figures rather as a hoard held in reserve, from which only so much is given out as is vitally necessary for man. The divine sphere of majesty and the human sphere of need are clearly differentiated. At the same time man may by all means inquire after his
happiness; indeed, in good Hellenistic fashion, this very question becomes the norm for the restriction of his cognitive will: "Quid ergo quaeris, quae nec potes scire, nec, si scias, beatior fias?" [What then do you seek, which it is neither possible for you to know, nor if you knew it, would you be made any happier?]83

In one essential respect, however, as a result of his Stoic assumptions, Lactantius stands outside the anti-Gnostic tradition of curiositas: in his description of man as contemplator caeli [observer of the heavens]. True, Socrates is praised as the prototype of the overcoming of curiositas, and he is given credit for having been more prudent than others who thought they could grasp the essence of things with their mind and whose foolishness and impiety consisted in the fact that with their curiosity they wanted to penetrate the secrets of heaven's providence.84 But at the same time he is blamed for the remark attributed to him that what is above us does not concern us because by this means he (supposedly) wanted to divert the essentially human direction of gaze, which is at the starry heavens.85 Here it becomes evident that the Stoic tradition was suited not only to retrieving astronomy from the realm of objects that are characteristic of curiositas, to which it had been consigned by the defense against Gnosticism, but also and especially to recovering the metaphysical justification of astronomy's pretension to truth. However, in Lactantius the contemplatio caeli [observation of the heavens] is taken into the service of religious experience to such an extent that one could speak less of a theoretical relation than of a relation of 'encounter': "Man is induced to observe the world by his upright posture and his upward-facing countenance; he exchanges looks with God, and reason recognizes reason."86 This definition of contemplative experience as something in the nature of 'physiognomic' dialogue leaves no room for mere theoretical curiosity.87 Thus here also the typical late-antique atheoretical attitude is preserved, in that the expectation that is operative in this vision is understood as one of existential fulfillment freed from the affliction of questioning.

The highly original 'systematic' classification of intellectual curiosity by the "false father" Arnobius, whose work Against the Heathen may have been produced soon after 303 A.D., remained without any noticeable influence on Augustine, and thus on the further elaboration of the curiositas theme. For him the discrepancy between the natural pretension to knowledge and the actual capacity for knowledge (which is seen as quite narrowly restricted) is one of the strongest arguments against the dogma of the divine origin of man. Again and again he
confronts man's real situation with the richness and easy acquisition of knowledge that could be expected on the assumption of the divine origin of the soul. Arnobius asks ironically whether the king of the world dispatched the souls so that only obscurity should confront their desire for knowledge of the truth about things. In his will to knowledge, man exercises no well-founded entitlement.

Arnobius takes it as the core of Christian revelation that man was not indeed created by God, but the gift of immortality can fall to his lot to the extent that he proves himself morally. From this he derives a maxim of theoretical resignation that approaches Skeptical abstention from judgment, in accordance with which even the alternative question that unavoidably presents itself, whence then did the human soul actually come, must remain a tenebrosa res [shadowy matter], a mystery enveloped in blank obscurities (caecis obscuritatibus involutum). The teleological economy of knowledge, as established in Cicero's temperately balanced coordination of Skepticism and Stoicism, is sharpened into the blunt demand that man should leave alone everything that has nothing to do with the earning of immortality: "Suis omnia relinquimus causis" [We leave all things to their own causes]. Here the element of 'care' is again perceived as central to curiositas and understood as a misleading of man's concern for himself. Curiosity is not the sheer sensuous pleasure of the busybody's inspection and questioning of things but rather a disoriented perplexity regarding one's own position with respect to the world. The acceptance of revelation becomes a liberation from this burden of supposedly vital problems.

It is not an accident that we come across traces of Epicurus's thought in Arnobius, in the form of numerous allusions to Lucretius. The neutralization of theoretical concern about the world and the lack of relation between worlds and gods provided Arnobius with his model. This dependence does not by any means exclude Gnostic connections because the Gnostics' demiurge and Epicurus's atomistic accident, which has nothing to do with his gods, can very well act systematically as substitutes for one another. This explains a contradiction that already appeared to be present in Epicurus's system between the irrelevance of the object called "nature" and the extent of the theoretical preoccupation with it. In Arnobius this inconsistency is repeated: No logical bridge can be constructed between the passage where Christ appears as a teacher of natural philosophy too and numerous others where such questions are explicitly consigned to indifference. The Epicurean
presuppositions are further reflected in an element that gives Arnobius a special position within the tradition of *curiositas*, which is his explicit rejection of self-knowledge and curiosity about the world as mutually exclusive alternatives: Man has no access to his origin and thus to his own nature; he is an *animal caecum et ipsum se nesciens* [blind creature, ignorant of himself]. The evidence of what is obligatory for him leaves no room at all for access to what he is. One might say that Arnobius adds to his resistance to theoretical curiosity the radical extirpation of all tendencies from which the function of a ‘world view’ could accrue to Christianity.

Arnobius resists submitting the Christian revelation to the test of whether it can answer the questions that philosophy has raised and has not answered; although the heathens would have had to admit their inability to answer the questions about the origin of and the reasons for many things, they made the same admission on the part of the Christians into a reproach against them: “Qui quae nequeunt sciri, nescire nos confitemur . . .” [We are the ones who confess to not knowing what cannot be known]. Arnobius evidently wants to raise Christianity above a function into which its own apologetics had pressed it, namely, offering to the surrounding late-antique world, which was resigned about its own abilities, a solution of the traditional problems ‘by new means,’ and thus functioning as the final form of philosophy. In contrast, the admission of the inaccessibility of the objects of theory especially was meant to turn and to concentrate man’s self-understanding radically on its single real possibility. The Epicurean neutralization of nature now no longer serves liberation from fear but rather the setting free of moral energy and its exclusive interest in immortality. If ‘natural-philosophical’ communications are also attributed to Christ, then this accentuates precisely the futility of the ‘natural’ cognitive appetite, the indulgence of which forces history into an apparent continuity that it can no longer have after Christ. Thus *curiositas* becomes an inducement to the concealment of the heterogeneity of Christianity and to its transformation into a system of propositions amounting to a ‘world view’; the critique of curiosity is here functionalized for the self-understanding of Christianity with a precision that remained isolated and without influence.
Again and again the question has been asked, at what point in his spiritual biography did Augustine's 'real' conversion take place? If it is correct, as I propose, to understand his transition from Academic Skepticism to Neoplatonism simply as a reactivation of the 'Platonic remainder' in dogmatic Skepticism, and if we must recognize a high degree of continuity between his Neoplatonic and his early Christian phases, then the turning point shifts back to his alienation from Manichaean Gnosticism. Locating the break in the spiritual process at this point is also—in fact is especially—apt in relation to the problem that is our topic here: the foundation of the medieval curiositas complex. This is already evident from the way in which, in the retrospect of the fifth book of the Confessions, Augustine broadens his critique of Manichaean Manichaeism into a generalization of the tendency to shield himself against philosophy, a generalization that certainly cannot be justified solely on the basis of disillusionment with Gnosticism but in fact runs directly counter to the immediate lesson of that disillusionment. This makes the argumentation many leveled and complicated.

On the occasion of his encounter with Faustus, the Manichaean, Augustine claims to have recognized the slight value of the Gnostics' cosmological speculations, specifically through a comparison, unfavorable to Gnosticism, with the precisely calculated astronomical predictions of the 'philosophers.' This would have been a plausible argument against the Gnostics but at the same time an argument in favor of philosophy. But Augustine does not want his reader to be led
to this obvious inference; the turning away from Gnosticism must not appear as a repetition of the philosophical 'conversion' as it had been presented in the fourth chapter of the third book of the *Confessions*. In order to avoid this result, Augustine builds a step into the argument of this passage that would otherwise be totally unmotivated here: the philosophy that has just made such a favorable appearance, thanks to its cognitive accomplishments, in contrast to Gnosticism, now acquires a seductive attraction and is characterized as an attitude that is endangered and dangerous in its innermost nature. Its ability to give exact prognoses regarding the most exalted object in the world, the starry heavens, exposes man to the danger of self-admiration, of autonomous cognitive security, of *impia superbia* [impious pride].

It is not its object that constitutes the danger of the philosophical attitude but rather the authentic power—inferrred from the mastery of the object—of the human intellect, whose origin man ascribes to himself without acknowledging it as the creation and gift of his Author. Augustine puts this in terms of his characteristic metaphor of light: The man who knows is not himself the light to which he owes the intelligibility of his objects, but himself stands in the light, of whose full truth potential he deprives himself when he ascribes the origin of this light to himself. In the moment in which he is able to predict the future eclipses of the sun, he guarantees the present eclipse of his own illumination.

The antithesis that pervades the tradition of *curiositas* since the anecdote about Thales between on the one hand what is nearest at hand and essentially urgent and on the other hand the humanly remote matters that conceal the former is reoccupied here: Now what is nearest at hand is the perception and acknowledgment of the dependence of one's own capacity for truth upon illumination. The theoretical attitude is apprehended, in accordance with the exemplary model of astronomical prediction, as relating to the future and is seen as exposed in that very respect to the danger of evading the transcendent conditionality of its origin and the contingency of its presence. Reflection on this last condition of the possibility of human knowledge is opposed, as the mode of behavior of a finite being, to the essentially infinite *curiositas*, which passes over the simultaneous acknowledgment of the contingency implied in every acquisition of knowledge, being consumed, instead, entirely in the attraction of the object. Consequently Augustine's God denies Himself to those whose *curiosa peritia* [curious
Chapter 5

skill] wants to count the stars and the grains of sand and to calculate the extent of the heavens and the paths of the stars.\(^3\)

The excursus on *curiositas*, which takes up the greater part of the third chapter of the fifth book of the *Confessions* and only leads back to the point of departure of the account (the disillusionment resulting from the encounter with Faustus the Manichaean) in a very short final section, makes it evident that the reason why Augustine does not consider his own path to the overcoming of Gnosticism exemplary is that the criterion of scientific accomplishment implies acknowledgment of the right to theoretical curiosity. Thus Augustine fields philosophy against Gnosticism but does not turn the field over to the victor.

The problematic that the alliance with philosophy constituted for the whole patristic tradition is reflected here: How was the critical rationality that one had employed against mythological polytheism to be circumscribed and subordinated in its turn to the religious interest? Augustine attempts to do this by subjecting reason’s theoretical accomplishment to the question of the conditions of its possibility, a question that he considers essentially theological because it points to the problem of the Creation. If this reflection is carried out explicitly and the critical autonomy of philosophy is thus neutralized by a critique of philosophy itself, then the lasting benefit of the confrontation of Gnostic cosmology with philosophical astronomy can be admitted.\(^4\) Thus the desire to know, as such, does not by any means amount to *curiositas*, on the contrary, *saecularis sapientia* [secular knowledge] distinguishes itself favorably from Gnostic speculation precisely by the fact that it admits of empirical confirmation, whereas Gnosticism had required assent to its statements about the world as though by a kind of faith, without pretense of verification. Thus in this passage Augustine connects the mistake that he sees in *curiositas* neither with a particular object, such as the astronomical one, nor with authentically theoretical insistence on precision and verifiability but only with unreflectiveness in the use of reason, which as such already constitutes denial of the debt of gratitude for being created. With this degree of subtlety, admittedly, the idea was not capable of transmission as tradition.

In the tenth book of the *Confessions*, *curiositas* returns in connection with the ‘systematic’ account of his spiritual life history that Augustine gives there. Here it must be seen in indissoluble antithetical connection with the two questions, directed at himself and at God, that provide the framework of this account: *Quid sum? Quid es?* [What am I? What
are You?] After chapter 30 the guiding thread of the three classes of vices is dropped, and the whole of chapter 35 is devoted to *curiositas*: It represents precisely “ocular desire” (*concupiscientia oculorum*), the pure functional drive of the organ of sensation, which finds satisfaction even in the most trivial object and is defined as the futile and inquisitive appetite for sensual experience (*experiendi per carmen* vana et *curiosa cupiditas*). This self-satisfaction of instinct through surrender to the world of appearances dresses itself up in the great words and the images of supposed value in whose terms the human spirit conceives of its destiny and dignity, as knowledge and science (*nomine cognitionis et scientiae palliata*).

Here *curiositas* distinguishes itself from naive delight in the senses by its indifference to the qualities of the beautiful and the pleasant, since it ‘enjoys’ not its objects as such but rather *itself*, through the cognitive capability that it confirms in connection with them. Such self-enjoyment on the part of the cognitive drive is always facilitated by the degree of difficulty and remoteness of its objects, which do not present and recommend themselves of their own accord, like something beautiful. That curiosity can, in fact, become one of man’s central vices is a characteristic not only and not primarily of man himself but also of the world in which he finds himself—a sphere of obstructed immediacy and only partial anthropocentric teleology bordered by zones of hiddenness and remoteness, of strangeness and alienating reservation.

*Curiositas* is indeed a category applied in turning away from Gnosticism, but the world in which it can become a possible cardinal vice is no longer the cosmos that is open to man and symmetrically intelligible in all directions from the center but rather a sphere filled with Gnostic attributes in which man is [literally] ‘eccentric’—for nowhere in Augustine either does Stoic geocentrism play a role relevant to man’s understanding of himself.

Augustine’s world is not fulfilling but seductive, and *curiositas* is a ‘temptation’ (*forma tentationis*) in the double sense that to test oneself on and with what is resistant and uncommon (*tentandi causa*) is at the same time to be tempted (*tentatio*). In its extreme form this ‘tempted attempt’ of the appetite for experience and knowledge directs itself at God Himself, since even in religion there is hidden the attempt—the ‘experiment’ with God—to demand signs and miracles not as promises of salvation but merely to satisfy curiosity. In this attitude
God is taken into service and made into a means to the enjoyment of purely worldly experience. This makes clear what it means when Augustine again and again insists in his thinking on a strict differentiation between enjoyment and usefulness, between frui and uti. He sees the basic character of the world in its utilitas [usefulness] as the instrumentality ad salutem [for salvation], whereas a fulfilled and fulfilling existential relation is only to be expected from the fruitio [enjoyment, delight] directed at God. The ordering principle of human life, which can be spelled out in the form of the ethical virtues, is fixed in the maxim that one should correctly distinguish between the usefulness and the enjoyment of things. At the same time there emerges a criterion for the positively evaluated attitude to which curiositas is contrasted: All theory is concerned with disclosing the instrumental relevance of the things in the world, the serviceability inherent in them. But this means that the Augustinian interpretation of knowledge of the world is no longer the ‘pure’ theory of Hellenistic philosophy.

Curiosity violates this ordering principle of use and enjoyment and betrays its content of disorder precisely by the fact that in its extreme logical consequence (as Augustine defines it), it subjects even God to the criterion of utilitas, so as to be able to seek fruitio in the human self alone. There remains the question whether the human self-enjoyment that is perceived in theoretical curiosity is equally a mistake when it stops short of the presumption of taking God into its own service. This borderline question in distinguishing between use and enjoyment is investigated first of all in connection with the relations between human beings. The biblical injunction to men to love one another is cautiously interpreted by Augustine in such a way that it does not command us to love the other man for his own sake, which after all would be equivalent to fruitio, because only that can be loved for its own sake that promises man the vita beata [life of bliss]. Now this consideration can be transferred to self-love and self-enjoyment as well: Since self-enjoyment competes with the absolute level of the vita beata in the self-forgetful contemplation of God, it becomes the anticipatory transposition of and surrogate for man’s existential vocation, and thus the epitome of the false conversion of the interest that underlies all action. In self-enjoyment man remains or becomes external to himself and loses his inwardness just as he does in the ecstatic possession by knowledge that is curiosity. It is said antithetically of God, in the interpretation of the story of the Creation, that He
does not take pleasure in His works but only in Himself and that the
day of rest after the work of creation is meant to illustrate this fact;
man’s mistake is that he parts with himself in his works and cannot
really ‘rest’ from them in himself.9

When we return from this digression on the regula dilectionis [rule
of love] to the central passage, book 10, chapter 35 of the Confessions,
some light is shed on the catalog of the levels of curiositas: After amuse-
ment at a mutilated corpse, theatrical shows are mentioned, and from
here a transition to investigation of nature and to the magical arts is
found.10 The riddles of nature, to which the mere desire to know
applies itself, are characterized as objects that lie praeter nos [beyond
us], in the double sense that neither are they seen from the point of
view of their utilitas nor do they relate to man’s self-knowledge. In­
vestigation of the things that nature does not make openly accessible
to man is of no use to him. This proposition involves the teleological
assumption, familiar from Cicero, that the degree of a thing’s theoretical
accessibility indicates its ‘natural’ relevance for man. When he goes
beyond this region of what lies open to him, he obeys the cognitive
appetite that is justified by no other interest.11

The appeal to nature proves itself here, as so often, to be an am­
biguous type of argumentation, whose self-contradiction Augustine
seeks to avoid by not attributing a natural status to man’s inherent
cognitive appetite but instead interpreting that appetite—as always
where cupiditas is applied—as a consequence of the condition of man
having fallen away from his original nature as a result of his original
sin. The first sentence of Aristotle’s Metaphysics has become, through
the omission of “by nature,” a description of man’s status defectus
[failed, defective condition]. On this assumption, confirmation by the
“predilection for sense experience” can no longer be a “sign” from
which the vindication of the disinterested purity of the theoretical
attitude “independent of need” can be obtained. The grasp at the
‘tree of knowledge’ caused the unregulated cognitive appetite to de­
generate into the vana cura [futile care] of a godless state of being
fallen into the power of the world.

Admittedly the systematic consistency of the idea of curiositas found
in the Confessions cannot be confirmed in Augustine’s work as a whole.
He does not always see the cognitive appetite as a particular inner
condition of the subject. The definition in terms of particular realms
of objects that was so influential in the tradition is not only a mis-
understanding of the Augustinian texts, however much it may miss
the heart of his conception. Seen from a biographical-genetic point
of view, the objective definition of this human characteristic seems to
be the earlier one. When, following Cicero, he associates the self-
restriction of the cognitive appetite with the virtue of *temperantia* [tem-
perance], the lapse from this moderation is not an inner disorder of
the subject but rather is brought about by the attraction of the physical
world operating through the eyes. Here again a basic structure of the
Gnostic concept of sin survives: The forgetting of the origin and destiny
of the essential spiritual core of man (the *pneuma*) was understood by
Gnosticism not as an inner event but rather as the concealment and
overlaying of memory—which is to say, of metaphysical self-
orientation—by envelopment in worldly things, by diversion and dis-
persion in what is given and obtrudes itself from outside.

This Gnostic frame of reference makes it clear—just as does the
Neoplatonist frame—why in the tenth book of the *Confessions*, *curiositas*
appears as the negative correlate of *memoria*. Only by memory can
what gets lost in dispersion be grasped; memory gives man the authentic
relation—which makes him independent of the world—to his origin,
to his metaphysical ‘history,’ and thus to his transcendent contingency.
*Memoria* and *curiositas* relate to one another like inwardness and out-
wardness, not, however, as alternative human ‘modes of behavior,’
but rather in such a way that memory as actualization of one’s essence
is suppressed only by the forcefulness of the world’s influence upon
one and can assert itself to the extent that this ‘overstimulation’ can
be warded off and dammed up. The soul is inwardness, as soon as
and insofar as it is no longer outwardness; it is *memoria*, insofar as it
does not lose itself in *curiositas*. *Memoria*, which as the original ground
of the soul corresponds in Augustine’s Trinitarian analogy to God the
Father, stands for the fact that all thinking, insofar as it is not occupied
and diverted by ‘objects,’ would have to be something that thinks
itself. Only then would it represent the likeness of a God Who had
been conceived, since Aristotle, as a thought thinking itself. If one
pushes Augustine’s premises to their conclusion in that way, then, in
comparison, his formulas for *curiositas* still depend on those that were
coined earlier in the tradition and thus fall short of their logical
consequences.

The illusion to which man subjects himself when he surrenders to
his unbridled cognitive drive is also characterized by Augustine in its
limiting case as the transposition magic toward which we earlier saw Philo direct his suspicion of the "Chaldeanizers." "There are some individuals," Augustine writes, "who, having abandoned virtue and not knowing what God is nor the majesty of his eternal and immutable nature, suppose themselves to be engaged in a great enterprise when they busy themselves with intense and eager curiosity [curiosissime intentissimique] exploring that universal mass of matter we call the world. Such pride is engendered in them in this way, that they imagine themselves dwelling in the very heaven they so often discuss." True philosophy, which is love of and zeal for wisdom, arises from the gift of moderation, which protects one against curiosity. The soul's legitimate path is not the arrogant flight to the stars but rather the humble descent into oneself and the resulting ascent to God. Those who thirst for knowledge have not recognized this path, and the reverse befalls them: They believe themselves to be placed among the stars in their exaltation and enlightenment, and for that very reason they plunge back to earth.

This hyperbole for the delusion of the ecstatic cognitive appetite that considers itself equal to what is inaccessible is indeed directed against Gnosticism and its claim to have been initiated into cosmology, but at the same time it is peculiarly clairvoyant with regard to astronomy's influence on consciousness as it was to be manifested at the beginning of the modern age. Nicolas of Cusa, Copernicus, Giordano Bruno, and Galileo will find for this the expressive formula that the world has been elevated to the status of a heavenly body. It is true that the idea of creation implied the suspension of the ancient separation between terrestrial nature with its changeability and transience and the stellar region of eternal stability in favor of the idea of a homogeneous world; but this implication was fundamentally an extension to the whole universe of the metaphysical characteristics that had earlier been ascribed only to the earth, and thus something like the 'tellurization' of the special nature of the heavenly bodies. The early modern 'stellarization' of the earth reversed this implication and thus provided the metaphor for a self-consciousness that had been made thematic in Augustine's condemnation of astronomical curiosity.

Augustine had discovered, in connection with his disappointment with Gnosticism, what an impression the exact calculations of the "philosophical" astronomers could make. This competition between a system of faith and science preoccupies particularly the exegete of
the story of the Creation. He believes that he should prepare his readers for the fact that even a non-Christian can possess, on the basis of reason and experience, highly certain knowledge about the earth and the heavens, about the elements of the world, about the movement and circulation, size and distance of the heavenly bodies, about eclipses of the sun and moon, about calendar reckoning, about animals, plants, minerals, etc. The Christian, who should not intensively interest himself in such questions, should nevertheless not compromise his conviction in the face of such knowledgeable people by foolish assertions. Thus Augustine's exegesis of Genesis too is meant to provide speculation that is more spiritual than cosmological and to dismiss or to leave open, rather than to answer, the theoretical questions, that is, to practice what he calls *moderatio pia* [pious moderation]. He himself characterizes his exegesis of Genesis as having offered more questions than answers. One need not count on God's having wanted to communicate more to man than is necessary for his salvation. How much astronomy could nevertheless be included in such an economy of salvation was to be proved by the importance of the question of the calendar and the dating of the Easter celebration; so time indicators Augustine counts even the heavenly bodies among the *utilia* and *necessaria* [useful and necessary things] benefiting man. It does not occur to him that the problem of time determination could not be solved independently of a model of the cosmos; he explicitly counts the question of the form and construction of the heavens among the problems that need not concern the man who is intent on his salvation. In this context Augustine can perfectly well speak as though such cosmological problems could be solved with a sufficiently intensive effort; but for him the expenditure of time is indefensible.

Waste of time seems at first glance to be quite a superficial standard for the legitimacy or illegitimacy of posing purely theoretical questions. But in this criterion the conceptual pattern of *curiositas* reappears: In the boundlessness of his cognitive will, man denies his finitude precisely in his dealings with time by behaving as though he does not need to apply any measure or to bring forward any justification here. If the modern idea of science will be characterized by its forgoing an evaluation of its objects and a distinction between what is worth knowing and what is a matter of indifference, this will only be possible through the elimination of this very objection based on the finite time given to the subject, an elimination accomplished by the integration, through
‘method,’ of a potentially infinite sequence of inquiring subjects active in temporally extended functional complexes—subjects whose individual lives and needs (in regard to truth) can be neither the point of nor the standard against which to measure the totality of knowledge to be realized.

To both the ancient world and the Middle Ages, a knowledge that neither related to nor could be made to relate to the capacity of the individual and his existential fulfillment was still an altogether remote idea. The basic idea of the teleological serviceability of natural objects that are available and can be singled out from the whole had excluded the possibility that only a knowledge directed at the whole of nature could enable man to assert himself in his personal existence both against and by means of nature. Only the metaphysical suspicion that nature could function without regard to man in its lawfully regulated processes makes urgent and necessary a knowledge of nature that can examine each state of affairs merely for its potential relevance to man and that must therefore reject the criterion of the ‘appropriate expenditure of time’ as a point of view associated with a teleological contemplation of the world. Once theoretical observation of the world could no longer be regarded as satisfying the human need for happiness, the demonstration of the equivalence, in relation to man’s interests, of various physical and cosmological theories was sufficient and conclusive argument for the view that further insistence could no longer justify the expense.

Significantly, in demonstrating this view Augustine makes use of the very question whose definitive solution more than a millennium later was to orient and confirm the self-consciousness of the modern age: the question whether the sphere of the fixed stars stands still or moves. To those of his fellow believers who worried about this question in view of the biblical expression *firmamentum* [firmament: literally, support], Augustine replies that its solution would require ingenious and laborious investigations, to enter into and carry through which he lacked the time, and so should they. For the rest, those who treated such questions—with just as much curiosity as leisure—had found that the perceptible movements of the stars could be explained equally well on either assumption.\(^{24}\)

The distinction accorded to astronomy as the critical objective referent of *curiositas* has, however, another aspect in addition to those discussed so far. This aspect again is directed less at the Gnostic cul-
ivation of cosmic speculation and its 'useless questions' than at the astronomy of the philosophers, which had had the initial effect of creating disenchantment with Gnosticism. It is characterized by the exact prediction of stellar phenomena and the use of numbers, that is, in the widest sense, by measurement. When the human pretension to knowledge gives itself access to the dimension of the future, in phoronomic astronomy, it presupposes an unalterable regularity of nature. For Augustine that means that God’s free and autarchic disposition over His creation is thought of as being excluded by an act of self-restriction.

Augustine deals with this problem exhaustively in a very remarkable context in book 21 of his City of God, namely, in connection with his discussion of the question of the physical possibility of the eternal punishment of the damned. Of course, the ultimate ground of belief in this possibility is divine omnipotence, which has sovereign disposition over everything that can befit its creations ‘by nature.’ But this reference directly conflicts with the ancient world’s traditional concept of nature, with the elementary assumption of a cosmos that persists irrevocably in its regularity. “To what shall I appeal,” Augustine asks, “in order to persuade unbelievers that an animated and living human body is capable of not only continuously evading dissolution by death but also enduring even the torments of eternal fire? They refuse to be referred to the power of Omnipotence, but demand to be persuaded by an example.” The unbelievers’ objection that something could only be considered possible if it could be confirmed as actual by experience is supported by the characteristic and unquestioned premise of ancient philosophy that the world as a whole exhausts all possibilities and at the same time lies open and accessible to human experience. The apologist has to conform to this premise and is thus himself forced into the curiositas that is on the lookout for what is extraordinary and strange in nature. The assertion that there are wondrous things (miracula) in nature encounters the objection that these are nevertheless only nature in those of its workings that are unknown to us and therefore appear extraordinary. Augustine deals only superficially with this argument, which he himself accepts as conclusive, by laying himself open to the objection that he has appealed in support of the naturalness of the miracula to the same omnipotence that he wanted to demonstrate by pointing to them. No less problematical is the appeal in defense of the miracles in nature to the miracle of the creation of nature. For
this supposed fortior ratio [stronger argument] not only presupposes what it is meant to prove but also includes the contradiction to which the Enlightenment particularly enjoyed calling attention that the absolute status of the first, universal ‘miracle’ is made questionable by the later occasional breaches of order.  

The inconsistency of Augustine’s argumentation is itself very significant: On the one hand, he can provide himself with a basis on which to deal with unbelievers and with their concept of the cosmos only by making a point of holding to the regularity of the world and regarding supposed miracles as appearances due to regularities unknown to us; on the other hand, he fears a lawfulness to which appeal can be made, which would give legitimacy to the human inquisitive drive and would leave behind it, on account of its insistence on rationality, only a restricted acknowledgment of God’s free will.

This vacillation due to heterogeneity of motives becomes especially evident in the discussion of a mythical phenomenon of the heavens. In Varro’s Roman Genealogy, an account is given of an alteration in the color, size, shape, and path of the planet Venus in the early epoch of the kings, a unique phenomenon never observed before or after. This testimony is cited in order to show the possibility of a natural object at a particular point in time exhibiting behavior different from what it had been seen to exhibit at all other times and what had been held to be its essential nature. From such a beginning, he could quite well have gone on to explain the unusualness of the phenomenon as subjective, in accordance with the formula that the miracle contradicts not nature but merely the nature that is known to us. This would indeed have meant a broadening, but not an alteration, of the ‘cosmos’ concept: The regularity of nature would have been assumed as not indeed universally verifiable but still pregiven in principle. But Augustine does not hold to this line, and it was to have incalculable consequences for the history of Christian theology that he feared involvement in the cognitive pretension and in the exclusion of voluntarism more than he sought rationality. “So great an author as Varro,” Augustine writes, “would certainly not have called this a portent had it not seemed to be contrary to nature. For we say that all portents are contrary to nature; but they are not so. For how is that contrary to nature that happens by the will of God, since the will of so mighty a Creator is certainly the nature of each created thing? A portent, there-
fore, happens not contrary to nature but contrary to what we know as nature.”

So far he seems to have succeeded in reconciling to some extent the rationality of the cosmos and the volitional nature of the biblical God. But evidently this result does not satisfy Augustine’s theological zeal, and consequently he forces the concept of law and the metaphor of the ruler into an antithesis that is certainly unexpected after what has just been said: “What is there so arranged by the Author of the nature of heaven and earth as the exactly ordered course of the stars? What is there established by laws so sure and so inflexible? And yet, when it pleased Him Who with sovereignty and supreme power regulates all He has created, a star conspicuous among the rest by its size and splendor changed its color, size, form, and, most wonderful of all, the order and law of its course!” It is not evident at first glance why Augustine goes further here than is required by his premise of the subjectivity of ‘miracles’ in nature. But on closer inspection it turns out that the train of thought contains a point directed against curiositas: Augustine believes that he has found the meaning of God’s forcible intervention in the lawfulness of nature in the fact that it breaks through and frustrates the presumptuous claim of scientific exactitude to know the laws of nature and with their help to predetermine events: “Certainly that phenomenon disturbed the canons of the astronomers, if there were any then, by which they tabulate, as by unerring computation, the past and future movements of the stars, so as to take upon them to affirm that this which happened to the morning star (Venus) never happened before nor since.”

The mythical event reported by Varro is set alongside the sun’s standstill in the Book of Joshua, which was so offensive to the early modern age; but it is not suggested that the biblical talk of the movement and standstill of the sun contains information about, and obliges us to acknowledge, a particular cosmological system. Only the sovereign act of intervention, putting in question all claims to theoretical ‘exactness’ (inerrabiltis computatio), is seen as the point of the story.

Nature is not set free as the final authority and embodiment of everything dependable, on which the human relation to reality can be based. The conflict between the idea of the cosmos and voluntarism is decided for the Middle Ages, and at the same time those premises are designated, by implication, whose secular had to become necessary
in order to constitute an idea of science that was to make the absolute dependability of nature a condition of human self-assertion.

That scientific knowledge *prescribes* laws to nature—this triumphant formulation of the outcome of the physics of the modern age—is suspected by Augustine as the secret presumption of theoretical curiosity and imputed to it as the essence of its reprehensibility. He wants us to perceive in the ‘extraordinary’ happenings in nature above all the warning that knowledge of nature may not draw from even the most exact observation of the regularities in the phenomena the conclusion that God may be bound to these rules and that they may be prescribed to Him, as though He could not bring about an entirely different state of affairs from the one that appears to cognition to be lawfully regular.31

Perhaps even more instructive than what explicitly decides the matter for Augustine in favor of the voluntarism that renders consciousness of reality insecure is what is *not* present as motivation and argumentation for this decision. The discussions that have been cited from the *City of God* could still allow the impression that the paralysis of the ancient trust in the cosmos was not an essentially conditioned and internal consequence of the Christian system of categories. Augustine argues from the concept of creation: The right of intervention is the author’s right of disposition. He could with still more theological reason have brought forward the eschatological argument: The partial revocation, through the *miracula*, of the natural order posited in the Creation only anticipates and, as it were, announces the radical revocation of the Creation in the destruction of the world at the end of time. But eschatology not only had largely been repressed from Christian consciousness by the nonarrival of the repeatedly proclaimed final events but was also (for its supporters) the uncomfortable scandal of the unconverted surrounding world. It was not, after all, accidental that Christianity was held responsible for catastrophes of and deviations from supposedly unshakable institutions and orders, since the catalog of signs of the coming end of the world could quite well be interpreted as betraying an ‘interest’ in the disintegration of the world order. Thus the reproaches directed at the Christians can be summarized in the formula that they were the causes of the world’s departure from its laws.32 Augustine finds the Christians being held responsible even in a figure of speech—for the failure of rain to appear: *Pluvia defit, causa Christiani.*33 The connection that had originally been established by Christianity between its appearance in the world and the “sign in the
heavens” announcing the world’s destruction had to appear, on the assumptions of the still influential idea of the cosmos, as the suspect proclamation of a hoped-for ‘disorder.’

To the surrounding Hellenistic world in the time of the Caesars, the right of the Ruler of the World to arbitrariness vis-à-vis His creation could be made plausible more readily than the much more threatening meaning of the supposed miracles as announcements of the revocation of the existence of the world as whole. But just this concealed radicalness stands behind the disputes over the right of curiositas to guarantee itself the future of nature under laws. Dependability, rational constancy, regularity are characteristics of a concept of nature that does not want to admit the world as a metaphysical episode stretched between beginning and end, between creation and destruction. As the behavioral correlate of this concept of nature, with its insistence on man’s intra-worldly possibilities, curiositas is definitively entered by Augustine into the catalog of vices.

Translator’s Note

a. The Latin tentare means to try, to attempt, to test—or to tempt, incite, etc. The German Versuchen has the same thorough ambiguity, which is only faintly suggested by the similarity of “tempt” and “attempt” in English.
Difficulties Regarding the 'Natural' Status of the Appetite for Knowledge in the Scholastic System

The Scholastic reception of Augustine's ideas about *curiositas* can be characterized first of all as a loss of differentiation and a detachment from their genuine motivation. The passages, which were originally embedded in a complex context but often lent themselves to citation because of their rhetorical formulation, are boiled down into 'sentences' and appear as verdicts of 'authority' in the Scholastic questions. The loss of substance in the process of tradition facilitates the change of function. Even where the Scholastic handling of a problem meets high standards in argumentation, the biblical or patristic authorities cited are mostly of questionable relevance; this is sufficiently explained by the fact that in Scholasticism there appear systematic pretensions, and questions developed from them, that demand too much from authoritative texts deriving from an entirely different technique of thought. There are other circumstances as well that had blunted the original problematic of *curiositas* for the Middle Ages; this applies particularly to the position of astronomy, and thus to an exemplary objective reference of the Augustinian *curiositas*.

The position of astronomy in the Middle Ages paradoxically had been weakened precisely by its classification in the obligatory educational system of the liberal arts. Due to the fact that the disciplines of the trivium and the quadrivium had become the propaedeutic curriculum of every course of study, geometry and astronomy underwent the fate that tends to be necessarily bound up with the supposed blessing of propaedeutic 'required courses,' namely, a leveling down
into a burdensome first step, to be quickly surmounted by means of formal expedients, on the way to what appears to be really important. Certainly mistrust of astronomical curiosity is the root of the theoretical stagnation of this science over centuries. But such mistrust became latent under a layer of the employment of the view of the starry heavens for edifying purposes. Occasionally it can happen in the Vita [Life] of a pious man that his astronomical curiosity is mentioned as an episodic attraction, a quickly abandoned byway among dangers happily and mercifully surmounted.1 Or the touching and at the same time very characteristic story is told of Odo of Tournai (who died in 1113) that the master followed the course of the stars with his students far into the night, pointing them out with his finger, while the assurance is explicitly added that this observation of the heavens took place ante ianuas ecclesiae [before the doors to the church].2 Or the comforting connection is established between the course of the stars, obedient to God, and man, who is bound to the same obedience to God’s commandments and to whom the heavenly bodies are meant to serve pro miraculo pariter et exemplo [equally as a miracle and as an example].3 This seems remote from any thought of conflict.

Conflict about the interest in theoretical knowledge broke out when, after the saeculum obscurum [dark age], in the eleventh century, under the influence of Boethius especially, the ancient philosophical tradition again gained ground and (to begin with) the literature of logic determined the development of Scholastic practice. The reciprocal action characteristic of the reception of ancient philosophy throughout the Middle Ages can be observed immediately in this first phase of Scholasticism: At first the ancient authors are taken into service instrumentally, so as to provide means of argument for theology; but the heterogeneous medium for its part immediately begins to have a normative influence on the theoretical pretension, which unfolds its immanent rationality.

The rigorous carry-over of dialectical means to the problems of theology provokes a theological reaction whose first high point can be seen in the thought of Peter Damian (1007–1072). In the opuscule On the Superiority of Holy Simplicity over Inflated Science, all participation in access to the divine truth is denied to the “blind wisdom of the philosophers,” as summarized in the artes liberales [liberal arts]; indeed the pernicious cupiditas scientiae [desire for knowledge] is identified with the temptation of man in paradise to seek equality with God. It is
important that in this work the attack on the presumptuousness of theory is restricted to the trivium, that is, grammar, rhetoric, and dialectic; the disciplines of the quadrivium play no role. Even where Peter Damian explicitly cites Augustine’s concept of *curiositas* as the *desiderium oculorum* [desire of the eyes], he gives no space to its theoretical aspect but restricts himself to enumerating plays, magic, and tempting God by demanding miracles. The core of his argumentation against philosophy is that true wisdom has no need of human expedients in order to open and show itself to those who seek it.

The real importance of Peter Damian is that in his little treatise *On Divine Omnipotence* he raised a theme that was to become not only central but fateful for the Middle Ages: the question of the relation between the idea of science and the concept of God, or more precisely, the question of the compatibility of the necessary presuppositions of knowledge of the world with the theological attribute of omnipotence, which pressed itself more and more into the foreground. That the general question of the relation between theology and philosophy was bound to emerge as a consequence of pursuing this concrete problematic is as yet scarcely to be suspected from this opuscule, which takes as its point of departure this quite arbitrarily, almost frivolously posed question: *Utrum deus possit reparare virginem post ruinam* [Whether God is able to restore a virgin after her downfall].

Here the question of divine omnipotence, which in late-medieval nominalism was to gain a destructive power against the system of Scholastic rationalism and to license the thought experiments of the Ockhamist philosophy of nature, still lacks any disposition toward destruction, any relation to the problem of human freedom and certainty of reality. But Augustine’s schema is nevertheless taken up again, though in a narrower framework: The human cognitive pretension, since it is directed at a lawfulness in the phenomena and has to presuppose this for its success, requires a restriction on the power and freedom, standing behind nature, of the Creator, a restriction that inevitably leads to a collision between the will to theory and religious submission.

Peter Damian sees the problem almost exclusively from the point of view of the validity of ‘dialectic’ for metaphysical/theological assertions. He is concerned to protest the “blind thoughtlessness” of those who pose their questions and give their answers as though the structures of language (*ordo verborum*) and the logical rules of disputation
(ars dialectica) were transferable to God and applicable as unalterable laws to His dealings with the world. Human thought and human language imply a temporal reference; true assertions about past states of affairs involve the unalterability of fact; and assertions about what is present and in the future, since they are either true or false, must assume in these temporal dimensions as well that necessity belongs to their factual correlates. But theology has its own language, which brackets out temporal reference as a human, intraworldly structure and obliges one to think from the point of view of God's eternal presence and unrestricted potential. The premise of omnipotence prohibits a clear-cut separation between theological assertions about God and theoretical assertions about nature. Omnipotence and the continual presence of the world's course for God's disposition excludes the kind of statements about nature in which—as guarantees of lawful dependability—the human relation to reality is alone interested and can find both theoretical and practical fulfillment.

Peter Damian sees—and this is relevant to our subject here—the motive behind the adaptation of the problem of omnipotence to the mode of procedure of the artes liberales as curiositas, as man's pretension to knowledge, insofar as man knows that that pretension may be rendered insecure and threatened by theological premises and consequently wants to secure the metaphysical conditions of the possibility of his objects. For the first time the legitimacy of curiositas is disputed because it is recognized as the exposed attitude of a pretension to rational self-assertion, which subjects the theological categories to the criterion of a possible human relation to the world.

Curiositas is struck at the root of its legitimacy when the admissibility of its conception of its object as 'nature' is disputed: The nature of things is not something ultimate, but rather there is a 'nature of nature' that is withheld from the pretension of theory, a nature that relates to nature as traditionally understood just as the will of the legislator relates to the laws that constitute a legal order for which he can at any time substitute his command. The aspect of nature that appears to man as a lawfulness given with its existence is in reality nothing but its obedience. The supposed ordo naturae [order of nature] turns out to be only an ordo verborum [order of words]. To manifest the Author's right of disposition over the beings He created seems more important to the religious thinker than to exclude self-contradiction from the divine world plan. Thus it is not only a matter here of a...
hypothetical consideration but rather of the statement, regarded as demonstrable from many examples, that since the origin of the world God has broken through nature unnaturally. The same 'miracles,' to expect or to demand which is the 'temptation' (in the double sense that includes 'attempting,' testing) of curiositas, are a phenomenon that man must accept in the world as the stigmata of its origin from nothingness in order not to be charged with curiositas in another aspect. Everywhere the talk is of the supposedly extraordinary things in nature; nowhere is it of wonderment at nature's order, which is suspected of being the self-confirmation of theory's claim to lawfulness.

At the end of the treatise there stands as an illustration of theoretical curiosity the anonymous figure of the philosopher (Thales) who investigates the paths of the stars and falls into the well in the process. The mockery of the maid is directed not so much at the theoretician of Plato's anecdote, who forgets the facts of his earthly surroundings on account of the exalted and remote object of his inquiry, as at the presumption to heavenly—which is to say, here, theological—mysteries, now only metaphorically embodied in the heavenly bodies, a presumption that leads to delusion regarding the load-bearing capacity of the ground on which man stands, the ground that constitutes the condition on which he ventures into those mysteries. The context makes quite clear how this metaphor is intended: Man is misled by the conditions of his language and his thought into posing, and believing himself a match for, questions to which he can only find false answers. Curiositas is erroneous confidence in the form of thought that has proved reliable on earth, and in the lawfulness projected from it onto the heterogeneous object of metaphysics.11

The High Scholasticism brought about by the complete reception of Aristotle gives a new aspect to the problem in view of the difficulties that were involved in the integration of Aristotelian metaphysics and natural philosophy into the system of Christian dogmatics. The absolute value given to knowledge in the first sentence of Aristotle's Metaphysics was the 'program' whose execution did not allow the exclusion of natural philosophy but rather laid a foundation for the process by which it could make its way in spite of all ecclesiastical reservations. In the process the attempt is now made, which we saw that Aristotle himself significantly avoided, to transfer the schema of his ethics with its normative conception of the mesotes [mean]—that is, the localization of what is morally right as the mean between two extremes—to the
pretension to theoretical knowledge. Albert the Great (1193–1280) rejects this transfer of the authentic application of the Aristotelian assumptions when he answers in the negative the question whether the virtue of prudencia (foresight, prudence), can be defined as the mean between the extremes of stultitia (foolishness) and curiositas. This denial is based on the fact that a specific objective reference is ascribed to curiositas by which it can be defined as “investigation of questions that have no importance in reality and for us.” Prudence, in contrast, is the virtue that sticks to what is objectively and subjectively important. But this distinction, taken in itself, must nevertheless be regarded as unacceptable from the point of view of Aristotle’s assumptions if knowledge as such is supposed to be naturally appropriate to man. Albert the Great brings this objection into play when, contrary to the authority of both Augustine and Bernard of Clairvaux, he finds the reason for the reprehensibility of humanly irrelevant knowledge in neither the object nor the act of cognition as such but rather in the knowledge’s motivation, which can be inferred from the irrelevance of the object: The man who investigates such objects, objects that have no relevance to himself, can only have an intention that is wrong in itself. The unstated presupposition of this inference is that man does indeed strive by nature for every kind of knowledge, and thus for every kind of object of knowledge, but that on account of the finitude of his mental capacity—which is substantially exceeded by the extent of its possible objects—he is forced to pose the question of need and to orient his cognitive interest in accordance with it.

It is evident that thereby an assumption begins to play a role in this problematic that had not yet had any significance for Aristotle. Between the subjective cognitive drive and the objective need for knowledge, an incongruence has appeared. This conforms to the medieval system because the world becomes perceptible as an expression and demonstration of divine omnipotence, and thus can fulfill its testimonial function precisely because man’s capacity for theoretical comprehension falls short of the realm of its possible objects. The Scholastic thinker can assume the lively presence of this incongruence to consciousness and infer from it that any squandering of theoretical energy on what is not important for man must be due to a morally reprehensible disposition. Thus the proof is carried out indirectly, from neither the specificity of the objects nor a devaluation of the interest in theory as such.
In Thomas Aquinas (1226–1274) the first sentence of Aristotle's *Metaphysics* is elevated to one of the absolutely valid principles, employed in many kinds of argumentation, of Scholastic thought. The natural status of the striving for knowledge implies the evaluation "Omnis scientia bona est" [All knowledge is good]. Thomas sees that the knowledge of God that is to be ascribed to all men in accordance with the Epistle to the Romans can only be assumed, under the stricter requirements of Aristotelian proof from causality, if the unrest of the cognitive drive—which will not be satisfied by any mere datum—is acknowledged in all men as part of their constitution. Unlike Augustine, Aquinas sees knowledge of God as the fulfillment—not as a condition of the legitimacy—of theoretical curiosity, which precisely in its natural insatiability and universality seems to be the guaranteeing factor and the specific energy of the ascent to metaphysical positions. Not to be allowed to inquire under one's own power into what is hidden would appear, in this perspective, as a denial of the capacity of the Scholastic system as a whole to perform its function. Nevertheless, it is not to be expected that within the system a basic trait of human nature could have been conceived as unaffected by that nature's postparadisaic losses. Quite naturally, then, Thomas too discusses the question of the legitimacy of knowledge in direct connection with the theme of original sin, using the antithesis of *studiositas* [attentiveness, diligence] and *curiositas*.

It is the man exiled from paradise, for whom his own existence and the nature that is no longer paradisaically granted to him have become a pressing task, who stands over against the demands of reality in the tension between appropriate and futile care, between expedient and superfluous expenditure of his abilities and energies. In the *studiosus homo* [attentive, diligent man] we have before us the "virtuous man" [*spoudaitos aner*: literally, "assiduous, earnest man"] of Aristotelian ethics. He is projected into the theological situation (foreign to his origin) of the postparadisaic life in a condition to be characterized on the whole as "effortful," with the basic characteristic of *cura* [care] and the consciousness of the futility of trying to retrieve under his own power the lost fullness of his existence. Precisely the supplementary assumption of futility, which was not yet known to Aristotle in his definition of the "virtuous man," must be kept in mind in order to understand that for Thomas not only restless activity but also resigned indolence
is implicated in the lapse called curiositas—insofar as that lapse is a mark of the postparadisaic situation of the human interest in knowledge.

Thomas sees two extremes of the theoretical attitude and has thus arrived at the possibility of systematization in accordance with the schema of Aristotle’s ethics. “As regards knowledge there is a tension of opposites; the soul has an urge to know about things, which needs to be laudably tempered, lest we stretch out to know beyond due measure; while the body has an inclination to shirk the effort of discovering. As for the first, studiousness lies in restraint and economy, and as such is counted a part of temperance. As for the second, it is praised for a certain eagerness in getting to a conclusion...”¹⁷ A comparison with the meaning that Augustine had given to curiositas shows above all that Aristotelianism has eliminated all the remnants of Gnosticism and made their continued operation impossible. In spite of the original contrariety of the tendencies (inclinatio) of soul and body, no opportunity for dualism can arise because the Aristotelian schema orders modes of behavior on a continuum between two extremes whose ‘mean’ possesses no specificity of its own but is defined by reference to the extremes.

Thus curiositas too cannot set itself off definitionally by its own characteristics but is rather in the nature of a ‘quantitative’ distortion of the cognitive will, a will that is legitimate in itself. Nor can there be too much knowledge of truth (cognitio veritatis) itself but only too much driverness and industry (appetitus, studium) directed to this end.¹³ The stipulation already set down by Albert the Great is held to: Knowledge can only fail per accidens [by accident, i.e., not by its essence] to have its intended value when something objectionable and harmful results from it indirectly or when it motivates pride (inquantum aliquis de cognitione veritatis superbit).

The Augustinian idea of the inquiry that does not maintain the proper religious connection, the non religioso quaeere, finds in Thomas a very characteristic modification and Aristotelianizing correction. He does not attribute the error of curiositas to the absence of a recognition of conditionality by which the subject attributes his cognitive ‘accomplishment’ in the last analysis to God but sees the perversitas [perversity] rather in that the subject does not trace his objects back to their ultimate origin: “Man desires knowledge of the truth about the Creation, without carrying it through to its proper purpose by relating it to the knowledge of God.”¹⁹ Here curiositas lies precisely in the transitoriness and pre-
maturely satisfied inconsistency of the desire for knowledge, in a lack of the ‘thoroughness’ that has to exhaust the depth of the objects in their reference to their derivation and ultimate origin.

Curiosity is superficial dwelling on the object, on the prospect of the phenomena, a dissolution into the breadth of arbitrary objective variations, which represses the cognitive claim by resting content with truths while giving up all claim to the truth. But for Thomas the responsibility of the cognitive subject no longer leaves the level of theoretical accomplishment and its persistence but rather is developed precisely on and from this level. On this basis a fundamental and specific reservation against philosophy is no longer possible. Interesting oneself in philosophy is in itself and as such permitted and to be accepted, even and especially on account of the truth that was arrived at by the philosophical ‘authorities’ before the Christian era, even if on the basis of a sort of revelation that can only be recognized as such after the fact, but whose recognition does not necessarily belong to the ‘substance’ of this truth, as had been required by Tertullian.

The special position of astronomical curiosity in the complex of the question of the appropriateness of the appetite for knowledge also has its reflex in Thomas. After all, Aristotelianism had created a special and lasting reservation for the theoretical exercise of astronomy and for its concept of truth by sanctioning the dogma of the elementally different nature of the heavenly bodies and thereby systematizing a hiatus between types of physical objects for epistemology as well. In his commentary on Aristotle’s treatise On the Heavens, Thomas uses this reservation to dismiss certain cosmological questions, for instance, the question of the provability of the actual direction of rotation of the first sphere of the heavens. “If someone exerts himself to make assertions about such difficult and obscure matters and wants to assign them causes, and thus claims to extend his inquiry to everything and to omit nothing, then this must be regarded either as an indication of great stupidity, from which arises his inability to distinguish between the accessible and the inaccessible, or as an indication that he proceeds with great thoughtlessness and ultimately presumption, from which it appears that the man does not correctly evaluate his ability in regard to investigation of the truth.”

Thomas immediately restricts this general censure by adding that not everyone who has interested himself in this way in a fruitless subject can rightly be condemned for it, but rather it still depends on
the motive from which they made their assertions. It is not the same
thing if someone expresses such things from love of truth (ex amore
veritatis) as if he does so from the need to exhibit his own ability (ad
ostentationem sapientiae). Further, one has to ask how far he laid claim
to certainty for his assertions and whether he could have made his
judgments on the basis of insight exceeding the usual measure. "If
someone has gone further and achieved greater confidence in knowl-
edge of the essential causes of these phenomena than seems possible
according to the usual measure of human knowledge, then thanks
rather than blame is due to such discoverers of necessary causal
connections."

The admirer of Scholastic speculation may find it disappointing that
for the determination of the well-tempered mean of cognitive assiduity
the mutually opposed tendencies of body and soul—as the indolence
that avoids the effort of inquiry, on the one hand, and the facility
tending toward excessive zeal, on the other—are put to work. For
those who require a specifically medieval argumentation, another
question of the Summa theologica offers a more extensive and more
precisely suitable account. The acedia [indifference, apathy] that is
dealt with here accommodates itself better to the syndrome of the
'postparadisac' situation. Thomas uses this cardinal vice to epitomize
the despondency and indolence of the man who has deviated from
his vocation, who conceals from himself in this pure melancholy the
seriousness of the cura, actio, and labor [care, action, and labor] that
are his task. Acedia is a form of sadness that surrenders itself to its
own heaviness and thereby turns away from the goal of its existence,
indeed, from all purposeful behavior and 'exertion' whatever [fuga fnis
[flight from purpose]]. Curiositas is only one of the forms that this
purposelessness takes. Here lies the connection with its definition as
inconsistency, as premature failure with respect to the demands of a
reality that no longer holds itself open to man in immediate self-
givenness.

The description of this mistake as straying toward illicit things, as
dispersion, once again takes up the motive that in Neoplatonism had
been behind the soul's turning away from its essentially appropriate
concentration on the contemplation of what is purely spiritual and
that was supposed to explain the one world soul's own multiplication
of itself as a result of a surrender to the manifold of worldly things.
That dispersing curiosity was the weakness of something that itself
could not become pure spirit and that consequently came to be dominated by the powers in whose force field it stood. Fulfillment and failure were determined by the direction in which vision was directed; beyond that there was only surrender to the superior power of either the spiritual or the material.

In Thomas it can be seen to what an extent the Neoplatonic diagram of external relations, the drama of turning toward and turning away, has become internalized. External seduction is seen as inner danger, foreign superior power as an immanent moral quality. Thus curiosity too is a fundamentally wicked disdain, concealing itself behind supposed justification—a disdain of the absolute object, to turn away from which and to lose oneself in dispersion constitute the definition of curiosity. When the soul allows itself to become indifferent to its highest object, to the source of its fulfillment, it indulges in a calm that it should expect only beyond earthly existence in the perfect contemplation of the only object appropriate to it. The radicalness of this error is at the same time its peculiar rationality, since this anticipatory version of the transcendent condition arises from the discontent of a finite being in his present neediness in view of the infinite riches of the Deity. It does not take seriously the preliminary nature of its want of truth but rather perceives the still inaccessible blissful satiety of the Deity as the provocation of an unfulfilled promise. Of course, to convert the promise of salvation into mere impatience and restlessness is, for the medieval author, the summit of deadly sinfulness.

This description of wickedness has phenomenological relevance to the trial of theoretical curiosity: New motivations become discernible behind the negative evaluation. The attributes of divinity have acquired anthropological importance. Theodicy no longer holds man unquestionably in the wrong, and even his sin is more than mere error—it acquires a glimmer of plausibility. Man’s competition with the Deity, his comparison of his own with the divine possessions, has become formulable as something reprehensible. Thomas compares man’s sorrow over not being God Himself (tristitia de bono divino interno) with the individual’s envy of the possessions of another (invidia de bono proximi).24 Curiosity would then be the sort of compensatory extravagance that provides itself with a substitute, in the enigmas and mysteries of the world, for what man has given up trying to reach. From this we can understand curiosity’s pact with the devil, which was to
make the figure of Faust into the image of the emancipation, seen in terms of medieval assumptions, of early modern *curiositas*.

The resignation that is expressed in the idea of *acedia* with respect to the absolute object that had been ‘wooed’ for centuries—the theological/metaphysical discouragement with respect to the God Who withdraws in His sovereign arbitrariness as *deus absconditus* [hidden God]—will determine the ending of the Middle Ages and the revaluation of theoretical curiosity that was essential to the change of epoch. The vice of disregarding the preliminary character of this life was to be replaced by the conception of man’s theoretical/technical form of existence, the only one left to him. From melancholy over the unreachability of the transcendent reservations of the Diety there will emerge the determined competition of the immanent idea of science, to which the infinity of nature discloses itself as the inexhaustible field of theoretical application and raises itself to the equivalent of the transcendent infinity of the Diety Himself, which, as the idea of salvation, has become problematical.

What Thomas Acquinas describes as the abyss of human sinfulness, man’s mistrust regarding his promised share of God’s inner wealth in a next-worldly form of possession—this ultimate intensification of the discrimination against theoretical curiosity as the mere negation of theology for human self-consciousness—at the same time makes visible a new motivation, by means of which the alternative of renouncing transcendent uncertainty is defined. That which within the medieval system can only signify man’s dull torpidity in the consciousness of the share in the Diety’s possessions that is denied to him here and now—that is, *acedia*—was to become the energy and the epochal exertion of a new historical form of existence. In the perfection of Scholasticism the potential for its destruction is already latent.

In regard to the *curiositas* problem, Scholasticism, placed between its two great authorities, Augustine and Aristotle, got into an extremely significant dilemma. The Aristotelian affirmation of the appetite for knowledge, on the one hand, and the restriction commanded by its Augustinian classification in the catalog of vices, on the other, appear to introduce into the system a contradiction that can only be reconciled or concealed by ingenious sophistries. But here one should not rely too quickly on the assumption that the elements of the tradition enter into and operate in the new constellation as constant factors. At least one of the preconditions under which the first sentence of Aristotle’s
Metaphysics could have a legitimating function no longer persists unchanged and unquestioned for Scholasticism; that precondition is the premise, which was present in Aristotle but not made explicit, that the human capacity for knowledge is in principle equal and adequate to its natural object, so that at least there does not need to be a significant excess of what is knowable over what is actually known, and thus the element of necessary economy, with its discrimination between the necessary and the superfluous, does not come into play.

What this means immediately becomes clear when one considers the professedly strictly orthodox reception of Aristotle by the Paris Faculty of Arts, whose leading figure was Siger of Brabant (ca. 1235–ca. 1284). In connection with man’s natural striving for knowledge, a question becomes central that Aristotle had never explicitly posed because under his assumptions it simply could not become acute: the question whether the pretension to knowledge can be fulfilled if one were to affirm that knowledge of the world could be achieved as something finite and definitively complete, if the organ of knowledge and the object of knowledge could be shown to be coordinated in such a way that “the soul is potentially everything in existence,” then the idea of superfluous knowledge, knowledge that does not concern man, would remain powerless over against that preformed congruence. Siger of Brabant offers exactly this solution to the problem. He asks whether man’s ability to acquire experience and knowledge can be fully realized or whether it is a potentiality extending into the infinite and decides in favor of the possibility of consummating this capacity. Neither an infinity of the possible objects of knowledge nor an infinity of increasing degrees of knowledge is to be assumed; the number of the kinds of entities (species entis) is finite, and in confirmation of this there is a perfectio scientiae [perfection or completion of knowledge] as definition and proof.25

Thus Siger gave the clearest and most definite expression to the systematic principle inherent in the Scholastic Summa, and in fact precisely because he does not take into consideration the authority of the Augustinian idea of curiositas and its background, the situational definition of fallen man. The principle of the thoroughgoing rationality of a finite reality excludes the concept of a theoretical curiosity that is essentially restless and not to be satisfied by an attainable amount of knowledge, and cuts the ground from under its demonization. But the Middle Ages resisted this consciousness of a reality that could be
completed in itself; they viewed the orthodox Aristotelianism of the Faculty of Arts with suspicion and regarded restlessness in view of the infinitude of truth possession as an energy essentially aimed at transcendence. That unrest only needed to be protected from the risk of curiositas in order to be maintained as the permanent motor of the human need for transcendence. How ‘conservative’ the position of Siger of Brabant was in fact and could have been in its effects remained hidden from the age.

One will scarcely be able to maintain that the high esteem of Dante (1265–1321) for Siger of Brabant was due to a clear perception of this relation, especially if one accepts the most common interpretation of the figure from the Inferno that can most readily be associated with the idea of curiositas: the figure of Odysseus in the twenty-sixth canto. Here one meets not the hero of the Homeric saga who passes through the peril of the Sirens but rather the Odysseus whom Dante consistently ‘further developed’ and freely invented on the basis of the restlessness of his curiosity about the world, the Odysseus who does not return home to Ithaca but rather undertakes the final adventure of crossing the boundary of the known world, sails through the Pillars of Hercules, and after five months of voyaging across the ocean sights a mysterious mountain and is shipwrecked. Virgil and Dante meet the ancient hero in the eighth circle of hell among will-o’-the-wisp tongues of flame in the cesspool of the deceivers, and from him they learn the story of his last voyage.

Is this still the entirely medieval figure of reprobate curiosity or is it the first presentiment of its revaluation in the transition to the modern age? To begin with, it is clear that the specificity of the punishment in hell that befell Odysseus has nothing to do with his adventurous curiosity and his last venture. The Odysseus who is being punished is the deceitful adviser who coaxed Achilles into his fatal destiny before Troy and contrived the fall of the city by means of the fraud of the Trojan horse. The punishment makes amends to Virgil, the Roman, who in the Aeneid had traced the prehistory of the founding of Rome back to Aeneas, the Trojan, and who must have seen the Greek stratagem with the eyes of the Trojans and condemned it; in the Aeneid, Odysseus had been characterized as the inventor of criminal tricks. The tragic end of Dante’s Odysseus in the ocean has in its turn the character of an ‘appropriate’ fate: The man who had awakened the curiosity of the Trojans by means of the wooden horse and thus
deceitfully brought about their downfall himself has a downfall into which his curiosity tempts him at the sight of a fateful objective, the dark mountain rising out of the ocean. Dante gives to the magnitude of this figure, who evidently fascinates him, a world scope that does not end at the Pillars of Hercules, that is, at the boundary of the known world. Odysseus is allowed to cross the ocean for five months more, in order—as he persuasively promises his companions—to acquire virtue and knowledge (per seguirt virtute e conoscenza). Is this speech of Odysseus also deceitful counsel, for which he has to suffer in the inferno?

Dante leaves his Odysseus standing in twilight: The foolhardy venture (folle volo) does not lead to the sought-for discovery of an uninhabited world (mondo senza gente), but rather the rejoicing of the companions at the sight of the unknown land (nuova terra) dies amid turmoil and destruction. Dante takes pains to contrast his own curiosity about the realm of the hereafter with Odysseus's disastrous independent boundary crossing; what he himself is deemed worthy of seeing is granted him by a higher power and made accessible by gracious guidance, and he takes care not to show himself unworthy of this dispensation. Dante can ascend the same mountain against which Odysseus was wrecked because he does not give himself up to his own will and to the appetite for experience but binds his venture to the direction of salvation. In each new region that is opened up to him, what he perceives is not primarily the theoretical quality of something that has never before been seen but rather the moral import of justice having been done, the contrapasso [retribution] between this world and the next. Thus curiosity still has need of a transcendent legitimation that is oriented toward something more than theory. In the Paradiso, Dante can ask Adam about the essence of the first sin, and it is explained to him as transgression of the sign (il trapassar del segno). Odysseus is the still unredeemed heir of the original sin that had been the transgression of the limits set for man: He transgresses the sign of the inhabitable world that is 'assigned' to man so as to penetrate into uninhabitable regions. He disregards the world's partial providence for man.

Dante created a position in his 'system' that a new consciousness could reoccupy and revalue; in the latter part of the sixteenth century, Torquato Tasso in his Liberated Jerusalem could view and evaluate the passage beyond the Pillars of Hercules anew, in a clear allusion to the
twenty-sixth canto of the *Inferno*, because in the meantime Columbus had reached and set foot upon the *nuova terra* [new land]. The self-confirmation of human curiosity has become the form of its legitimation. The metaphysical premises are ‘outdated’ by appeal to the success of what was unlooked for; history has become an authority to which to appeal against metaphysics. “Hercules didn’t dare to cross the high seas. He set up a sign and confined the courage of the human spirit in an all-too-narrow cell. But Odysseus paid little heed to the established signs, in his craving to see and to know. He went beyond the Pillars and extended his audacious flight (*il volo audace*) over the open sea.”

The self-consciousness of the modern age found in the image of the Pillars of Hercules and their order, *Nec plus ultra* [No further], which Dante’s Odysseus still understood (and disregarded) as meaning “Man may not venture further here,” the symbol of its new beginning and of its claim directed against what had been valid until then. On the title page of Bacon’s *Instauratio magna* [Great Renewal] of 1620, Odysseus’s ship was to appear behind the Pillars of Hercules, interpreted by this self-confident motto: *Multi pertransibunt et augebitur scientia* [Many will pass through and knowledge will be increased]. And in 1668 one of the first attempts to draw up a balance sheet of the new age of science will appear under the title *Plus ultra* [Further yet].

Dante’s Odysseus is still not a figure of the Renaissance, of rebellion against the Middle Ages. If the dark mountain, at whose emergence from the sea the “foolhardy flight” finds its end, was meant as the mountain of the *Purgatorio* and of earthly paradise, still in any case Odysseus’s hubris was not that of seeking and wanting to possess that earthly paradise. If it is not only in our eyes that this figure possesses tragic greatness, then this is noticeable in Dante at most in the restraint with which he applies his categories of value to this case; this damned soul is after all the only one in the circles of the inferno from whose mouth no word of self-accusation or self-condemnation comes. The figure regarding whose worldly curiosity Cicero and the patristic writers were already unable to reach a unanimous evaluative judgment here again signifies an undecidedness, or at least the difficulty of measuring this attitude to the world, in particular, against the valid or still valid standards of the epoch. That would already suffice to say that something new is beginning to define itself. The metaphysical reservations no longer enjoy unquestioned validity. Even before practical experience comes into play, confinement in the given world that is sanctioned
by traditional cognizance is tested, in the imagination, for pervious and transparent zones that no longer lead into transcendence.

As one of the great moments that oscillate indecisively between the epochs, I would like to mark April 26, 1356, when Petrarch ascended Mont Ventoux—"purely out of the desire," as he writes, "to see the unusual altitude of this place." The comparatively modest excursion is stylized into a symbolic venture, in which desire verging on the sinful and pious timidty before what he had never set foot upon, daring and fear, presumption and self-recollection combine in an event whose attributes one could label "deeply medieval" just as much as "early modern." Petrarch's appeal to the ancient example of King Philip of Macedonia on Mount Haemus in Thessaly plays a role here, just as does the entirely Ciceronian justification that such a venture might be excusable for a young man who is not involved in public affairs (excusabili in iuvene privato). Nature offers resistance to the intrusion: Sola nobis obstabat natura loci. Petrarch's portrayal of his goings astray and exertions gives it the appearance of a prodigious undertaking (ingentem conatum). An old herdsman appears as a cautioner, who himself had once reached the summit under the impulse of youthful spirit but had brought away only repentance and hardship (penitentiam et laborem). One of the typical motives of curiositas—reservation and prohibition—enhances the appetite: Crescebat ex prohibitione cupiditas. All of this presents itself as a monstrous human temptation, and the experience on the summit accords with this: Stupenti similis steti [I stood as though amazed].

But this experience is not exhausted by the overwhelmed and deeply stirred contemplation of what had been anticipated and now lies in view; entirely within the schema set up by Augustine, memoria prevails over curiositas, inwardness over affectedness by the world, concern for salvation over the passion for theory, but also the temporal reference over the spatial situation. The competition between outside and inside, between the world and the soul, ends when Petrarch opens the pocket edition of Augustine's Confessions that he always carries with him and providentially hits upon a passage in the tenth book in which amazement at the heights of the mountains, the tides of the sea and flooding of streams, and the paths of the stars is set in sharp contrast to man's self-forgetfulness. Once again Petrarch is as though stupefied and is angry with himself for his admiration of earthly things; he rests content with what he has seen and turns his inner attention to himself.
he considers, in retrospect, the mountain that previously had attracted him, Nature now shrinks into insignificance: “Et vix unius cubiti altitudo visa est prae altitudine contemplationis humanae...” [And it appears scarcely a cubit in height in comparison to the loftiness of human contemplation].

This amazing transposition of the category of conversion onto the beginnings of a new consciousness of nature and the world, which was ostensibly put on paper on the evening of the same day and turned into a humanistically stylized communication, into conscious literature—which indeed was perhaps never anything more than literature, if the doubts regarding the reality of the event are correct—is an exemplary case of the supposed constancy of literary topoi [occasions, topics] and the methodological value of tracing them. What Petrarch describes is like a ritual with regard to which the ideas and justifications that gave it meaning are long vanished and which as a fixed sequence of proceedings can be carried out again with the legitimacy of the new, free endowment of meaning. The description of the ascent of Mont Ventoux exemplifies graphically what is meant by the ‘reality’ of history as the reoccupation of formal systems of positions. Even when Goethe climbed to the summit of the Brocken in December 1777 and saw “the environs of Germany” spread out below him, this had not yet become a commonplace diversion but was still, as he stylized it in writing to Merck in August 1778, “naturally a most adventurous undertaking.” The forester responsible for the area “could be persuaded only with difficulty” to guide him to the summit, and the letter writer claims to have observed that the forester “himself was lost in wonder... because while living many years at the foot of the mountain, he had always considered the ascent impossible.” Goethe carries no Confessions with him; he has to meet his own needs in this respect, through half a month of painstakingly staged withdrawal from the world: “There I was alone for fourteen days, and no man knew where I was.” The great gesture of Sturm und Drang still presupposes a ‘position’ of extraordinary behavior that had once been labeled blasphemous lingering.
Preludes to a Future Overstepping of Limits

Dante’s Odysseus, shipwrecked in view of land that had never been seen before; Petrarch on the summit of Mont Ventoux, retracting his aesthetic curiosity about the world before it had scarcely begun—are they figures of the specific novelty in whose terms the modern age [die Neuzeit: the new age] was to recognize and form itself self-consciously? Raising this question once again calls for a further differentiation and a comparison with other transformations of the attitude to the world that were accomplished at the beginning of the fourteenth century.

Common to both figurations—the voyage into the uncertain, and the ascent of the mountain that resists access—is the goal of satisfaction through mere vision. Once again the ancient theoria [viewing, contemplating] is sought as existential fulfillment in the entwined categories—which are dissociated for the modern interpreter—of the theoretical and the aesthetic. It is easy to see that such theoria has practically nothing in common with the attitude to the reality of nature that was distinguished and idealized as ‘scientific’ at the beginning of the modern age. Opening up access to new outlooks on the given world may have been perceived as the daring of curiosity, but for that very reason it lacks the kind of position in the system of man’s existential necessities that had to be established for it. Need for the world is excess, the free amplification of a margin around the core of what man by his nature had to be concerned about. Hence the attribute of the folle volo [foolhardy venture], hence the almost anxious recourse to Augustine’s
Confessions, the message of which in both cases is man's basic care for his salvation. Odysseus misses the deadline of five months on the world sea that might have been set for his timely turning back; Petrarch accomplishes his 'conversion' to inwardness with what is meant to be exemplary timeliness before losing himself to the overwhelming view of the world.

The curiositas schema based on the antithesis of necessaria [necessities] and supervacua [superfluities], with the effect of 'withdrawing' a cognitive appetite initially set free but then negated by contrast, is also found in a letter that Petrarch wrote a year later about the location of the mysterious island of Thule. After an exhaustive discourse of ostentatious humanistic erudition, Petrarch breaks off bruskly and converts theme and interest just as he did on Mont Ventoux: "The discord here is so great that the island seems to me to be no less hidden than the truth. But let it be. What we have sought with eager effort we may safely ignore. Let Thule remain hidden in the North, let the source of the Nile remain hidden in the South, if only virtue gains a firm footing in between them and does not remain hidden. . . . So let us not expend too great a labor in ascertaining the location of a place that we might perhaps gladly leave as soon as we found it. . . . Even if it is denied to me to search out these secret hiding places and to gain information about these distant regions, still it will be sufficient for me to know myself. It is here that I shall be open eyed and fix my gaze. . . ." Humanism and Christian humilitas [humility] mesh with one another, but they always 'demonstrate' this intermeshing first of all as the breaking off of a substantially complete exertion, whose continuation promises nothing because the canon of the ancient tradition appears as the epitome of possible knowledge. The mention of one's personal and new opinion on occasion is only a friendly concession to curiosity: "After all it really is curiosity, knowing the important opinions of the ancients, to want to hear my opinion as well. But friendship is after all curious through and through. . . ." Curiositas is also a category in the polemics of enmity; in his attack on an Aristotelianizing doctor, Petrarch employs this tool with malicious severity. An instructive aspect of this text is the change in function of the antithesis between necessarium and supervacuum as soon as it is a question of the necessity of poetry, which the doctor had disputed: The ars mechanica [mechanical art] of medicine does indeed concern itself with the necessarium of health, but precisely therein it does something bas-
ically superfluous because what is necessary is God-given; in connection with poetry, however, this criterion does not apply because poetry comes from man and for that reason alone cannot be ‘necessary.’ One can see the embarrassment into which such a schema leads but also how it can be functionally transformed so as to extract a justification from the embarrassment.

Curiositas could be rehabilitated only by freeing it of its characterization as ‘caring’ about superfluous matters. It had to be brought into the central precinct of human care. But that presupposed the resolution of the competition between the concern for salvation and the need for knowledge in a new conception.

This process was accomplished thanks to two preconditions. The first was that the concern for salvation was largely removed from the sphere over which man has disposition, the sphere of his free decision and just deserts. This alienation of the certainty of salvation from self-consciousness and self-realization was accomplished by a theology that traced justification and grace exclusively to the unfathomable divine decree of election, which is no longer bound to man’s ‘works.’ Nominalistic voluntarism, with its central emphasis on predestination, made man’s care appear impotent in relation to the requirement that one possess a faith that was no longer initiated by the autonomous summoning-up of human obedience. It is easy to see that an act like Petrarch’s retraction of his aesthetic interest in the world had only been meaningful on the assumption that inner concentration on what a man most needed could also turn away his distress and ‘take care of’ his needs. The Middle Ages would have been unthinkable in the full range of their manifestations without this sustaining axiom. The radical displacement of the preconditions of salvation into transcendence could plunge man into uncertainty and fear, but it could no longer determine his action or the direction of his essential interests.

A second precondition of the rehabilitation of curiositas is closely connected to the first through its origin: The world as the creation could no longer be related to man as the expression of divine providence, nor could he understand it as the first and natural revelation. It was hermeneutically inaccessible, as though it had become speechless. Thus one’s attitude to the world was no longer preformed by the object. The constitution of the objects of theory was now accomplished under conditions first posed by man in a system of his concepts and hypotheses, just as the constitution of the objects of practice was ac-
accomplished exclusively from the point of view of the power of disposition achieved at any given time and the constitution of aesthetic objects was accomplished as the perception of a possibility that no longer was presented but rather was accomplished in the perception, succeeded only in the subject.

The self-assertive character of the theoretical attitude eradicated the immediacy of contemplation [Anschauung], the meaningfulness of watching the world from an attitude of repose, and required the aggressive cognitive approach that goes behind appearances and proposes and verifies at least their possible constitution. Theoretical curiosity, and the confirmations that it was to provide for itself when it was constituted as 'science,' could no longer appropriately be disqualified as superfluous. The question, which had become open in every respect, what one had to expect from reality did not (for instance) repress the medieval concern for salvation; rather it took over the position of the concern for salvation as the one thing left in which man could center his interest and from which he could derive attitudes.

The element of cura [care] in curiositas now becomes the very root of its meaning, which legitimizes the cognitive appetite as the attentiveness that is provoked by the world. The modern age began, not indeed as the epoch of the death of God, but as the epoch of the hidden God, the deus absconditus—and a hidden God is pragmatically as good as dead. The nominalist theology induces a human relation to the world whose implicit content could have been formulated in the postulate that man had to behave as though God were dead. This induces a restless taking stock of the world, which can be designated as the motive power of the age of science.

It is characteristic of such situations that every defense of the existing state of affairs goes in the wrong direction; that is, it grows independent in its function and ceases to serve the intended purpose. The second half of the thirteenth century had as a conservative front-line defense the rejection of the Aristotelian philosophy of nature. The high point of this futile exertion was the condemnation of 219 Aristotelian propositions by Tempier, the bishop of Paris, in 1277. For the 'trial' of theoretical curiosity, it is decisive that this index of the prohibited actually functioned as the source and documentation of the license not to identify the traditionally received knowledge about the cosmos with the plan of creation. What was intended as a defense of theology against physics became in its turn an authority for what was not well
established, an authority to which a new physics could appeal in defense of its right to ‘play through’ constructive hypotheses and thus to criticize a world model that had served High Scholasticism as the incontestable key to its rational theology. The diversion of interest from a world whose perspicuity was supposed to become doubtful, the intended radicalization of reliance on salvation, miscarried profoundly. The first sentence of Aristotle’s *Metaphysics* could have been modified so as to say that man has to strive for knowledge, not indeed ‘by nature,’ but as the being who is exposed to this uncertain world, whose ground plan is hidden from him.

William of Ockham (ca. 1300–1349) takes it as an elementary stipulation that reason is hardly sufficient to provide what is needed for salvation. That could easily be reinterpreted as implying that the theological impotence of reason by no means excludes its theoretical potency when directed at the world. Raising theology to its maximal pretension over against reason had the unintended result of reducing theology’s role in explaining the world to a minimum, and thus of preparing the competence of reason as the organ of a new kind of science that would liberate itself from the tradition.

Of course this science could no longer claim to penetrate into the thoughts of the hidden God and pose the question of the divine conception of the world. It had to restrict itself to explaining the phenomena by means of hypotheses and to give up any claim to the ideal of precise adequacy in its concepts and standards of measurement. Along with the Aristotelian cosmology, the absolute cognitive pretension of the Aristotelian theory of knowledge—the natural coordination of subject and object—had to be surrendered. But from the difference between a pretension to rational deduction and an admission of empirical provisionality and withdrawal into the hypothetical there emerged a new freedom from restriction for man’s cognitive will. The problematic of the legitimacy of theory resolved itself on the level of a reduced pretension, which included from the outset the continual revisability of its results. But the implementation of this logic still lay far in the future; the loosening of the structure and widening of the margin of variation were not yet sufficient to put in question the Scholastic system in its totality, to make the reoccupation of its central positions unavoidable. After all, the Middle Ages did not come to an end in the fourteenth century.
The immediate fruitfulness of nominalism for natural science may be appraised as slight in comparison to the positive findings that were to be realized in the time between Copernicus and Newton; indirectly, though, the scientific progress of the early modern age is based on the destruction of the Aristotelian dogmas, on the one hand, and the new legitimation of interest in nature, on the other—both of which had been substantially accomplished by nominalism. The reproach that in spite of all its productivity in the philosophy of nature, Ockham’s school did not accomplish what it could have accomplished with the means it developed closely touches the subject of curiositas. To what extent did the demolition—motivated by the nominalist premises—of the barrier that was constituted by the notion of curiositas succeed in fact? I would like to discuss this in relation to the very involved question of why it was that nominalism did not employ the methods for the quantitative definition of objects, which it had developed in such widely circulated books as Bradwardine’s *Tractatus proportionum* (written before 1349) and Swineshead’s *Liber calculationum* (ca. 1350), in the measurement and description of physical phenomena.

There was a “sort of logical and physical casuistry,” in which extremely complicated and subtle processes were constructed, but the magnitudes inserted into these processes were always of purely speculative and nonempirical derivation. The ontological replacement of the category of substance by the category of quantity had indeed established the ideal of handling all possible problems by calculation; but in the generality of this groundwork, those intermediate methodical and technical steps had not yet been taken that could lead to the indirect determination of measurements. This concrete incapacity could have discredited a premature beginning very quickly, and one might almost be inclined to believe in a sort of self-protection on the part of the anticipation—pregnant with the future—of possibilities that had become conceivable in principle. But the Ockhamistic ‘physicists’ of the fourteenth century “carried out no measurements even where they could have done so without further ado.”

Here a theologically motivated lack of courage was involved, which based itself on, of all things, the biblical saying that is so readily cited for the opposite purpose in the context of the Platonic tradition: *Omnia in mensura, et numero, et ponder'e disposuisti* [You have arranged everything by measure, number, and weight]. On the assumptions of nominalism, according to which human thought is not capable of penetrating into God’s
souvereign dispositions and there can no longer be Idealities possessing transcendent authority, this ancient cosmic formula itself deprives man of all pretension to equivalence. The nominalistic cognitive means could and should only be heterogeneous with respect to the unknown constitutive principles of the world. The entire nominalistic theory of knowledge and concept formation was based on this assumption and everywhere opposed human economy to divine abundance. The calculations [calculations] too, being intellectual operations produced by man, had to have this same capricious character.

The example of the dictum cited from the Wisdom of Solomon illustrates clearly all the awkwardness and complexity of the historical relation between theology and the establishment of an autonomous theoretical consciousness: A saying derived from and based on Hellenistic thought that had found its way into a collection of sayings that was in any case perceived by the Christian tradition as out of place within the biblical canon, and was therefore readily cited by Platonizing metaphysics as evidence of the Christian suitability of the ancient conception of the cosmos, becomes on nominalistic assumptions an authority for the radically opposed position, for the essential hiddenness of the divine order of measure vis-à-vis human theory. God has indeed ordered the world according to measure, number, and weight; but this must now be read with a possessive pronoun: according to His measure, according to magnitudes reserved to Him and related to His intellect alone.

The sentence from the Wisdom of Solomon defined a theological, no longer rationally penetrable mystery; it put human reason, insofar as the latter considered itself capable of drawing conclusions from that sentence for its pretension to knowledge, at a distance from curiositas, in the sense (which now becomes significant) of the attempt to make objective theoretical sense of assertions imputed only to faith and withheld from all verification. To Augustine, the exact measurement and mathematical prediction of astronomical data had appeared as an example of an astonishing human achievement, which, however, precisely on account of its security, seduces man into impia superbia [impious pride] by making him forget its dependence on the participation in cosmic rationality that God bestows on man. The barrier of sinful curiositas that Augustine thought he had erected against the activation of this capacity was composed of moral and religious self-restriction, not resignation enforced by the subject matter itself. The
nominalistic theology shifted the hiatus between the regions of faith and knowledge, which had become more clearly demarcated during the centuries of Scholasticism; it no longer needed, like Augustine, to be convinced of the productivity of astronomy in contrast to cosmological speculation, since in the outgoing Middle Ages the disappointments of the supposed exactitude of astronomy had become palpable even in everyday life owing to the increasingly scandalous lack of a reliable calendar.

There is a position that in effect makes a dogma of the pre-Copernican situation. It found expression in the doctrine of the incommensurability of the movements of the heavens, for which Nicole of Oresme’s treatise De commensurabilitate vel incommensurabilitate motuum caeli (written before 1382) is the most important document. It is characteristic of the phenomenon of ‘physics without measurement’ that once Oresme has discussed the two antithetical possibilities of the problem as he poses it, he avoids any decision and denies man in principle the capacity to decide between them. In a poetic fiction he recounts how, when he was still brooding and absorbed in the problem, Apollo appeared to him in a dream, in the company of the Muses and the Sciences, and reproached him with troubling himself about a question whose solution exceeded man’s powers and with which he had plunged himself into an affliction of the spirit and interminable trouble. Since he nevertheless begs the god for an answer, Apollo commands the Muses and the Sciences to fulfill this request. Thereupon a disputation ensues between Arithmetic, who stands up for the thesis of commensurability, and Geometry, who defends the incommensurability of the movements of the heavens. But before Apollo, who appears in the role of the magister—the arbiter in the Scholastic disputation—has given his determinatio [determination of the result], the dreamer awakes, and the problem remains unsolved.

Oresme inclines, as can be seen in his Traité du ciel et du monde, toward the hypothesis that at least some of the components of the motion of the spheres of the heavens stand to one another in an irrational proportion of their speeds of rotation. This has the subjective consequence that ratio per numeros [reasoning with numbers] is necessarily futile; hence Apollo’s reprimand: Pessima est tua occupatio, affictio spiritus est et labor interminabilis. No less important is the objective consequence: Each irrational proportion is a violation of the cyclical recurrence of a total cosmic constellation, the abolition of the finitude
of a greatest world period, and thus of the Aristotelian assumption of a symmetry between the beginning and the end of time—an assumption that had been used by the Averroistic Aristotelians to argue against the world’s having a beginning, and whose refutation was used by Oresme to argue against its having a physically necessary end. Nature no longer provides history with an unambiguous periodization; the absolutely new and unRepeated has become possible; it can come from man as his signature imprinted on each moment of time in its singularity. This concept of a world time that is not already structured, in which each point contains every opportunity for surpassing everything that has come before it, is one of the fundamental preconditions of the self-consciousness of the modern age.

The fourteenth century was dominated by the ideal of quantification. It possessed a logic of definition that was no longer intended to give substantial definitions of objects but rather to make it possible to give directions for their quantitative description. It possessed to a large extent the mathematical methods and instruments with whose help the seventeenth century was to accomplish the awakening of science. But it lacked an interpretation of the human spirit and the legitimacy of its theoretical pretensions that could have made possible then and there the realization—independently of the transcendence possessed by the Creator’s knowledge of the world and independently of insight into the ‘natural measures’ given to nature—of a knowledge of nature that did not aspire to compete with the divine spirit in the domain of theory but only set itself the goal of man’s mastery of his objects. Although the conventionality of units of measure was familiar in daily life, there continued to be an obstruction to the analogy that would permit one to rest content with arbitrarily chosen units of measure and approximate measurements in the knowledge of nature as well. The idea of what science should be was still under the spell of the ideal accuracy of the Aristotelian knowledge of essences. This requirement did not allow one to content oneself with an inaccuracy that was as accurate as possible. “Calculation with vague measures, that is, approximate values, with margins of error and negligible magnitudes, such as became a matter of course for physics later on, would have appeared to the Scholastic philosopher as a grave offense against the dignity of science. So they remained standing on the threshold of a genuine, measuring physics, without crossing it—in the last analysis,
Part III

because they could not make up their minds to renounce exactitude, a renunciation that alone makes possible an exact science of nature.  

The pretension to exactitude conjured up visions of a collision with the theological index of the impossible and gave any application of the speculative calculations the character of curiositas, renunciation of exactitude, which could have stylized and justified itself as humilitas [humility], presupposed a break with the generally accepted ideal of science. From this point of view, what still had to happen between the fourteenth and the seventeenth centuries in order to lay the foundation for the formation of the modern age (this teleological mode of expression should be taken purely heuristically!) does not look like an intensification, or even an exaggeration, of the supposedly ‘modest’ cognitive pretensions of the Middle Ages—as it has readily been perceived, to the detriment of the integrity of the modern idea of science. Rather it looks like a very decisive renunciation, a resignation—which, while it was not skeptical, was still directed at the center of what had gone before—from continuing to measure oneself (in one’s theoretical relation to nature) against the norm of knowing the Creation from the angle of vision and with the categories of the Creator. The sentence about the measuredness and measurability of the world remained sterile for Scholasticism as a whole because it considered no measure to be applicable other than God’s own, and at the same time, on account of the assumptions embodied in its concept of God, it could not believe itself capable, or did not think it should believe itself capable, of ever knowing this measure, still less of making use of it. Consequently there could not be any igniting contact between the sphere of calculationes, with their speculatively fixed and only symbolically intended magnitudes, and practical experience of nature.

Robert Grosseteste (1175—1253) had already defined the actual infinite as a magnitude determinable in principle, as a certus numerus [fixed number], but had declared it to be unknowable by man. What for God was countable certissime et finitissime [most certainly and finitely] was inaccessible to man’s computational operations. Walter Burleigh (who died about 1343), in his Commentary on the Physics, was the first to draw from this assumption of the transcendence of real quantifiability the conclusion that man could make use of a system of measure created by himself and artificially institutionalized, based on a minima mensura secundum institutionem [institutionalized minimum unit], but the problem raised by this, that of conventional stipulation and imple-
mentation, appeared to him to be insurmountable: "Circa istam institutionem potest esse error" [In that institution there can be an error]. This is at bottom the metrological solution of the modern age—a program of rational expediency, which is opposed to viewing reality as transcendent and renounces the cognitive ideal of adequacy [adequatio]—but this renunciation appeared impracticable to the doctor planus et perspicuus [plain and evident teacher] because it required the Scholastic system no longer to accept transcendence but rather to compensate for it with an artificial universality of human convention. Only the idea, rising toward articulation by Descartes, of 'method' as the transferable form of the process of knowledge made comprehensible the constitution of an overarching identity of inquiring individuals as a subject extending across space and time, an identity that might also be consolidated under conventions. The great idea in the Wisdom of Solomon of the God Who counts and measures, and the Platonism of absolute geometry, which together had helped and driven the process so far forward, had now admittedly become hindrances; the Cusan's doubts about divine mathematics, which were intended as an intensification of transcendence and a strengthening of human authenticity, could have removed a blockage here.

It cannot be maintained that the relation between claim [Anspruch] and renunciation in the foundation of the early modern idea of science came about through insight into the necessity of renunciation for the sake of satisfying an—admittedly newly formulated—claim. The renunciation, which is the recognition of the essentially insurmountable 'inaccuracy' of the theoretical approach, made its appearance as resignation with regard to the cognitive ideal that was authoritative for Scholasticism. And it did so in the twin functions of, on the one hand, a constituent part of the reawakened anti-Aristotelian, Platonizing metaphysics, with its definition of natural appearances by the transcendence of the Ideality imprinted in them, and, on the other hand, an element of a form of piety turned against Scholasticism that was spread by the Devotio moderna, with its emphatic confession of the provisional character of human and earthly existence.

The great architectonic exertion of the Scholastic system to balance created nature and redemptive grace and not to allow them to be played off against one another was shattered by the internal logical inconsistency of the structure and by the disruptive force of the increasing absolutism of its theological components. The great attempts
made in the fifteenth century to withstand the tensions of the medieval systematic structure and to save the whole make that especially evident.

At the beginning of the fifteenth century, Jean Gerson (1363–1429), one of the controlling figures at the Council of Constance and distinguished by the honorary title of *doctor christianissimus* [most Christian teacher], made it his business to oppose futile curiosity; and for him, curiosity about the world and theological hairsplitting of the late-Scholastic type permeate one another in such a way that they constitute a single homogeneously motivated syndrome. This is a noteworthy point because in the theological speculation, many questions were developed, still in medieval guise, that were immediately to show themselves to be approachable by physics, for example, in the hypertrophic doctrine of the angels and their function in the divine guidance of the world. Here again the motive of curiosity is the Augustinian *superbia* [pride], the striving for self-validation, the flight from submission, and an element of the fantastic presumption of being initiated into God’s sovereign reserve. The ideals that are opposed to the Scholastic appetite for knowledge and passion for originality (*singularitas*) are humility and submission as the roots of faith.

But this argumentation alone no longer seems sufficiently convincing; curiosity has its immanent futility and punishes itself by diversion from what is useful, attainable, and provides man with security. Scholasticism’s drive toward system as an end in itself takes on the appearance of progress, in spite of the fact that firm limits are set to human knowledge, whose transgression by investigating nature must result in the loss of the helpful light, and thus in error. But the philosophers wanted more from nature than its testimony to God’s existence, for which it was intended and illuminated. It is significant how Gerson characterizes this ‘more,’ namely, as the desire for dependable regularities in spite of, or in view of, God’s freest possible disposition over nature.

Hidden in this text’s admonition to submit humbly to the unknown will of God is the great contradiction that is the point of departure for the modern age’s elementary theoretical claim: the lawfulness of nature, and then also of society and the state, as protections against arbitrariness and accident, against the fact that man’s fate is not totally at his disposition. What prominence natural philosophy already seemed to the contemporary admonisher to have gained can be seen from his taking it as his model for the rejection of theological curiosity.
Theological curiosity also surrenders to the illusion of possible progress, of reaching out for what is as yet unknown and untested, of conjecture and invention. The price of this surrender is the loss of orientation, the accumulation of problems arising from supposed solutions, and finally the collapse into skepticism. The content of these admonitions and apprehensions is familiar; what is new is the sharper definition of the opposing position, the direction of the defensive gesture at a tendency that stands out more clearly.

The Middle Ages—if I may be permitted this hypostatization—are beginning to feel threatened. The fifteenth century stands under the sign of the increasing concretization of this threat around the key concept of curiositas and the reaction against it. Piety itself finds its anti-Scholastic formulas in the Devotio moderna. Gerson rendered such formulas pithily: “Credite evangelio et sufficit” [Believe in the Gospel and it is enough]; “Esto contentus ... sorte tua et materias sine Logica aut Philosophia intelligibles apprehende” [Be content with ... your lot and understand what is intelligible without the help of logic or philosophy]. The Aristotelian appeal to nature and to the cognitive drive it established became questionable because this motive could not be tied down to boundaries or restrained by the reservation of mysteries and the reproach of insatiability for the new, whereas man’s problem of salvation had remained the same old one ever since the beginning. The nature of which Aristotle had spoken is now supposed to be the corrupted nature of sinful man, containing a cognitive drive on which he who is in need of salvation may no longer rely.

The static concept of knowledge, the stabilization of the will to truth by the standard of tradition, was not the last word spoken in the fifteenth century in the attempt to save the Middle Ages. Nicholas of Cusa (1410—1464) was to make the most important attempt to combine recognition of the human craving for knowledge, in its unrestrictable dynamics, with the humility of finitude that was specific to the Middle Ages. The tendency of this attempt was to turn Aristotelian Scholasticism’s concept of reason and nature against itself; it is true, but not for purposes of destruction—which it had long since shown itself to be capable of providing for itself—but rather as immanent criticism directed at the difference between motive and system, between function and tradition. In the formulation of ontological “imprecision” as the essence of “knowing ignorance,” the Cusan seems to be able once again to force together the tendencies of the late Middle Ages that
press toward divergence. The spirit's insatiability finds its correlate in nature's inexhaustibility, and indeed not just in the dimension of change and the novelty of objects but rather (which is much more to the point) in the intensifiability of every item of objective knowledge as such, insofar as in every object there is hidden the unattainable transcendence of its "precision."

In the preface dedicating his *Docta ignorantia* [*Of Learned Ignorance*] to Cardinal Julian, Nicholas does not hesitate to appeal to the addressee's appetite for knowledge and to claim for his work the primary attraction of unusualness, indeed of monstrosity: "Rara quidem, et si monstra sint, nos movere solent" [in fact unusual things, even if they are monstrous, usually excite us]. This is certainly also a gesture of modesty, but it is no accident that he chooses this one in particular. For the freedom with which reason surrenders itself to the 'natural' principle of its own completion and believes itself capable of finding rest only in the attainment of its cognitive goal no longer needs to be kept away from the neighborhood of animalistic metaphor. This very 'instinctiveness' is now the root of familiarity with the unattainable that makes itself present, as the image of infinity, only in the act of inquiry itself. The insatiability of the inquisitive instinct is no longer suspect, as it was in the patristic polemic against Gnosticism, as the desire neither to recognize the boundaries prescribed to our nature nor to obey the command to accept the proffered faith; it is rather the very opening of the unconstraint in which truth's continual transcendence of man's capacity for comprehension is represented and each item of acquired knowledge becomes an instance of "knowing ignorance," a surpassable degree of accuracy.

The justification of the inquisitive instinct now is precisely not that the authority of nature stands, so to speak, behind it, and a teleologically coordinated and guaranteed objectivity before it, but rather that its own nature first begins to dawn on it, in the difference between pretension and the impossibility of complete realization, only when it does not resist this nature, does not set for it the limits that the discrimination against *curiositas* had wanted to erect. The paradox of the *docta ignorantia* lies in the fact that the knowledge to which the spirit gives itself in a loving embrace has always already been suspended [*aufgehoben*] in a knowledge about knowledge, which prohibits all definitiveness—and not only in relation to eschatological reservations. The inexhaustibility of the desire for knowledge in any stage of re-
alization that it can ever arrive at is the reason why we can achieve something more than knowledge, namely, wisdom, the knowledge of what knowledge still does not know. "Since everything of which we have knowledge can be known better and more competely, nothing is known as it could be known. God's existence is indeed the reason why there is knowledge of the existence of all objects, but God's reality, which cannot be exhausted in His knowability, is also the reason why the reality of all things is not known as it could be known." But it is not only this reflection of the infinite internal dimension of divinity in the objects of the world and the world itself that dominates the Cusan's thinking but also and still more the imitation of divine self-reflexiveness in the way in which the subject is thrown back from its objects onto itself: "The more deeply the spirit knows itself in the world that is unfolded from it, the richer the fertilization it undergoes, its goal being after all the infinite reason, in which alone it will behold itself in its Being, as the sole measure of all reason, to which we become the better adapted the more deeply we become absorbed in our own spirit, whose single, life-bestowing center is that infinite spirit. And that is also the reason why our nature passionately desires perfection of knowledge." Counting, measuring, and weighing are the specific instruments of human knowledge of nature precisely because in their efficiency they simultaneously make evident the inaccuracy by whose means the spirit becomes conscious of the heterogeneity, in relation to its objects, of the parameters that it produces. Arithmetic and geometry leave an unrealized remainder in every application to real objects. The ideal construction and the real datum are not reducible to one another without remainder; however, the difference between them is not the difference between pregiven ideality and given reality but rather between the pretension of the knowing spirit and the knowledge attainable by it at any given time. When the Cusan criticizes Plato precisely for not distinguishing between the ideas that are given to us and that we can only assimilate and those that we ourselves produce and consequently fully understand, the conflict of possible truths that can be postulated here is decided in favor of the humanly authentic ideas because "our spirit, which creates the mathematical world, has in itself more of the truth and reality of what it can create than exists outside it."
The late Scholastic blockage of the application of measurement to a world that had been created according to measure, number, and weight, which not only conformed to the theological reservation but also continued obedient to the Aristotelian idea of science, falls into the critical clutches of a new conception of the truth of arithmetic and geometry, which, precisely because it is constructed by strict analogy with the veritas ontologica [ontological truth] of Scholasticism, explodes the Scholastic system in which all truth depends on pregivenness. The axiom that the author of a thing could alone be the possessor of its complete truth had been applicable only to God, and this principle that solus scit qui fecit excluded man, as the being who even in regard to his productivity was confined within the horizon of the imitation of nature, from the truth in its strictest definition. In that sense the concept of creation emerged as a radicalized Platonism, apart from the fact that it drew all the pregiven realities together, as it were, in a single hand—which did not make much difference for man.

The Cusan rightly goes back to Plato and charges him with the error of having made the purely geometrical figure into something similar to what is visible, of having provided it with a quasi-perceptibility, like its replica in the world of things. But that the concept of a circle or of number is truer and more real in reason than anything else in nature that corresponds to it just is not due to a sort of gift of direct intuition of the Ideas according to which the world was made but rather to the fact that the human spirit itself produces them (mathematicalia fabricat), that we ourselves are the authors of this pure thought structure. 21

At least in the one exemplary treatise on The Experiments with the Balance, the Cusan described how for him measurement gains legitimacy as a means of access to the specific indicators of the nature of physical objects precisely because in the measured values the constant proportions of the essential characteristics do indeed come to light, but not those characteristics themselves. Thus the universe of divine creation is simultaneously made accessible and covered up by the universe of human conception. But this was just what the Cusan had defined at the end of the second book of the Docta ignorantia as the meaning of the human relation to the world: To the extent that we admire, devote ourselves to and draw near to the world, the world in turn is withdrawn from us. 22 There is no longer any need to put a taboo on theoretical curiosity, or to put moral restrictions on it, because the process of
theory itself continually destroys the illusion of its finite realizability. The same thing holds for the art of investigating nature with measurement that is said of every art, in a modified version of the Aristotelian formula: It imitates nature as far as it is able but can never penetrate to nature’s precision.

This is especially true for astronomy; but it is no longer due to the elemental special nature of the heavenly bodies, as it had been for Aristotle and the Scholastics, but rather is taken up and retracted into the definition of the inner lawfulness of the theoretical process: “Caeli etiam dispositio... praecise scibilis non est” [The arrangement of the heavens is not precisely knowable]. Thus imprecision is assigned a higher metaphysical value as an index of all objectivity—referring us to the praecisa aequalitas [precise uniformity] of the absolute and to the heterogeneity of the parameters we produce—and at the same time it is made methodically admissible. Knowledge of nature does not succeed in fulfilling the Augustinian requirement of an inquiry mindful of its absolute definition—the requirement of religiose quaerere [to inquire piously]—merely by means of an additional, special act of reflection. This character is always already co thematic in its relation to its object. It finds confirmation and ratification of its achievement only by renouncing the claim of ‘adequate’ objectification, of mastery with no allowance for error.

For Scholasticism, the progress of theory through the cosmos had always had only the provisional function of gaining passage to the world cause by a finite number of steps. The justification of this procedure lay in its result; the motion of theory was legitimized by its point of rest. Any achievement of autonomy on the part of what was preparatory to this telos [end, purpose] was a functional failure, was, precisely, curiositas. The Cusan’s Docta ignorantia made the path, the process, that which as the ‘method’ was to become the key word of the beginning of the modern age, itself the essence of the theoretical function, and indeed precisely in what the Middle Ages had credited it with and expected of it: its capacity for self-surpassing. The emerging thematization of method was to actualize once again the difference between finitude and infinitude for human consciousness, and thus at first to remain within the horizon of that difference’s medieval serviceability for theology; but the way is at least being prepared for this point of view to be rendered autonomous as theoretical immanence and thus as a positivization of curiositas. In his dialogue On the Mind,
the Cusan makes the philosopher say to the layman, playing on the common etymology of *mens* and *mensura* [mind and measure], “I am surprised that the mind, which you say derives its name from measurement, proceeds with such eagerness to apply measures to things.” And the layman answers, “The meaning of this is that it wants to find the measure of itself. For the mind is a living standard of measurement, which becomes aware of its power of comprehension by applying its measure to other things. For it does everything in order to know itself. . . .”

**Translator's Notes**

a. “... dass die innere Konzentration auf das dem Menschen Notwendige auch seine Not zu wenden... vermochte,” a play on words that cannot be rendered in English.

b. *Devoto moderna*: a movement of 'lay' spiritual revival that originated in Holland in the late fourteenth century and spread to parts of Germany, France, and Italy. Its classic expression was Thomas à Kempis's *Imitation of Christ.*
The century of the Copernican reform of astronomy manifests not only a sudden change in the evaluation and justification of theoretical curiosity with respect to its object, which had been accentuated by the discrimination against it, but also the self-confirmation of theory’s claim to precisely what, on the premises of the ancient physics and cosmology, was supposed to be naturally withheld from the reach of knowledge. To that extent, the fate of Aristotelian physics gets mixed up with that of the Augustinian and Scholastic morality of theoretical humility and self-restraint.

Copernicus became the protagonist of the new idea of science not so much because he replaced one world model with another, and thus showed by example what radical incisions into the substance of the tradition were possible, as because he established a new and absolutely universal claim to truth. Within the world there was no longer to be any boundary to attainable knowledge, and thus to the will to knowledge. The meaning of the Copernican claim to truth was admittedly only to appear and to be confirmed when Galileo and Newton, bringing mechanics to the aid of the anticipatory innovations in cosmology, sent Aristotelian physics into retirement.

None of the psychological attraction of penetrating into the region of the forbidden and the reserved, which characterizes the magical/Faustian underground current of the century, is noticeable in Copernicus. The opportunity to measure and to test himself against a theoretical task that until then had been considered insoluble may
have had some significance for him, but it could not penetrate the restrained style of his ‘humanistic’ mode of communication. Nevertheless one can discern that the achievement of theory maintains for him its relation to the self-determination of man’s position in the world. But it is no longer the objective structure of the universe and man’s localization within it that is evidential, as geocentrism had been for the Stoics; rather, the accomplishment of the cognitive task confirms for man that the world has been founded with consideration for his need for rationality. To be sure, this is no longer self-knowledge as recognition of a finite role in contrast to an infinite task; each step taken by theory becomes a self-confirmation, securing the possibility of the next one.

There is even a passage in the fourth chapter of the first book of the *Revolutiones* in which it looks as though Copernicus wants to recommend his cosmological solution as superior in the very language of the critique of curiositas. There he suggests that the attribution of heavenly phenomena to movements of the earth does not pretend to knowledge of the highest and most distant objects themselves but rather holds to what is nearest at hand and accessible—namely, the constellations of the earth with respect to the stars—and thus, so to speak, ‘brings the problem down’ from the zone where there is danger of curiositas to that of theoretical admissibility, transforming the task from a heavenly to an earthly one. But from the point of view of the traditional astronomical conception of truth, this was a formula more of theoretical insurance than of moral diffidence, a suggestion to the Aristotelians that they should come to terms with the new, even from the point of view of their own dogmatics.

Tactical and economical ‘understatement’ rules the early history of modern science, whose documents consequently seldom provide us with the formulas that we expect. In his preface to Pope Paul III, Copernicus lets it be known that he is prepared for opposition and ready to discuss it. The thoughts of the man who is philosophically inclined are withheld from the judgment of the multitude because his efforts are toward the truth in all things, insofar—and this restriction forestalls the reproach of curiositas, as though it were utterly irrelevant to everything that followed—as such is permitted to human reason by God: *quatenus id a deo rationi humanae permissum est*. The sole concern following this restriction conceded in passing is the maxim that one should not pursue one’s own opinion too far away from what is correct.
That the science practiced here is good, that it turns away from the vices and guides the human spirit toward what is better, is stated without restriction in the proemium [introduction] to the first book and placed with pagan candor alongside the “unbelievable pleasure of the spirit” that this activity furnishes in abundance.²

The space in which the epoch pursues its curiosity about the world has its dimensions, its expanding width, height, and depth. Alongside the expansion of the classical oikumene [inhabited world] into the breadth of the oceans and the new land masses, and beside the fascination of the starry heavens, there is also a new interest in the depths, a desire to know what lies beneath the earth’s surface. The mundus subterraneus [subterranean world] becomes a realm of fantasy, but also of empirical inquiry, which becomes conscious of its headstrong inquisitiveness with a shiver.

On the threshold of this century, an exemplary figure of the daring interest in what is remote, out of the way, unexamined, or traditionally prohibited was Leonardo da Vinci (1452–1519). His interest in the playfully varying nature that neither commits itself to its forms nor exhausts them, an interest in what had hitherto remained invisible to the onlooker at the world spectacle, in what was hidden deep in the sea and distant in time in a world that was growing older, and in the realm of the unrealized possibilities of nature and of human invention—all this is pure, as though crystallized, curiositas, which enjoys itself even when it stops short of its object at the last moment and leaves it alone. A characteristic example is given by the fragment on the investigation of a cave, which remained fragmentary not only by accident—in its form—but also by virtue of its outcome:

Unable to resist my eager desire (etirato dalla mia bramose voglia) and wanting to see the great profusion of the various and strange shapes made by formative nature, and having wandered some distance among gloomy rocks, I came to the entrance of a great cavern, in front of which I stood some time, astonished and unaware of such a thing. Bending my back into an arch I rested my left hand on my knee and held my right hand over my down-cast and contracted eye brows: often bending first one way and then the other, to see whether I could discover anything inside, and this being forbidden by the deep darkness within, and after having remained there some time, two contrary emotions arose in me, fear and desire—fear of the threatening dark cavern, desire to see whether there were any marvellous thing within it. . . .”³
One must lay this fragment alongside Petrarch’s letter on the ascent of Mont Ventoux in order to perceive the independence and matter-of-course quality that curiosity has acquired and the way in which its reservations and its hesitation have been humanized and to recognize that Leonardo’s *Madonna of the Rocks* no longer has anything in common with Petrarch’s falling back on Augustine’s *Confessions*. On the other side one might add George Berkeley’s (1685–1753) description of the Cave of Dunmore, in which curiosity (“the curiosity to see it”) is only an introductory flourish and readily combines with the description—free of all terror—of the object as “this wonderfull place.”

The darkness confronting Leonardo at the entrance to the cave as an index of natural concealment, which, however, is no longer respected as something intended by nature; and elemental difference in kind such as was ascribed to the stars by the traditional cosmology—these remain for the sixteenth century the basic forms of the limit set for theory, whose transgression constituted the nature and the problematic of theoretical curiosity. What still scarcely enters the horizon of possibility is a limitation on the range of theory as a contingent result of the limits of the human organ of vision—the threshold of visibility in both the macrocosm and the earthly micronature. It is not only that the optical auxiliaries, the telescope and the microscope, had not yet been invented and that their power was still unsuspected but even more that a realm of objects invisible on account of their distance or smallness was not considered at all possible or relevant even in speculation.

As long as the universe was represented as limited and closed by the outermost sphere of the fixed stars, the totality of the stars appearing above the horizon was considered to be surveyable with a single glance and exhausted by the stock already catalogued by Hipparchus. The geocentric system favored the unquestioned validity of this assumption by granting man visual conditions that were the same in all directions and constant. The supplementary teleological assumption that invisible things in nature would contradict the meaning of creation was current at least in the humanistic tradition and gave astronomy’s postulate of visibility a more than methodical/economic foundation, namely, a metaphysical one. That the world could contain things withdrawn and inaccessible to man’s natural optical capacity, not only at times and provisionally but definitively, was an idea unknown to the ancient world and the Middle Ages and also, by their philosophical assumptions,
an impossible one. The enrollment of *curiositas* in the catalog of vices was based on the moral self-restriction of human theory vis-à-vis constituents of nature that were certainly given in the phenomena, even if explanatory access to them might be difficult. It is true that it would have been quite consistent with the nominalist system, in which nature was no longer related to man's point of view, to assume the existence also of phenomenally concealed and unseen things in nature, indeed to presuppose that only a small or a vanishingly minute segment of reality was accessible to the human sense organs; but this conclusion was not immediately drawn.

Of course this state of affairs has remained incomprehensible to the subsequent age, with its mythified picture of the genesis of modern natural science; and, in the time-honored manner, it has tried to provide, by means of a new myth formation, what it felt was missing. In the third volume of Alexander von Humboldt's colossal picture (itself part of world literature) of the world of science, his *Kosmos* (1845–1862), there is a little-noticed passage regarding Copernicus that registers doubt regarding the statement that Copernicus foresaw the future discovery of the phases of Venus as inevitable and predictable. Humboldt ascribes this statement to the *Optics* of Robert Smith (published in 1738) and also mentions the check carried out by De Morgan in 1847, which turned up no evidence relating to this in Copernicus's works. Behind this skeptical note, which does not betray any urgent interest in itself settling the question, there stands a clever anecdote, whose dissemination and origin deserved investigation.5

The earliest instance of the anecdote appears to be in John Keill's *Introduction to the True Astronomy*.6 There mention is made of an objection to Copernicus's doctrine, to which he himself had replied; specifically it had been held against him that on his assumptions Venus would have to exhibit the same alterations and phases as the moon. Copernicus had replied to this that perhaps the astronomers of subsequent ages actually would establish that Venus underwent such alterations—and this prophecy of Copernicus had been fulfilled by Galileo, who while observing Venus through the telescope had found the appearances, analogous to those of the moon, that Copernicus had predicted. In the later travels of Keill's anecdote, the prophetic trait ascribed to Copernicus became more articulate: The French astronomer Bailly, who presumably knew the French translation of Keill's book, makes Copernicus venture the declaration that if our eye possessed sufficient
power of vision to see the two planets nearest the sun exactly as it sees the moon, it would perceive the same sort of alterations in them as in the moon. But Jan Czynski, a Pole living in France, in his study of Copernicus of 1847—that is, the same year in which De Morgan’s search for appropriate documentation in Copernicus proved fruitless—was the first to invent the imaginary dialogue in which Copernicus replies to his opponents’ objection on the grounds of the unconfirmable phases of Venus that one would see precisely these phases if one could find the means to perfect man’s visual faculty. Camille Flammarion canonized the anecdote almost word for word in this form in his widely read biography of Copernicus, which was so influential for the nineteenth century’s picture of the astronomical reformer. Thus Copernicus’s prophetic proclamation of the telescope—scarcely even cryptic any longer—definitively entered the literature.

The ready audience that the anecdote found fits only too well in the picture of a historiography of science for which its epoch-making heroes seemed occasionally to possess too little self-consciousness. But it was only when Galileo’s discoveries with the telescope had become known that his one-time student Benedetto Castelli could inquire of him by letter in December 1610 whether perhaps he had confirmed by observation Venus’s suspected phases. Galileo answers him in the same month, saying that he had in fact reached certainty about the alterations in Venus’s shape a quarter of a year earlier; and this confirmation of the Copernican system by the telescope is accordingly brought into play in the “Third Day” of the Dialogue on the World Systems.

The root, in Copernicus’s works, of the anecdotal anticipation of the invisible being made visible lies in a passage in which he does in fact speak of the phases of Venus, not, however, in connection with the difference between his own system and the traditional one but rather in connection with the differences within the astronomical tradition itself regarding the position of Mercury and Venus, the two innermost planets. In the tenth chapter of the first book, which must have been the point of departure for the construction of the apocryphal anecdote, Copernicus deals with the sequence of the heavenly bodies of the solar system from outermost to innermost and discusses in the process the various opinions about Mercury and Venus, whose orbits Plato had placed outside that of the sun, but Ptolemy and many recent authors had placed within. According to which construction one chooses
and which explanation of the derivation of the planets' light one accepts, varying consequences result for the apparent phenomena. If the planets receive their light from the sun, then events similar to the phases of the moon should affect Mercury and Venus, and they should even undergo occasional transits through the sun's disk, if one wanted to fix their paths beneath the sun's path. But such phenomena had not been observed, and this had led this group of astronomers to place the paths of Mercury and Venus outside that of the sun. The adherents of Ptolemy, on the other hand, had good constructive grounds for posting Venus and Mercury in the space, which seemed to them too large and empty, between the moon's orbit and the sun's, and they defended themselves against the cited objections with the assumption that the planets are either self-illuminating bodies or of such transparency that the sunlight can stream through them. Thus this whole discussion operates exclusively on the basis of the geocentric system that Copernicus rejects. It has as yet nothing to do with the questions regarding the confirmation of Copernicus's own model. The statement that the observable proofs of Ptolemy's thesis that were to be expected were missing does not yet imply that Copernicus predicted such proofs for his own thesis, although his own system does likewise imply the appearance of phases in Mercury and Venus.

However, the anecdote does touch upon a central point of the Copernican achievement and its connection with the importance that the optical 'making visible of the invisible' was to acquire in the history of Copernicanism. There are clues in Copernicus's Revolutiones, unnoticed before now, that point to the hypothesis that the new conception of the solar system began with a partial constructive solution for the system of the sun, Mercury, and Venus and then generalized the schema arrived at in that connection. Within the Ptolemaic system, there were great difficulties in accommodating the imaginary spheres of the two planets that travel as though 'synchronized' with the sun; Copernicus mentions the enormous size of the secondary circle of Venus's orbit (ingens ille Veneris epicyclus)—that is, Venus's deviation from its primary orbit around the central body—and the characteristic that distinguishes the movements of the moon and the other planets from those of Venus and Mercury, namely, their independence of the movement of the sun. Here the very natural solution was to make not the earth but the sun the center of the orbits of Mercury and Venus and to introduce in this manner a partial heliocentrism in order
to save the *ordo orbium* [order of the spheres]: "Then one of two alternatives will have to be true. Either the earth is not the center to which the order of the planets and spheres is referred, or there really is no principle of arrangement..." Here then lay the first decision regarding the possible rationality of the world system. Copernicus formulates it as a general dilemma, although his considerations in this passage limit themselves strictly to the arrangement of the orbits of these three heavenly bodies. Only the subsequent paragraph undertakes the extension and begins with a formula that is highly instructive in regard to the genesis of the system: "If anyone seizes this opportunity to link Saturn, Jupiter and Mars also to that center, provided he understands their spheres to be so large that together with Venus and Mercury the earth too is enclosed inside and encircled, he will not be mistaken, as is shown by the regular pattern of their motions." The discussion concludes with another reference to the transference of the partial construction that had been discovered first: "These facts are enough to show that their center [that of the outer planets] belongs more to the sun, and is identical with the center around which Venus and Mercury likewise execute their revolutions."

This excursus into one of the Copernican system’s genetic characteristics that we have been able to uncover was necessary in order to correct a false element of consistency in the history of the interest in the invisible. At the same time, it was meant to give at least an example of how the history of the early modern intellect is deformed by the endeavor to ascribe essential tendencies of the epoch to the daring and the anticipatory genius of its supposed protagonists. It was not by accident that the French *Encyclopédie* laid emphasis, in the article “Copernic” in its fourth volume (1754), on precisely this supposedly prophetic trait of Copernicus in regard to the phases of Mercury and Venus: "Il prédit qu’on les découvrirait un jour, et les télescopes ont vérifié sa prédiction" [He predicted that they would be discovered some day, and the telescopes have verified his prediction]. It had to be shown, in contrast, that Copernicus could not base any hope for a definitive confirmation of his system on the future discovery of phases in Venus and Mercury. Thus the anecdote projects back onto Copernicus the expectations and pretensions that Galileo, with the telescope and the optical accessibility newly opened up by it, both awakened and fulfilled. For Copernicus the postulate of visibility continued in unbroken validity: If phases were not observable in Venus
and Mercury, then he had in mind an explanation of their physical nature that made such phenomena unnecessary for the new system too.

Thus there was no Copernican necessity for the telescope to be invented and no point of departure for a rational prophecy of that event. Theoretical curiosity did not hurry on ahead of the stock of the available possibilities of satisfying it by means of man's natural organs. It was precisely for that reason that Galileo's application of the new optical apparatus to astronomy induced such an original and surprising turning of man's interest and his assessment of its scope. Galileo's use of the telescope marks a historical moment whose unsuspected result, the discovery of unseen realities in the universe, was to have radical consequences for the understanding of man's position in and toward nature. The most important consequence was that (so to speak) 'curiosity is rewarded'—the weighty significance of what had hitherto been withheld from man is confirmed, and thus the morality of self-restriction is disabused and put in the wrong, and its abandonment is a logical consequence. The sixteenth century as yet knows nothing of all this, even if it does see the emergence of the first timid speculative relaxation of the postulate of visibility precisely in the reception of the Copernican reform.

Copernicus had held to the bodily reality of the heavenly spheres not only for the planets but also for the vaulted heaven of the fixed stars, although he no longer had any need at all to assume the solidity of this structure once he had replaced the rotation of the sphere of the fixed stars by the daily rotation of the earth. The first chapter of the first book of the Revolutiones holds explicitly to the spherical form of the world body as the forma perfectissima [most perfect form]. It represents complete totality (tota integritas), to which one can add nothing and from which one can take nothing away, and at the same time the most capacious form (capacissima figurarum), which is best suited to containing and preserving everything. The chapter closes with the lapidary statement that no one will dispute that this is the form appropriate to the divinity of the heavenly bodies. Giordano Bruno was not the first to deduce from Copernicus the consequence of the dissolution of the finite system of spheres—this was already done in 1576 by the Englishman Thomas Digges, with his broadening of the Copernican principle that the appearances of astronomical phenomena are conditioned by the standpoint of the observer.
Digges was the first to account for the finitude of the world as a mere appearance resulting from the limited visibility of the fixed stars that are disposed freely in space beyond the outermost planetary sphere and stand at different distances from the earth. This assumption would still not require one explicitly and positively to assert the unlimitedness of the world; that is ‘somewhat more’ than the logical Copernican result. Digges arrives at the assertion, which is liable to cause dismay in relation to the postulate of visibility, that “the greatest part [of the heavenly bodies] rest by reason of their wonderfull distance invisible to us.”\(^\text{12}\) This idea, in its time monstrous, destroys for the first time the anthropocentric teleology that Copernicus had wanted to save. Digges’s text is, admittedly, contradictory, vacillating between two positions: At first he assures us that we could never sufficiently admire this world, which God intended, as His work, for our senses;\(^\text{13}\) but ultimately he revels in vindicating the overwhelming invisible regions as the glorious court of divinity itself, to whose unlimited power and majesty only infinite space is appropriate, while man possesses his little visible share of the world not to see and to enjoy but rather to extrapolate by conjecture into the invisible.\(^\text{14}\) The infinity of the world, which in Giordano Bruno was to signify a pagan rebellion, is here still something like man’s pious resignation from his full participation in the world. But from whatever motive and however contradictory it may be, it is a leap of the anticipatory expansion of reality in which as yet there is no trace of a suspicion that man’s auxiliary equipment could ever imitate this expansion even to the extent of making visible a single previously invisible star.

One cannot define Copernicanism so narrowly that one sees in it only the exchange between the sun and the earth of the central position in the system of planets and then adds to this the new speculation about unbounded space and the plurality of worlds as something entirely separate from that, something that set thought and imagination in motion independently.\(^\text{15}\) In Digges, it is plainly evident that the impetus—however welcome it may have been just then for other reasons—came from Copernicus, even if here as elsewhere the Pythagoreans are always named in the same breath. But conjecture regarding the invisible background of what is visible has as yet no virulence as a stimulus to curiosity. In the absence of ‘prospects’ lies the reservation of divinity; optical and metaphysical transcendence have one and the same threshold. But in this single step beyond
Copernicus, visibility has become a contingent fact. In the process, the ambivalence that characterizes such a subject in this no-man's-land between the epochs has become clearly recognizable: The theological function assigned to a cognitive step, in accordance with which that step once again negates man's certainty of the world, makes ready beforehand its human counterfunction. Theology destroys itself by staking its claim on the finality of a consciousness of finitude. By emphasizing the inconsiderateness and relentlessness of absolute power with respect to man, it makes it impossible for the progress of theory to be neutral, for technical accomplishment to be a matter of indifference, in this historical zone. By laying claim to supposed boundaries and impossibilities, theology exposes itself fatally, as it had done and was to do with the proof of God's existence and with theodicy.

The synchrony of events and ideas is so incredibly concentrated by the assiduity of inquiry in the second half of the sixteenth century and the growing motivation and the technical equipment of theoretical curiosity have drawn so close together in time as seen from our distant vantage point that sequential relations occasionally seem to become reversible. It was almost inevitable that Thomas Digges's dissolution of the sphere of the fixed stars should be seen as not the pure and immanent consequence of the Copernican idea but rather the earliest result of the use of the telescope, which already haunted these decades. In Digges's *Pantometria* of 1571, there is found, both in the preface and in the twenty-first chapter of the first book, a description of the optical apparatus that his father Leonard Digges had invented and produced and with whose help distant objects could be observed. Before 1580 such instruments were already the object of widespread interest in England, and the technique of their production was thoroughly familiar. However, it is testimony to the unquestioned authority of the astronomical postulate of visibility that we possess no documentary basis for the assumption that any of these 'perspective glasses,' which already played their role as conveyors of new sights on the seafarers' voyages of discovery, had ever been trained on an astronomical object.

The fact that as early as in the *Opus maius* of Roger Bacon—the thirteenth-century *doctor mirabilis* [marvelous teacher] and Faust figure, accused of heresy, who had set himself the goal of entirely exhausting the limits of the knowable—16—an indication of a system of lenses could be found by whose means one could fetch the sun, the moon, and
the stars down to earth was no doubt, in its formulation alone, too suspect of magical motivation to allow one to appeal to or be motivated by it. The distance between the theoretical ideal of astronomy, as one of the seven *artes liberales* [liberal arts], and the *artes mechanicae* [mechanical arts] as the product of which the new instrument was introduced was still too great, in the prevalent conceptions of order, to allow the tool and the object to be brought together. The serviceability of technique for theory, the positively symbolic role of the telescope in the self-confirmation of theoretical curiosity, required an intellectual breakthrough of the boldness of the proclamation that Galileo was to make in March of 1610 with his *Sidereus Nuncius*.

Only a year before, in June 1609, in England, Thomas Harriot had demonstrably begun telescopic observation of the heavens and in the winter of 1609/1610 had already involved some of his friends and students in such observations and equipped them with instruments of their own. However, it was not only that the Englishmen appear to have restricted their observations to the moon that prevented the great breakthrough of astronomical curiosity from emanating from England. They evidently lacked not only Galileo's ingenious and considered use of optics but also his ability to make the kind of concentrated literary proclamation that first made the result into an event.

Galileo not only described what he saw; he grasped the relevance of what he had seen for a new interpretation of and attitude to the world and formulated it into a conscious provocation to the tradition. In this phase of the history of the scientific attitude, the manner of literary proclamation is still inseparably bound up with the potential efficacy of the theoretical result itself. Galileo's contemporaries and fellow members of the learned fraternity who refused to look through the telescope should not be understood in this attitude only as fearing confirmations of Copernicus; there one readily projects too much from Galileo's later conflicts into the early situation following the publication of the *Sidereus Nuncius*. Galileo must have deceived himself, they thought, not only because he claimed to see things that seemed to contradict a particular cosmological theory—it was to emerge later how little the evidential strength of those Copernican analogies actually was—but because he claimed to see more by means of a device from the realm of lowly mechanical skills than was naturally accessible to man's eyes.
The telescope could not be abolished or banished as an instrument of theoretical impertinence. It became a factor in the legitimization of theoretical curiosity precisely because, unlike any experimental intervention in the objects of nature, it could be adapted to the classical ideal of the contemplation of nature. The phenomena newly revealed by the telescope nourished and gave wings to the imagination, which sought to provide itself, by means of the ‘plurality’ of worlds, with continually self-surpassing limit conceptions of what was as yet undisclosed.

Still more important than this history of the effects of the telescope is that of its incorporation into the instrumentation of human theory, its vindication as part of the system of human attitudes and accomplishments. Through the telescope, the contemplation of the heavens acquires a historical character: In a situation in which the cosmic horizon of experience had been constant since primeval times, the discovery of the telescope signifies a caesura, beyond which a continuous increase in the accessible reality could be anticipated. Even Galileo did not dare to ground this epochal caesura on the mere contingency of an idea happening to occur to human reason. In the “Third Day” of the Dialogue on the World Systems, he puts in Salviati’s mouth a carefully weighed formula: At this time in particular it had pleased God to grant to human intelligence such a marvelous invention. If Copernicus had not yet been able to cite the differences in the apparent sizes of the planets, and the phases of Venus, in support of his theory, then the natural imperfection of the faculty of vision must be held responsible for this, the faculty whose objects had only been brought to full presence (visibilissimi) by the telescope. The imperfection of the human organic equipment even for the noblest activity, that of observing the heavens, is the ineluctable admission that man’s technical/inventive self-extension justifies.

Kepler, who seems not to have hesitated a moment in accepting and finding credible the news of the new discoveries in the heavens, sees in the telescope the sign of the domination granted to man over the earth. And the Jesuit Christoph Scheiner, who was engaged in a violent feud with Galileo, even attempts in his great work on the sunspots, Rosa Ursina (1630), to domesticate the telescope for Scholasticism by classifying it as an almost matter-of-course constituent part of the true and sure philosophical method, which after all has done nothing other than, and needs to do nothing but, go back from the
effect lying before our eyes to the unknown causes. In the case of the phenomena of the heavens, however, this is not possible for unequipped sense perception—solely on account of the all too great distance—so that the telescope, as a divine favor, has given us both access and the right of access to the realm of those hidden causes.  

Another historical classification of the telescope is given by Joseph Glanvill in *The Vanity of Dogmatizing* (1661): Adam before the fall had not yet needed “Galileo’s tube” in order to contemplate the “Celestial magnificence and bravery,” since the whole of nature stood open to him and his unaided eye, so that he was even able to see the influence of magnetism. On this theological assumption, in his first balance sheet of scientific and technical progress, *Plus ultra* (1668), Glanvill could praise the telescope as the most excellent invention ever made, which had extended the heavens for us and helped us to achieve nobler and better-grounded theories.

Barthold Heinrich Brockes, in his *irdisches Vergnügen in Gott* (1721–1748), classified the optical realm of the telescope as a third, independent revelation of God alongside the two others, that of the nature visible to the unaided eye and that of biblical revelation: “Die dritte zeiget offenbar in den Vergrößerungsgläsern sich/Und in den Telescopiis zum Ruhm des Schöpfers sichtbarlich; /Indem, wenn man in der Natur verborgene Größ’ und Kleinheit steiget,/Bei einem heiligen Erstaunen der Schöpfer mehr als sonst sich zeiget.” [The third makes itself evident visibly in magnifying glasses/And in telescopes, to the glory of the Creator;/Since, when one ascends into the greatness and smallness that are hidden in nature,/The Creator shows Himself more than He does elsewhere, in a holy wonderment.] In the eleventh of the critical letters that Lessing appended to the first edition of his writings (in 1753), he discusses in detail an early and “extensive poem on the plurality of worlds,” in whose first canto he had spoken “of the deception of the senses”; here the relation between sensual appearance and rational judgment is compared to the difference between natural and technical optics:

Deussen gab dir Gott des Geistes schärferes Auge,  
Dass es das leibliche dir zu verbessern tauge.  
Wann du mit deitem siehst, zieh jenes auch zu Rat,  
Durch beides siehst du recht, wann eines Mängel hat.  
Wie in dem Zauberrohr, wodurch man in der Ferne
Gleich als im Nahen sieht, wodurch man Mond und Sterne
Aus ihrer Höhen Kluft, ohn Segen, ohne Geist,
Und ohne Talisma, zu uns hernieder reisst.
Des Künstlers weise Hand ein doppelt Glas vereinert,
Und nur der Gegenstand durch beide klärer scheinet;
Da eines nie vor sich der Neugier Auge stärkt
Das statt der Deutlichkeit in ihm nur Nebel merkt.²²

[Consequently God gave you the spirit’s keener eye,/So that it would serve to improve your bodily one./When you see with the latter, call on the former also for counsel;/You see accurately through both together even if one of them has flaws./As in the magical tube, through which one sees in the distance/Just as one does near at hand, through which one brings moon and stars/From the abyss of their heights, without blessing, without spiritual intervention,/And without a talisman, down to us here below./The artisan’s wise hand unites a doubled glass,/And only through both does the object appear clearer;/Since one of them alone does not strengthen curiosity’s eye,/Which instead of clarity sees only fog in it.]

The fact that the talk here is, quite unabashedly, of strengthening “curiosity’s eye” with the artificial system of lenses indicates in the clearest possible way the end of the process of justifying the telescope, to which Goethe did indeed oppose a new and final doubt whether it did not confuse “real human understanding,” without this having anything to do with its original questionableness as an instrument of curiosity.

Translator’s Note

Justifications of Curiosity as Preparation for the Enlightenment

The modern age has understood itself as the age in which reason, and thus man's natural vocation, definitively prevailed. The difficulty created by this self-interpretation was to explain the delayed appearance in history of the form of existence that, as a result of its identity with the nature of man, should have been ubiquitous and taken for granted throughout history. The conceptions of the historical process that try to overcome this problem can be categorized according to whether they describe the prehistory of the age of reason as the natural impotence or the forcible suppression of the power of rationality. Like many metaphors, those of the organic growth of rationality or the coming of the light of day after the long night of its absence have an initial but not a lasting plausibility. The idea of a continuous upward progress of rationality contradicted the fundamental idea of the radical, revolutionary self-empowerment of reason as an event of epoch-making, unexpected suddenness. The idea of reason liberating itself from its medieval servitude made it impossible to understand how such a servitude could ever have been inflicted upon the constitutive power of the human spirit and could have continued in force for centuries. Another dangerous implication of this explanation was that it was bound to inject doubt into the self-consciousness of reason's definitive victory and the impossibility of a repetition of its subjugation. Thus the picture of its own origin and possibility in history that the epoch of rationality made for itself remained peculiarly irrational. In the Enlightenment's understanding of history, the relation between
the Middle Ages and the modern age is characteristically dualistic, and this is expressed more than anywhere else in the conception formulated by Descartes of an absolute, radical new beginning, whose only prerequisites lay in the rational subject’s making sure of itself, and for which history could become a unity only under the dominance of ‘method.’

One could say that historical understanding and the historical attitude were formed precisely to the extent that this dualism, presupposed by the modern age’s pretension to spontaneity, was overcome and the Middle Ages were brought into a unified conception of history. But this result was achieved through the effacement of the epochal threshold by the demonstration that elements of what was supposedly new could be traced back to factors that could be shown to be ‘already’ present in the makeup of the Middle Ages. The transformation of the Middle Ages into a ‘Renaissance’ extending itself further and further back into history was the logical result of this historiographical dissolution of the dualism of the Enlightenment; it can be understood as the rationalization of the irrational element in rationality’s self-understanding, and thus as a logical result of the Enlightenment itself. But the consequence was that the modern age seemed to lose its definition as an epoch, and thus also the legitimacy of its claim to have led man into a new and final phase of self-possession and self-realization.

An attempt to comprehend the structure of the change of epoch with rational categories was not made by the Enlightenment and up to the present has remained stuck fast in the dilemma of nominalism versus realism in interpreting the validity of the concept of an epoch. Wölfflin’s resigned attitude in his Kunstgeschichtliche Grundbegriffe of 1915 is characteristic of the state of theory: “Transition is everything, and it is difficult to contradict one who regards history as an endless flow. For us, intellectual survival requires that we arrange the unlimitedness of events according to a few points of reference.” A return to the self-interpretation of the Enlightenment, or merely to taking seriously the uniqueness of the character of the modern age as an epoch, as implied in that self-interpretation, is apparently impossible so long as even a vestige of this overwhelming ‘historicity’ is operative in our attitude to the interpretation of history. But must the validity of the epochal category and the rationality of historiographical object definition be in conflict with one another? The answer is plainly yes,
so long as the logic of continuity takes as its only alternative the constancy of what ‘was there all along’ or preformation extending as far back as documentation is possible.

The insight that all logic, both historically and systematically, is based on structures of dialogue has not yet been brought to bear in the construction of historical categories. If the modern age was not the monologue, beginning at point zero, of the absolute subject—as it pictures itself—but rather the system of efforts to answer in a new context questions that were posed to man in the Middle Ages, then this would entail new standards for interpreting what does in fact function as an answer to a question but does not represent itself as such an answer and may even conceal the fact that that is what it is. Every occurrence [Ereignis], in the widest sense of the term, is characterized by ‘correspondence’; it responds to a question, a challenge, a discomfort; it bridges over an inconsistency, relaxes a tension, or occupies a vacant position. In a cartoon by Jean Effel in L’Express, De Gaulle was pictured opening a press conference with the remark, “Gentlemen! Now will you please give me the questions to my answers!” Something along those lines would serve to describe the procedure that would have to be employed in interpreting the logic of a historical epoch in relation to the one preceding it. Nietzsche understood the modern age as the result of the intellectual pressure under which man had formerly lived, not at all, however, as the mere Cartesian “jetter par terre” [throwing down] of everything inherited, which was supposed to make possible the planned new construction, but rather as a specific correlate precisely focused on the prior demand and challenge. It is not difficult to eliminate the biologism of the idea of “training” from what Nietzsche says in Beyond Good and Evil: “The long unfreedom of the spirit, the mistrustful constraint in the communicability of thoughts, the discipline thinkers imposed on themselves to think within the directions laid down by a church or court, or under Aristotelian presuppositions, the long spiritual will to interpret all events under a Christian schema and to rediscover and justify the Christian God in every accident—all this, however forced, capricious, hard, gruesome, and anti-rational, has shown itself to be the means through which the European spirit has been trained to strength, ruthless curiosity, and subtle mobility. . . .” If one translates character here into function and “strength” into argumentation, one arrives at a schema for a historiographical relation in which the Middle Ages have lost
the historiographical contingency vis-à-vis the modern age that they had in the Enlightenment’s conception of history, their arbitrariness as an annoying episode of confusion and obscurity in the text of history, and in which they gain their historiographical relevance precisely from their being able to provide the key to the sum of the requirements, as the implicit satisfaction of which (whether the supposed or the actual satisfaction is of no concern) the modern age organized itself.

It is not an accident that Nietzsche names “ruthless curiosity” as one of the epochal characteristics of the modern age that can only be understood in its specificity and energy by reference to the passage through the Middle Ages. The ‘theoretical attitude’ may be a constant of European history since the awakening of the Ionians’ interest in nature—a presupposition that Edmund Husserl made basic to his conception of a teleology of this history—but this attitude could only take on the explicitness of insistence on the will and the right to theoretical curiosity after contradiction, restriction, competition, and the exclusiveness of other essential human interests had been set up in opposition to it. After the Middle Ages, theory could no longer be a simple continuation of the theoretical ideal of antiquity, as if a mere disturbance of some centuries in length had intervened. Not only did pent-up energy have to be let out through curiosity once it was rehabilitated, a kind of energy that deprived the ancient ideal’s contemplative repose of the qualities precisely of repose and calm; the medieval reservations had also defined and given direction to a concentration of the will to knowledge and of interest in specific realms of objects. To understand this concentration as a continuation of antiquity is to participate in a misunderstanding suggested by the unavoidable employment of traditional terminology and sanctioning formulas.

Among Goethe’s aphorisms and fragments on the history of science, there is a sketch that attempts to display the epochs of the sciences systematically according to the spiritual powers of man engaged in them: Sensuality and imagination are the basis of a first, childish phase of the cognitive interest, which expresses itself in the form of poetic and superstitious views; in the second phase, sensuality and understanding are the basis of an empirical world interpretation, which is typified by curious and inquiring individuals; dogmatism and pedantry are the characteristics of a third epoch, in which understanding and reason combine for purposes that are predominantly didactic; in the fourth
and last epoch, reason and imagination enter into a constellation of
the *ideal*, whose opposing poles are designated as *methodical* and *mystical*. In this schema, the attributes of the individual epochs, which are equipped with polarizing signs, arise entirely from the changing interplay of human faculties. The tensions lie in the modes of expression of the epochs themselves; but there is no visible logic leading from tension to intensification, that is, for example, from the childish polarity between poetry and superstition in viewing the world to the empirical opening up of access to the world in the field between the negative pole of the curious and the positive pole of the inquiring attitude to the world. (The assignment of plus and minus signs is Goethe’s.) The peculiarly unhistorical character of the anthropologically compart-

tmentalized schema conceals the historical logic in which attitudes of faith and superstition arrive at their own stages of dogmatic pedantry and, by means of the appearance of systematic completion and stability, block the view of what could endanger the system. But curiosity, the instinct of inquiry, empirical openness are awakened precisely by the tabooing coercion of the dogmatic system, which not only must deprive its adherents of certain questions and pretensions but grounds this renunciation on a particular appropriateness and serviceability of the system. The extent to which the impossibility of the system’s failing to answer questions loses self-evidence and to which the meritoriousness of renunciation or the viciousness of boundary infringement require argument is not only an index of the remaining unsatisfied curiosity or of the turning tide of awakening dissatisfaction but also reacts on this in a stimulating, accentuating, tendency-promoting fashion. The still ‘medieval’ concessions and restrictions with which the seventeenth century wants to secure a path and legitimacy for the cognitive appetite always operate at the same time as reflections on what still remained to be set free.

At the turn of the seventeenth century, theoretical curiosity gains typification, definition as a figure, wealth of gesture. In the poetic figure of Doctor Faustus there is created a bearer of its transformations and of the progress in its vindication. The original figure of Faust, in Johann Spies’s *Historia* of 1587, still embodies terror at the sinful cognitive appetite, which “took for itself eagle’s wings and wanted to investigate all the foundations of heaven and earth.” The English translator already moderated the epithets of moral reprehensibility, and Christopher Marlowe transformed the baseness of the cognitive
Part III

drive that is ready to risk anything into tragic greatness. Damnation still remains the ultimate consequence, but doubt has set in whether the spirit, when it surrenders itself entirely to its most characteristic motive, can be sinful. The chorus closes the tragedy with the moral that one should contemplate Faust’s downfall so as to be warned by his fate not “to wonder at unlawful things. / Whose deepness doth entice such forward wits/ To practice more than heavenly power permits” [in the German translation: “Zu tun, was hie und da der Seele wenig nütz,” to do what sometimes is not good for the soul]. Lessing’s Faust was to be the first to find salvation; Goethe’s Faust also found it—but did salvation resolve the question that gave the figure its epochal significance?

In his preface to Wilhelm Müller’s translation of Marlowe’s Faust (1817), Achim von Arnim “reclaimed the freedom of the world, as it matures, to rework this material” and grounded his assumption that “not enough Fausts have yet been written” on the “enormous arrogance of which the sciences of our time in their ingenious development are guilty,” without meaning to cast doubt on the effective power of Goethe’s version: “The further the lust for science spreads, the higher grows the arrogance of the individuals who think they have accomplished something and then deify themselves, the more renunciation science demands, the more the taste for science spreads—the deeper will the earnest truth of Goethe’s Faust be felt....”

When in 1940 Paul Valéry availed himself, in what was perhaps a final, insurpassable instance, of the right to render the story incarnate again, to assign to Faust and Mephistopheles their metamorphoses as instruments de l’esprit universel [instruments of the universal spirit] in history, to recognize in them the humanity and inhumanity of the altered world—the result was a comedy with magic tricks. Why so? Because it was no longer Faust who needed to be tempted but his tempter: The process of knowledge itself had surpassed everything that could make magic enticing. The great gesture of curiosity has lost its scope when pointers indicate the instant at which to press a button.

As Christopher Marlowe wrote his Faust, in 1588, Giordano Bruno had already begun to pursue to the end his path of triumphant defiance on behalf of curiositas. At least in what he believes man capable of knowing about the world, he is the real Faust figure of the century, in distance from the Middle Ages far in advance of his poetic colleague.
In the first dialogue of the *Ash Wednesday Supper*, he celebrates the work of knowledge, his knowledge, as the penetration of heaven and overstepping the bounds of the world, as the opening of the prison where truth was held in custody and the exposure of concealed nature—in other words, as the *coup de main* of the cognitive drive against its medieval enclosure and limitation. Augustine's suspicion that behind astronomy stands the striving to elevate oneself to heaven by one's own power seems to be confirmed in Bruno: "Non altrimente calcamo la stella, e siamo compresi noi dal cielo, che essi loro" [Just as we tread our star and are contained in our heaven, so are they], declares the introduction to his dialogues on the infinite universe. Knowledge of nature and possession of happiness are identical; but the Aristotelian formula regarding man's cognitive drive, which Giordano Bruno places at the beginning of his interpretation of Aristotle's physics, is now directed precisely against the closed universe of Aristotle and the Middle Ages; it has become a formula of liberation rather than justification. This liberating cognitive striving is no longer the common nature of all men—otherwise Bruno would not feel the loneliness and forlornness of his fate—but rather the business of the few whom he can pull along with him and draw into the ecstatic flight of curiosity: "O curiosi ingegni, Peregrinate il mondo, Cercate tutti i numerosi regni!" [Oh curious spirits, Travel around the world, Investigate all the numerous kingdoms!]

Francis Bacon defends theoretical curiosity entirely differently, more indolently, with juristic tricks and shrewd twists of hallowed arguments. Just as he treats the process of nature in juristic categories "exactly like a civil or criminal matter" (as Liebig observed), so also for him man's relation to nature, in the entire range—whose breadth he was the first to perceive—over which theoretical and technical mastery can be achieved, emerged as a question of legal rights. The distinction, which is usually understood as merely a result of shifting terminology, between eternal laws of nature (*leges aeternae*) and their usual course (*cursus communis*) is established in strict accordance with the distinction between codified law and common law and serves precisely to delimit the possibilities of human intervention in nature. A parallel distinction appears in the roles assigned to metaphysics and physics: The former has as its object the unalterable law beyond man's influence; the latter comprises all knowledge of the operative and material causes that man can transpose in order to influence given states of affairs.
Bacon recognizes no thoroughgoing lawful determination of nature, and I doubt whether today one still correctly understands his famous proposition that nature can only be mastered if one obeys her in the way one immediately assumes one can understand it, that is, by relating obedience and mastery to one and the same aspect of law.

The idea of an essential human right to knowledge, a right that has to be recovered, dominates Bacon’s Novum organum (1620). The preface deals with the stagnant condition of the contemporary sciences and promises to open a new and hitherto unknown path for the human spirit and to provide it with resources so that it can “exercise its right with respect to nature.” Mankind’s pretension to science is grounded in a divinely bestowed legal title, whose full power should now be exercised to the extent permitted by reason and “sound religion.” Bacon sees the satisfaction of the human appetite for knowledge with the achievements of the ancient world as a result not of conscious self-restriction in view of supposed limit settings but rather of an illusionary underestimation of one’s own powers and means, which at the same time can be described as an overestimation of what has been achieved. The pillars of Hercules, which are presented on the title page of the Instauratio magna as already being transcended by shipping traffic, are indeed a fateful boundary (columnae fatales)—but rather than representing a divine warning against hubris they represent the discouragement of desire and hope by myth.

Bacon avoids burdening the medieval sanction of the traditional world frame with the responsibility for man having allowed his possibilities to remain unexploited; as I will show, he must keep the theological premises unburdened so as to be able to derive from them a new legitimacy. Thus it is not religious humility and theological taboo that have brought about the great stagnation but rather man’s error regarding the scope of his potential power; imagined riches are one of the main causes of poverty: “Opinio copiae inter maximas causas inopiae.” False trust in the world in the present makes one neglect the available sources of assistance for the future. False trust in the world—that is the dominant concern in Bacon’s momentous exclusion of the teleological view of nature. But it is no longer the hidden and incomprehensibly sovereign God of nature Who denies man insight and intervention in nature but rather the historical indolence of man himself, who fails to recognize the goals of his interaction with nature and prematurely blocks the path of progress for himself.
by his faith in a special favor accorded to him by nature. The positions of hubris and an appropriate assessment of one's worth are interchanged in Bacon's system; men's carelessness and indolence (socordia et inertia) made them accept and treat as an agreeable authority the self-confidence and presumption of an arrogant spirit (of Aristotle), qualities that saved them the trouble of further investigations.\(^9\)

This picture of the human spirit's historical indolence and unwillingness to progress presupposes of course an altered concept of theory itself, which no longer is the reposeful and bliss-conferring contemplation of things that present themselves—as the ancient world had regarded it—but rather is understood as work and a test of strength. It is no longer sufficient to draw the individual object into the focus of observation and, so to speak, expect it to give evidence about itself; only efforts to alter reality contribute to its explanation, and the patience of reposeful contemplation is useless.\(^9\) Here also, without any notice being taken of the telescope and the microscope, the relevance of the invisible is brought into play, not, however, as the relevance of what is too small or too distant but rather as the way in which nature's constitutive elements and powers are hidden behind the self-presentation of its surface.

The novelty of the method of induction is the way in which it directs one's attention primarily away from the object of interest itself. Reason left to itself, the intellectus sibi permissus, is impotent because it is consumed in the momentariness of supposed evidence that Bacon calls anticipatio. This evidence penetrates the intellect in the moment and fills up the imagination, whereas reason that is equipped with and controlled by method is directed at a factual material that has not yet been organized, a material that does not constitute a pregiven coherent context but must first be brought into one and whose interpretation only becomes possible in such a context.\(^{10}\) The critical side of this concept of knowledge is directed against the concept of reality as evidence in the present, and the new scheme rests entirely on the concept of reality as experimental consistency,\(^4\) in which the true nature of things—like that of the citizen in the state—shows itself only when they are withdrawn from their natural condition and exposed to, as it were, artificial disorder: cum quis in perturbatione ponitur.\(^{11}\) Here the turning is described, from which Galileo extracted greater consequences than Bacon, when he turned his back on 'natural' nature and out of curiosity had himself shown the arsenal of Venice, where
the ‘artificial’ nature embodied in the mechanisms of the instruments of war gave up its secrets. Bacon’s ideal of knowledge still stands closer to the medieval undercurrent of magic than is the case with Galileo’s physics. On the other hand, Galileo’s confidence in the demonstrative power of optically strengthened observation, by means of the telescope, is more ancient in its concept of reality than our mythicized version of the scene makes it appear. Bacon’s concept of indirect experience indicates the new path more explicitly here. The magic habitus [manner, dress] is also in large part stylization, intoxication with metaphor—and not least of all an attempt to give color and concreteness to the paradisaic status of Adam as the typification of man’s relation to nature, which, while admittedly lost, guarantees his title of right in history. The restitution of paradise, as the goal of history, was supposed to promise magical facility. Bacon’s rejection of mathematics as the medium in which to formulate the knowledge of nature is connected with his definition of the paradisaic condition as mastery by means of the word. 12

Bacon wrote down the clearest outline of his justification of human curiosity by rearranging the biblical paradise as a utopian goal of human history as early as 1603 in the fragment entitled Valerius terminus, which, however, was only published posthumously in 1734. It is the earliest form of the projected systematics of his major works. The first chapter of the fragment carries the heading “Of the Limits and End of Knowledge.” This problem is immediately traced back to two analogous events of theological prehistory: the fall of the angels and the fall of man. The relation between the two events lies in the interchange of the motivations appropriate to the behavior of each species, motivations that thereby become culpable: The angels, destined for the pure contemplation of the divine truth, aspired to power; men, equipped in their paradisaic condition with power over nature, aspired to the pure and hidden knowledge. 13

At the same time, the relation between knowledge and power is prefigured in this mythical reversal. The angel of light, endowed with pure knowledge but destined to serve the highest power, reaches for the highest power itself; man, equipped with power over everything created, but not partaking of the deepest secrets of the divinity, confined as spirit in the body, succumbs to the temptation of the light and the liberty of knowledge. 14 Now he is endangered by both things, the lost sovereignty over reality and the longing for purity of knowledge, which
for this being is as dangerous as stumbling upon a spring whose torrents of water gush forth without any prepared course. But the sacrilegiously arrogated knowledge is not that of things and nature; rather it is "moral knowledge," the ability to distinguish between good and evil. This alone is God's secret, which He wanted to reveal but not to expose to an autonomous grasp. By taking the biblical "tree of knowledge" literally, Bacon reserves the realm of morality for religion but gains nature as the harmless object of an inquiry that wants to and may regain for man his lost paradisaic dominion.

There is no hint of any doubt whether the regaining of the paradisaic power is compatible with the divine reservation in favor of revelation when the latter remains restricted to morality, since after all the lost paradise evidently had no need of morality and its discovery immediately entailed banishment. Bacon is not concerned with such inconsistency; it is enough for him that knowledge of nature was not the temptation that brought man to his fall. If God appeared to have His secrets in nature as well, then that meant no prohibition but rather something like the divine majesty's delight in hiding His works, in the manner of innocent children's games, in order to let them ultimately be discovered nonetheless. For Bacon, the great world hide-and-seek of the hidden God of late-medieval nominalism, which Descartes intensified into the suspicion of the universal deception of a Dieu trompeur [deceiving God] and sought to break through by grounding all certainty on absolute subjectivity, has exactly the innocence of a game laid out with the goal of eventual discovery and solution and free of any suggestion of jealousy of man's insight into the secret of the creation.

The idea is foreign to Bacon that human knowledge might be an auxiliary construction in place of what is unknown, might be hypothesis and mere probability—a consideration that the seventeenth century used over and over again to conceal its cognitive pretension. For Bacon, the human spirit is a mirror capable of containing the image of the universe. The representation of this universe is determined by the idea of natural law ("law of nature"). The interpretation of this expression is still entirely bound to its metaphorical substratum, to the analogy of political law. This confines the idea within the horizon of the political thought of the time: The citizen does not enjoy insight into every aspect of the will of the ruler, but events and changes enable him to infer the reason that underlies the whole.
Bacon loves still another set of metaphors, those of organic growth. Here as elsewhere they have the function of justifying the continuation of a formative process, once begun, toward a totality. Knowledge is "a plant of God's own planting," and its development to blossom and fruit, laid out in its inner principle, is "appointed to this autumn of the world," the harvesttime that Bacon believes has arrived in his century, as the time when his philosophy is 'due,' and which announces itself in the opening of the world by seafaring and trade and in the awakening of knowledge. Religion, so he argues, should support and promote the knowledge of nature, since its neglect is an offense to God's majesty, as though, perhaps, one were to judge the accomplishments of an outstanding jeweler only by what he lays out in his show window. But in everything the lost paradise remains the regulative idea of cognition; knowledge continues to be functionalized for power, for "the benefit and relief of the state and society of man"; otherwise it degenerates and "maketh the mind of man to swell." Here "the pleasure of curiosity" appears once more in its medieval signification; but the expression describes not a particular variety and objective reference of knowledge itself but rather a standstill in the pursuit of knowledge, a forgetfulness of its original purpose, a refusal of its potential for the recovery of paradise. Knowledge that only satisfies itself fails to serve its organic purpose and takes on the characteristics of a sexual vice that produces no offspring.

The voyage beyond the Pillars of Hercules has lost its adventurousness and no longer aims only into the enticing indefiniteness of the ocean; the certainty of finding terra incognita on the other side of the ocean justifies the departure; indeed it renders it criminal to linger in the land-locked sea of what is known. The extent to which we are certain that we do not yet know and rule nature, that we are not yet near the lost paradise again, guarantees the future of new discoveries. The increment to the known world that had already come about in Bacon's time contracts, in the great framework of this speculative picture of history, into a mere beginning, a symptom of possibilities. Pure knowledge, whose idea coincides for Bacon with the ancient idea of theory, appears to him as an attitude of inescapable resignation because it has no motive for its progress but rather dwells persistently on each of its phenomena and loses itself in admiration of it. Curiositas has become a worldly 'sin,' the indolence of theory in theory itself, a failure in the extensiveness of the cognitive pretension as a result of
its intensiveness. The premature assertion, in the tradition, of boundaries to knowledge and capability was for Bacon the result of this ideal of pure theory. 23

This position of Bacon's entails a leveling off and homogenization of the world of objects. There are no preferred and no unworthy objects of theory. The teleological interpretation of knowledge itself excludes any teleological interpretation of its objects. What an object 'imports' first emerges only when it functions as a source of evidence to be assimilated by method, that is, not in what it is but in what it makes possible. Here a new concept of the 'purity' of theory is forming itself, one that no longer has anything to do with the ancient ideal but rather points to what we nowadays call 'basic research,' where we exclude only predefined purposes, but we certainly do assume that theoretical results themselves give rise to possible goals, open up the path to applications. The general goal of the reattainment of paradise cannot be made specific in the form of fixed goals for the individual component processes. Here also the image of the contemporary voyages of discovery dominates Bacon's thought. No assumption of an unknown goal guides the ship's voyage; rather the compass enables one to hold to a path on which, in the field of the unknown, new land will eventually appear. Which goals are attainable is something that emerges from and along the paths that are found; method is the unspecific potentiality of knowledge, the security of holding to the chosen direction and the clarification of the possibilities inherent in it.

The systematic topography of the paths guarantees that the accidents of things coming to light ultimately lead to a universal acquaintance with the world. The discovery of the compass enables one to imagine a net of coordinates laid over reality and independent of its structures, in which the unsuspected can be sought and arranged. So much had remained concealed from the human spirit throughout many centuries and was discovered neither by philosophy nor by the faculty of reason but rather by accident and favorable opportunity, because it was all too different and distant from what was familiar, so that no preconception (praenotio aliqua) could lead one to it. Thus one may hope that nature conceals in its womb still more, of greater importance, which lies entirely outside the familiar paths of the power of imagination (extra vias phantasiae) and which one can only be sure of finding through the systematization of accident. 24 The tendency of Bacon's method is to set the human mind in controlled motion. Where nothing is un-
dertaken, nothing can be achieved; and to expect representations of
the goal where imagination and conception fail is to be misled, with
standstill as a result. Paths must be entered upon and their “directions”
held to in order to find what is new.

The mythical construction of the fall of the angels and men and of
the immanent restoration of paradise, which serves Bacon as a jus-
tification of human curiosity with respect to nature, presupposes a
‘polimorphic’ conception of the world, that is, a conception in which
natural laws are interpreted as decreed by divine volition and the role
of created things is defined in the plan of creation in terms of service
and power. What lies open and what remains hidden, what results in
good or evil, is determined by this quasi-political state. Commandment
and law, which were promulgated over nature verbally and are carried
out according to the word, also have the word as their appropriate
medium of knowledge. The determined antithesis of this position is
constituted by the metaphysics of the mathematization of natural sci-
ence. It proceeds from the impossibility in principle of secrecy in
nature and things withheld from knowledge, to the extent that math-
emtical regularities are implemented in nature.

The mathematically comprehensible law of nature is not a decree
of divine volition but rather the essence of necessity, in which divine
and human spirit possess the same evidence, which as such excludes
the withholding that makes things inaccessible. Kepler and Galileo
gave the most compelling expression to this idea, more compelling
than Descartes, because Descartes had to take the indirect path of
securing certainty by means of the divine guarantee even for math-
ematics. The human spirit will correctly assess its powers, Kepler writes
to Mästlin on April 19, 1597, only when it understands “that God,
Who founded everything in the world according to the norm of quantity,
also gave man a mind that can grasp these norms. For like the eye
for color, the ear for sounds, so man’s mind is not meant for the
knowledge of whatever arbitrarily chosen things, but for that of mag-
nitudes; it understands something the more correctly, the more it
approaches pure quantities, as the origin of the thing.”

The basic nominalist idea of mathematics as a constructive makeshift
of knowledge over against the pure heterogeneousness of the world
is thus given up and a form of justification for curiosity is found, which
at bottom is the absence of any need for justification. Though Kepler
may still give the idea the pious form of a derivation from man’s
creation in God’s image, this is nevertheless inessential for the stringency of the argument; that we “gain a share in his own thoughts,” as Kepler writes to Herwart on April 9/10, 1599, depends on the essential ‘openness’ [Öffentlichkeit] of these thoughts themselves in their mathematical structure. In the knowledge of numbers and magnitudes, Kepler goes on, “our knowing, if piety permits one to say so, is of the same species as the divine knowing, at least insofar as we are able to grasp something of the latter in this mortal life. Only fools fear that we thereby make man into a god; for God’s decrees are unfathomable, but not His corporeal works.” Kepler has not yet loosed this idea from its medieval embedding in the idea of the preference given to man by providence; Leibniz was to be the first to accomplish this, by making the principle of sufficient reason into the criterion by which to verify the divine plan of creation objectively and basing on this the impossibility that the nature of the \textit{mathesis divina} [divine mathematizing] should be arcane.

This is no ‘secularization’ of man’s having been created in God’s image. The function of the thought emerges naked and undisguised and makes its historical derivation a matter of indifference: Knowledge has no need of justification; it justifies itself; it does not owe thanks for itself to God; it no longer has any tinge of illumination or graciously permitted participation but rests in its own evidence, from which God and man cannot escape. The Middle Ages of High Scholasticism had seen man’s relation to reality as a triangular relation mediated by the divinity. Cognitive certainty was possible because God guaranteed man’s participation in His creative rationality when He brought him into the fellowship of His world idea and wanted to furnish him, according to the measure of His grace, with insight into the conception of nature. Any autonomous step beyond this conception strained the relation of dependence and the debt of thanks. This triangular relation is now dissolved; human knowledge is commensurable with divine knowledge, on the basis, in fact, of the object itself and its necessity. Reality has its authentic, obligatory rationality and no longer has need of a guarantee of its adequate accessibility. The problematic of theoretical curiosity, which had depended on the idea of the world as a demonstration of divine power, and of human stupor as the corresponding effect, is paralyzed by the idea that knowledge is not a pretension to what is unfathomable but rather the laying open of necessity.
From the point of view of the stage that the argument was to reach with Leibniz, the position that Galileo occupies in developing it, and the burden that he had to bear in opposing the theological position, becomes clearer. At the end of the “First Day” of the *Dialogue on the World Systems*, the question of the existence of living beings on the moon is discussed. The human power of imagination, Salviati decides, is incapable of imagining such beings, since the riches of nature and the omnipotence of the Creator lead one to expect that they would be utterly different from the ones known to us. Sagredo agrees with him that it would be the highest audacity (*estrema temerità*) to make the human power of imagination the criterion of what can exist in nature. Only a complete lack of all knowledge would lead to the vain presumption (*vana presunzione*) of wanting to understand the whole. *Docta ignorantia* [learned ignorance], the Socratic knowledge of ignorance, is praised as the effect of true cognition; no state of knowledge attainable in fact could diminish the difference between human knowledge and divine knowledge in its infinity: “Il saper divino esser infinite volte infinito” [Divine knowledge is infinitely times infinite]. So far this could have been taken from a medieval treatise.

Galileo’s artful dialectic, however, consists in the fact that he puts in the mouth of the conservative figure of the Scholastic in his dialogue, Simplicio, the remark that gives the argumentation its turning. If this were how things lay with regard to human knowledge, Simplicio says, one would have to admit that even nature had not understood how to produce an intellect that understands. 26 Salviati praises the acuteness of the otherwise dull mind, and this always means that he can catch ‘the Middle Ages’ in an inconsistency. As a matter of fact everything that one had heretofore admitted to be a weakness of the human spirit had been related to the extent of knowledge. But if one considered its intensity, that is to say, the degree of certainty of an individual proposition, then one would have to admit that the human intellect can grasp some truths just as perfectly, and possess certainty regarding them just as unconditional, as any that nature itself could possess. 27 It is true that the divine spirit can grasp infinitely many more mathematical truths than the human spirit, namely, all of them, but knowledge of the few is equivalent in objective certainty (*certezza obiettiva*) to divine knowledge, even if the species of the cognitive act may be different.
And now follows the crucial sentence, which brings the whole train of thought into relief against the background of what was still mediately thinkable: The human knowledge of mathematical truths conceives them in their necessity, beyond which there can be no higher level of certainty. These statements are common property and free from the suspicion of presumptuousness or daring (lontane da ogni ombra di temerità o d'ardire). The dialogue has traversed the obligatory stretch of humility and earned its license to enhance the dignity and accomplishment of the human spirit. That nullity is not so null as to prevent the “First Day” of the dialogue from ending with a laudatio [eulogy] of the human spirit’s acuity and discoveries.

When Galileo had completed the Dialogue on the World Systems, he was once again, and forcibly, confronted with the question of the legitimacy of the cognitive will. The Roman censor imposed on him the stipulation that the theses of the work—especially the explanation of the tides by the movement of the earth, in the “Fourth Day,” a movement that is the physical and realistic correlate of the Copernicanism that was permitted only as an astronomical hypothesis—should be put under the proviso of the infinite possibilities open to omnipotence. One could say that this proviso of sovereignty forced upon Galileo did not affect the core of his epistemology because to all intents and purposes the whole dialogue made no use of the technique of mathematical astronomy; that is, it did not even touch that highest intensive dignity of the intellect, for which Galileo had postulated an evidence common to God and man. The irony of the situation lies in the fact that the Pope had informed Galileo, through the inquisitor of Florence, that the mathematical presentation of the Copernican doctrine remained entirely open to him. But Galileo gathers together all the materials that he himself, according to his classification, would have to ascribe to the extensive accomplishment of knowledge and thus render suspect of the weakness that is proper to knowledge wherever it does not become mathematical.

Admittedly, where the Copernican matter is concerned, Galileo’s own criteria leave him in the lurch. The formula that Galileo had to work into the text does not contain, as has been asserted, something like Urban VIII’s personal countertheory to Galileo’s explanation of the tides; rather it is an ‘antitheory’ altogether, opposed to physical theory of any kind. In it the difference between the thought of the spent Middle Ages and the new pretension of the scientific explanation
of nature comes undisguisedly to light. Offense was to be taken at the fact that Galileo placed this vexatious formula in the mouth of Simplicio, that is, of the figure in the dialogue who is the loser in the end. There is, he says, always present in his mind a teaching that was once given him by a highly learned and highly placed person and that he regards as unshakeably well established, namely, that God can also produce a phenomenon in nature in a different way than is made to appear plausible by a particular explanation. Consequently it would be inadmissible daring (soverchia arditezza) to want to narrow down and commit divine power and wisdom to a particular idea by asserting that single explanation to be true.

This general proviso throws man back, as far as he is concerned with theoretical truth, to a hopeless position. For him the world would continue to have an unperspicuous structure, whose laws had to remain unknown to him and for which any theoretical exertion would stand under the threat of the revocation of the condition of its possibility. Of course for the theologian Maffeo Barberini, who sat upon the papal chair, God could be an uncertainty factor in knowledge, since at the same time He offered man His revelation as the sole salvation-bringing certainty and had the right not to allow its uniqueness to be leveled off or supplanted by other supposed certainties.

It is evident that what Galileo had to deal with here was the charge—which had now reached the stage of ‘taking measures’—embodied in the verdict against curiositas. The discipline with which Galileo makes Salviati answer that this is an admirable and truly angelic doctrine allows him a new bit of dialectic: It is perfectly in harmony with this to award us permission to investigate the construction of the world, even if we may not pretend fully to understand the work, as it comes forth from the divine hands, since otherwise the activity of the human spirit might perhaps grow weak and be exhausted. Theoretical curiosity, it seems to be argued here, has its economy between the futility to which the omnipotence proviso means to relegate it and the definitiveness in which belief in the completed possession of knowledge would fix it. Galileo’s resistance to the omnipotence proviso suggests that it is only and especially the movement of the intellect, as progress in its understanding and its formulation of problems, that guarantees consciousness of the finitude of knowledge over against the infinitude of what, though it is never irreducible, is nevertheless kept in reserve at any given time, whereas the mere appeal to the infinitude of the
intrinsically noncontradictory possibilities open to omnipotence destroys any consciousness of a relation between what is already known and what is still to be known and thrusts reason back into the indifference of resignation. The project of infinite progress does indeed direct itself against reason's theological resignation but not against reflection on its finitude, which can only be experienced precisely in the accomplishment of its possibilities.

The role that the progress of knowledge begins to play in the justification of curiosity stands out in the negative at the close of the Dialogo: It is not what the progress of knowledge has already yielded and is yielding now that legitimates the cognitive drive that keeps it in motion but rather the function for consciousness of what lies before it at any given time, which gives everything that has been achieved the mark of finitude and provisionality. "Sir, my science is still greedy for knowledge!" says Bertolt Brecht's Galileo in bargaining with the curator of the University of Padua, who would like to divert his wish for income to the more lucrative provision of private tuition. The declaration that Brecht puts in Galileo's mouth here objectivizes curiosity and makes it into a mark of the imperfect status of his science; this corresponds to the objectivity of the conflict of systems in which Galileo and Urban VIII are the exponents. But Brecht does not stick consistently to this objectivization of curiosity. He writes in his Notes on the "Life of Galileo," "The inquisitive drive, a social phenomenon scarcely less lustful or dictatorial than the procreative drive, directs Galileo into this dangerous territory, drives him into painful conflict with his intense wishes for other satisfactions. He lifts the telescope to the stars and delivers himself over to torture. In the end, he practices his science like a vice, secretly, probably with pangs of conscience. In view of such a situation, one can scarcely be bent on either only praising Galileo or only damning him."31

Such a late reintroduction of theoretical curiosity into the catalog of vices has, of course, its new premises: Where it converts itself, as motive power, into science, it gives this science an imprint of 'purity' and apragmatic disregard for consequences that makes it appear just as questionable from the humane or social point of view as it was under the primacy of the exclusiveness assigned to the question of salvation by theology. Galileo, writes Brecht, "enriched astronomy and physics by simultaneously robbing these sciences of the greater part of their social meaning.... Galileo's crime can be regarded as
the 'original sin' of the modern natural sciences. From the new astronomy, which deeply interested a new class, the bourgeoisie, since it afforded assistance to the revolutionary social currents of the time, he made a sharply circumscribed specialized science, which of course precisely on account of its 'purity,' that is, its indifference to the mode of production, could develop with relative freedom from disturbance. The atom bomb, as both a technical and a social phenomenon, is the classical end product of his scientific accomplishment and his social failure." The difference between the two statements about Galileo—the one in the play and the one in the notes on the play—gives us a key to the new shape of the problem of theoretical curiosity in the seventeenth century. In my opinion, the most precise comprehension of the actual state of affairs is extracted in the short statement to the Paduan curator: Curiosity is not only no longer able to be one of the vices of the individual in need of redemption; it has already separated itself from the structure of personality, from the psychic motive forces, and has become the mark of the hectic unrest of the scientific process itself.

Admittedly this corresponds neither to the picture that Galileo made for himself of his own type of mental eagerness nor to what his contemporaries saw in him. The digressiveness that dominates the style of both of his great dialogues and is so distant from the linear methodology that Descartes was to project for the new idea of science indulges, with emphatic unconcern for system, in the psychological attraction of each new curiosità [curiosity] as almost an isolated quality of the objects themselves. New truths are found off the side of the direct path of what method anticipates, by seizing accidental opportunities, by being ready to drop the thread of principles already established. The opposite type is represented by the people who could not be curious enough to look through the telescope because they believed themselves to know too accurately already what one could not see with it. When in the "Third Day" of the Dialogue on the World Systems the discussion comes to William Gilbert's theory of magnetism, Galileo makes Salviati say that against the authority of the inherited conceptions, only a curiosity comparable to his own (una curiosità simile alla mia) and the suspicion of an infinite reserve of unknown things in nature could maintain inner freedom and openness toward what is new. Martin Horky, the pamphleteer against the moons of Jupiter who was put forward by Magini, already placed Galileo's eye trouble,
which was ultimately to lead to blindness, in an infamous relation with his curiosity: "... optici nervi, quia nimis curiose et pompose scrupula circa Jovem observavit, rupti ..." [... optical nerves, which have observed Jupiter with too much curious and ostentatious scrutiny, broken ...]. And Galileo's first biographer, Vincenzio Viviani, made *filosofica curiosità* [philosophical curiosity] the key term in his characterization of his teacher.

But the crucial objection—precisely because it was no longer medieval—against curiosity as the power that was definitive for Galileo's style of inquiry was first raised and could only have been raised by Descartes, who for his part gave the new science not indeed its aims and contents but certainly its form and agenda. He writes regarding Galileo to Mersenne, "His error is that he continually disgresses and never stops to expound his material thoroughly, which shows that he never examined it in an orderly fashion and that without considering the primary causes of nature, he merely sought the causes of some particular effects, so that he built without a foundation." The motor quality of theoretical curiosity appears in Descartes to be threatened by objective irritations, to which it all too easily succumbs, by being made to forget the basic and presuppositional questions, the foundations and critical reinforcements, to which a thinker of the Cartesian type devotes himself entirely. Here there arises a sort of intrascientific morality, a rigorism of systematic logic, to which the unbridled appetite for knowledge is bound to be suspect.

With decisiveness equal to that with which he excluded teleology from the canon of possible questions directed at nature, Descartes gave human knowledge the teleological character of a strenuous exertion, united by the Method, toward the attainment of the definitive morality, which as the epitome of materially appropriate behavior in the world presupposes the perfection of factual knowledge. The employment of the terms *curiosité* and *curieux* [curiosity and curious person] in Descartes has neither pathos nor specificity; the rational goal of knowledge excludes any other justification of the energies that must be expended for its achievement. The *curieux* takes on the professional quality of the scholar, who is characterized more by the methodically secured or attainable possession of knowledge than by the elemental need for knowledge, even if something of the infamy of the *sciences curieuses* [curious sciences] may still adhere to the disciplines, such as anatomy or chemistry, that are now entering the orderly ranks of
scholarship. The predicate formerly attached to the solitary daring of individuals is made harmless as the designation of an interested public and as the characterization of the equally harmless activities of the collector and the amateur, which are carried along with the great train of scientific progress and protected by it. Part of the process of the legitimation of theoretical curiosity is its effort to rediscover itself, or a preformation of itself, in the region where something new would in any case look for evidence to demonstrate that it is nothing new, before a consciousness that novelty is permissible had stabilized itself in history—namely, in antiquity.

The early historiography of philosophy—represented in its most lasting form by the widely read Jakob Brucker, who defined the picture of the philosophical tradition for, for example, Kant—already poses the question of what was special about the conditions under which something like ‘philosophy’ could arise among the Greeks as the epitome of theoretical procedure—a question that was to be approached in many ways, for instance, that of expounding the disposition of the Greek language for the development of philosophical modes of thought. Here one must recognize to what an extent the beginnings of the historiography of philosophy depend directly on the testimony of the sources themselves, since the critical thinning out of the tradition, which begins with Bayle, affects the anecdotal material more than the study of doctrine; but it affects the latter even more than it does the statements, withdrawn from verification, about the origin and the motives of the theoretical attitude.

In the nominally short, actually seven-volume long Kurtze Fragen aus der Philosophischen Historie [Short Questions from the History of Philosophy], whose first volume was published in Ulm in 1731, Brucker too asks the question (formulated in the manner of a Scholastic quaestio): “What was the beginning of philosophy like, with the Greeks?” Brucker regularly answers such questions initially with a single, and therefore usually not very informative, sentence, as in this case: “Rather scanty, and very obscure as well.” “Wide-awake” Greeks had gone to the Orient, and there had seen the “establishments” of people “who were considered learned”; and in the reverse direction, foreigners had settled in Greece and given instruction. The philosophy of the barbarians is characterized as philosophia traditiva [traditional philosophy], as a canon of learned answers, handed down unthinkingly, to established questions. The Greeks, however, were moved to reflection by this teaching. This
version of the relation is important because it does not adopt the dogma that philosophy was an inheritance from the East but rather defines a new beginning in relation to this inheritance, and not even as a result of unmediated wonder at nature and pressure from the questions that it poses. It is remarkable how little use is made here of Greek philosophy's interpretation of itself, whether it be the designation of wonder as its original affect or the discovery of the supposed allegorical hidden meaning of mythology.

For Brucker, neither immediacy nor tradition can be the reason for this beginning. What is important for him is "the curiosity of the Greek nation." This is in harmony with the manner of speaking that prevailed in his century. Fontenelle will still insert this characterization of the Greeks into his Cartesian schema of the difference between *raison* [reason] and *esprit* [wit, intelligence], thus attributing to the origin of philosophy the quality that was supposed to have prevented it, until Descartes, from performing its plain function: "Les Grecs en general avoient extremement de l'esprit, mais ils étoient fort legers, curieux, inquiets, incapable de se moderer sur rien; et pour dire tout ce que j'en pense, ils avoient tant d'esprit, que leur raison en soufroit un peu." [The Greeks in general had a great deal of wit, but they were very fickle, curious, agitated, incapable of restraining themselves in any area; and, to be frank, they had so much wit that their reason suffered somewhat as a result.] Brucker does not see the quality of curiosity in terms of the antithesis between intellectual excitement and controlled rationality. Philosophy seems to him to be the result of a setting free of energies over against traditional doctrine. Consequently it is important that the motive of curiosity appears here in what was an unusual, if not a unique association for the time: in association with favorable political circumstances. Under a "form of government in which anyone could think, say, and teach whatever he wanted to," the impulse of curiosity develops into science. Allegorical interpretation and esoteric doctrine become mere residues of the earlier traditional form of philosophy, "vestiges of the secret type of teaching."

So as to make more evident the contrast between Brucker's analysis of the origin of curiosity and the traditional harnessing together of the immediate impact of nature with theoretical excitation, I want to quote the very conventional formulations from J. G. Sulzer's *Gedanken über den Ursprung und die verschiedenen Bestimmungen der Wissenschaften*
... an innocent curiosity and the desire to gain a complete acquaintance with the phenomena of nature provided the occasion for their genesis; and no doubt this occurred later than the birth of the arts. Nature is a vast theater that presents amazing objects and events on all sides. Could men, once they were free of their initial struggle for sustenance and had gained some free time, for long regard this magnificent edifice of the world without thinking of the unseen power that brought forth such a thing and the dexterous hand that organized the parts into a whole? Could the old inhabitants of these fortunate regions, where a pure and peaceful air always leaves the heavens unobscured, for long view this marvellous vault in which so many stars sparkle, of which any one would be sufficient to fix our gaze, without asking themselves what all these lights may be?

Nevertheless, for Sulzer too the disposition to such immediate admiration of nature is not present in everyone: “There are entire peoples in whom one finds not a trace of this curiosity, which is a mother of science. The stupid Hottentot and the miserable native of Greenland regard the wonders of nature with an amazing indifference.”

When Brucker comes back to this topic in the second volume of his work, in the “Additions and Improvements,” the connection between curiosity and democracy becomes clearer: It destroys the form of the philosophia traditiva [traditional philosophy] as a wisdom guarded by priests, which conveys only dicta but not “the cause, the connection of the reasons with the conclusions. . . . And just as soon as the ancient Greeks had laid aside bestiality and the savage state, they themselves began to reflect. . . .” In this process, the politician took the place of the priest: “The investigation of truth got away from the priests, and soon politiki [statesmen] applied themselves to it. . . .” This is very remarkable because it reverses, historically, the direction of the relation of foundation between philosophy and politics in the metaphysical tradition. This tradition had always seen the theoretical attitude as depending on leisure. Theoretical curiosity did not require any other public conditions than the negative one of freedom from the pressure of need; it did not require the possibility of satisfaction of the cognitive interest by virtue of the competence of everyone to inquire into everything.
Translator's Note

The problematic of theoretical curiosity seemed to Descartes to be exhausted. The superior power of the logic with which the idea of science forces its way is such that it can afford to ignore the splinter and reflex effects of its epochal interest. But in view of the connection taken for granted as existing between knowledge and usefulness in life, a question remains unposed that at first sight appears to bring forward ancient concerns again—no longer, to be sure, the question of the identity of theory and eudemonia, but rather the question of the dependence of man’s happiness on knowledge, or even, taken a step further, the question whether man’s happiness is not endangered by knowledge.

The objectivization of theoretical curiosity, its disappearance into the logic of the methodical process of scientific cognition, is implied in both of the basic demands of the Cartesian philosophy: the postulate of the radically new foundation of cognitive certainty and the project of the regulated procedure of all cognitive acts. The elementary concern for the possibility of any secure knowledge at all made the traditional rank orderings of its objects utterly irrelevant for the realization of knowledge. Henceforth the theoretical dignity of the object and its position in the cognitive process depend entirely on the extent to which man assures himself of his results in each case. The function that both the individual and his object have in the context of the process is regulated by reference to the idea of the whole—and Descartes still held to the perfectability of the totality of knowledge.
This model of a process transcending individuals in respect to both their lifetimes and their vital interests transfers the motivation of the movement of knowledge into the process itself and rationalizes not only the latter's methodology and choice of objects but also the subjects as its functionaries; while they do provide for the happiness of a mankind that is to be brought to its definitive morality, they can never lay claim for themselves, or for the time in which they live, to fulfillment of life through knowledge. The equality of men is postulated as not the equality of their claim to justice and happiness but the reduction of both individual motives and individual prospects to their functional share in the overarching process. In this way inquiry takes on the characteristics of a professional office, the character of work, which is also always a form of justification as long as the suspicion of mere enjoyment does not fit into the picture of an obligation to serve a higher purpose.

Truth is not only, as Bacon had said, the daughter of time. This could still involve the fundamental idea of organic growth and maturing, or the experience of the astronomers that very small changes in the heavens become observable only over very great lengths of time. Truth has become the result of a renunciation for the modern age also, a renunciation that lies in the separation between cognitive achievement and the production of happiness. This separation could be accepted as a temporary one as long as the integration of theoretical accomplishments still seemed attainable or indeed insofar as one considered one's own present situation to be quite near to the summit of the ascent. But this separation also begins—with increasing doubt about the convergence of knowledge and happiness—to be set up as an ideal: Lack of consideration for happiness becomes the stigma of truth itself, a homage to its absolutism. Nietzsche was to try out the category of ‘secularization,’ without using this term, on this very characteristic of modern science; scientific truth appeared to him to be a concealed form of the ‘ascetic ideal,’ a late form of the renunciations, inimical to life, that Platonism and Christianity had demanded of man. But the question of the compatibility of scientific truth with humanity, of the legitimacy of theoretical curiosity as a ‘reckless’ effort, was already posed at the high point of the Enlightenment and its scientific optimism.

Here curiosity appears split into two roles: It is both the original driving power in the unlimited proceedings that mankind conducts, without consideration of the individual, toward the illumination and
mastery of reality, and also the agent that disturbs and diverges from this process, that makes the individual insist on access to the truth that will guarantee his happiness. This antithesis is the basis of not only what one could describe as the Enlightenment's predominantly indulgent dealings with the remnants of the Middle Ages but also the unmediated coexistence of new science and old metaphysics, or the continual conversion of theoretical world models into world pictures useful for life.¹ The continuing absence of convergence between the total representation of nature, on the one hand, and the determinate purpose of the totality of knowledge of nature, on the other, enforced translations and transformations; the universe of modern physics, as completed in the first instance by Newton, yielded for the eighteenth century a conclusive schema of leading ideas for everything from political theory to moral philosophy.

What Voltaire (1694–1778) accomplished with the philosophical paradigmatization of Newton is more than the popular distribution of esoteric scientific goods. But the same Newton who used the unanswerability of the question regarding the cause of the direction of the planets' orbits around the sun as a point at which to admit theological voluntarism into his system of nature becomes for Voltaire the anecdotal prototype of an economical skepticism that is meant to reduce the luxury of theoretical curiosity to the magnitude serviceable for life.² Curiosity is the mark of a finite being with infinite pretensions; its absurdity is demonstrated in the cosmic projection of the philosophical novel Micromégas. The astronaut from Sirius learns from the secretary of the Saturn Academy that the people on this planet have seventy-two senses and still complain daily that they possess so few. "We imagine more needs than we have, and with our seventy-two senses, our Saturn ring, and our five moons, we feel far too confined, since in spite of our curiosity and the numerous passions that result from our seventy-two senses, we still have plenty of time to get bored."³ The traveler from Sirius replies that in his homeland, where one has almost a thousand senses, it is no different and there, also, there remains an undefined yearning and unrest: "Je ne sais quel désir vague, je ne sais quelle inquiétude" [I know not what vague desire, what disquiet]. When, at the end, the Saturnian wants to continue the journey with his friend from Sirius, his mistress, who has got wind of his departure, assails him with a passionate complaint, culminating in these words: ". . . va, tu n'es qu'un curieux, tu n'a jamais eu
d’amour . . .” [. . . go on, you are nothing but a curiosity seeker; you have never experienced love]. That, expressed in one of the typical scenes of the Contes philosophiques, is the antithesis between curiosity and happiness in life.

The magnified scale of the cosmic anecdote shows that in the context of the infinite, approximation is impossible, and that the same problems repeat themselves on each level in the same proportions. The instability of this situation is due not to a drive to transgress limits with respect to a tabooed transcendence; it consists rather in the turn toward dogmatization of what has supposedly been attained; the intolerability of unrest produces scholastics, leads to intolerance. If Fontenelle had still said, in the Discourse on the Plurality of Worlds (1686), that the whole of philosophy rests on two things: the curiosity of the spirit and the shortsightedness of the eyes, then Voltaire’s thesis is that even a thousand eyes, and eyes that were a thousand times better, would not improve the prospects for satisfying the unrest of the cognitive will. Curiosity alienates man from his true basic problem, which is a problem of behavior, not of knowledge: “O homme! ce Dieu t’a donné l’entendement pour te bien conduire, et non pour pénétrer dans l’essence des choses qu’il a créées” [Oh man! this God gave you understanding so that you should behave well, and not to enable you to penetrate into the essence of the things He created]. Allowing for a small, but crucial alteration, which is not ‘secularization,’ this could have been taken from a medieval treatise reminding us of the priority of salvation over knowledge.

The abbé Galiani, in a letter to Mme. de Epinay dated August 31, 1771, urged in opposition to Voltaire’s article on “Curiosité” that the feeling of happiness did not indeed result from the satisfaction of curiosity, but rather, conversely, curiosity is the surest symptom of happiness. The happier a nation, the more curious it is, and a curious people is a good testimonial for its government. Consequently Paris is the capital city of curiosity. It is a little theory of the origin of culture from the anthropological characteristic of curiosity, which distinguishes man from beast: The curious man is more a man than others are. The whole antithesis to Voltaire becomes clear when this anthropology of curiosity opens into the aesthetic situation of the spectator in a theater, which is defined by his position’s invulnerability to the danger and confusion of the action that he watches running its course on the stage. This comfortable private box, which is reached by neither rain
nor sun, this artificial maximum of the distance between reality and the standpoint of the spectator, for whom his inaction and the absence of any need for him to act are the conditions of his feeling happy, this Archimedean point is not available to man as Voltaire sees him. Hence for Voltaire aesthetics cannot be exemplary for man's relation to the world. Even Galiani's theater is not really the world theater, even when he makes Newton investigate the causes of the moon's motion and of the tides out of pure curiosity and concludes in summary that "almost all sciences are only curiosities, and the key to the whole is that from the beginning the curious being must be secure and in a comfortable condition." Mme. de Epinay, one may note in passing, gave this letter the ample answer that her dog was also curious.  

Pierre Louis Moreau de Maupertuis, who accomplished Newton's triumph in France less through literature (in the manner of Voltaire) than by means of painstaking labor and organizational skill, embodied curiosité as the energy of his century in a manner that is unique because in him it becomes both a capacity to imagine problems and also a political appeal to the powerful people of his time, and not least of all because he proposed a theory of its unappeased and unappeasable excitability and unrest.

He himself stylizes the prototypical role of the functionary and hero of curiosité for himself when he portrays the terrible hardships that he had to withstand during the meridian measurements in Lapland, by means of which he wanted to furnish the definitive proof of the oblateness of the earth spheroid, and thus the definitive proof of the truth of Newton's physics. This modern martyrdom of curiosity, which forces the perceptual demonstration of the truth, reads as follows: "Moving through the snow, which was two feet deep, laden with the heavy measuring rods, which had continually to be laid down and picked up again, in a cold in which tongues and lips immediately froze to the cup and could only be torn away bleeding, when one wanted to drink brandy, which was the only fluid that remained fluid enough to be drinkable... While our limbs were benumbed, the exertion made us sweat."

Maupertuis had an eye for the hitherto entirely untried type of research problem that required collective and international cooperation extending across territories and oceans, and thus required a certain political substructure: France, he wrote, had made the greatest contribution that had ever been made to the sciences when it sent out
troops of experts to determine the shape of the globe; in the same manner it should bring about a determination of the parallax of the moon by means of observations from distant points on the earth, and thus lay the foundation for an exact measurement of the universe; it should set in motion a systematic search for parallaxes of fixed stars, by means, in fact, of an international division of the heavens into zones to be observed by a great number of participating astronomers. On the basis of what for him is the obviously fundamental human attitude of curiosity, he believed he had only to offer such tasks to the nations and the princes of his time in order to set in motion the instruments of a routine that had become sluggish. He reproaches even the pharaohs, whom he assesses, like the princes of his own times, as naturally "curious," with having squandered the immense quantities of labor that went into erecting the pyramids, which they should rather have put to work in excavating and investigating the interior of the earth. For this notion, too, Voltaire will ridicule him terribly in his satire on "Dr. Akakia." Part of the consciousness of the Enlightenment is that for the first time it has become aware of the fact that man lives 'only on the surface of [i.e., "superficially" on] the earth' and that this is perhaps an indication that in general he exists on and orients himself to what is only the surface of a hidden reality. I need only mention the importance that this idea has for Lichtenberg. This suspicion is the impulse to accelerate the convenience of inquiry, to gather together forces, to develop parameters, methods, and modes of organization for pressing forward into the depths of the unknown. The pyramids too, which were apostrophized as useless, are only a model of this situation: "... what a small part of such an edifice is the part that has been discovered! Is it not probable that many other things are shut up in there?"9 A "Calife curieux" had already had a pyramid opened once. That was in the ninth century. But now it would be possible to unveil the entire mystery: "L'usage de la poudre rendroit aujourd'hui facile le bouleversement total d'une de ces pyramides ... [Today the use of gunpowder would make it easy to overthrow one of these pyramids entirely]. Here, perhaps for the first time, the use of gunpowder for theory is recommended, as a means of laying open a path to the unknown within; and the political conditions are not forgotten—they are favorable: "... le Grand-Seigneur les abandonneroit sans peine à la moindre curiosité d'un Roi de France" [... the Sultan would abandon them without any difficulty to the least curiosity
of a King of France]. Curiosity has become expansive, grandiose, and occasionally violent.

Hardly anyone has drawn up such a complete catalog of conjectures that could stimulate curiosity as Maupertuis did in this “Letter on the Progress of the Sciences.” Coniectura [conjecture] and curiositas converge here in projects sketched in the grand style. This curiosity still continues to promise the astonishment produced by what is simply monstrous, the nature that departs from every postulate of homogeneity: unknown materials in the deepest interior of the earth; hitherto unseen stars unveiled by new telescopes;\textsuperscript{10} and in Patagonia things that are entirely different from elsewhere, to suspect which does not make one guilty of curiosité ridicule [ridiculous curiosity],\textsuperscript{11} just as the interior of Africa, which already offers us such wonderful things in the marginal regions that we are acquainted with, would without doubt be bien digne de notre curiosité [well deserving of our curiosity].\textsuperscript{12}

Human curiosity still finds itself quite at the edge of reality—again and again this same basic idea!—in regard to the conditions that arise in temperatures that are higher than those accessible to our experience on earth.

With our wood, our charcoal, all our most combustible materials, we cannot augment the effects of fire beyond a certain degree, which is not much compared to the degree of heat that the earth seems to have undergone or that certain comets undergo in their closest approaches to the sun. The most powerful fires of our chemists may be too feeble as agents to form and to decompose bodies. And this may have the result that we take for the most intimate union or the most complete decomposition what may be nothing but an imperfect mixture or a gross separation of certain parts. The discovery of the mirror of Archimedes, which Monsieur de Busson has made, shows us that one could construct burning towers, or amphitheaters filled with mirrors, that would produce a fire whose violence would, so to speak, have no limits but those that the sun itself has.\textsuperscript{13}

The earth, which as our most immediate realm of experience is known to us only superficially and marginally, is in its turn only a marginal phenomenon in the cosmos in regard to the conditions it offers for observation that is not technically enhanced and equipped.

Finally man himself, in the form in which he is most immediately open to study—as the civilized being of the European type—is in his turn only a marginal phenomenon of the total reality called man. The
experience—which had such a lasting influence on the Enlightenment—of exotic men, of the noble savage, the original antitype of human possibilities before and outside of one's own cultural matrix, is proposed by Maupertuis as an experience that could be consolidated organizationally. The president of the Berlin Akademie would like to see an inventory of everything possessed by man in a sort of academy of exotic sciences. "A college where one would find assembled men of these nations, well instructed in the sciences of their countries, and whom one could instruct in the language of our country, would undoubtedly be a fine institution, and should not be too difficult to establish. Perhaps one should not exclude from it the most savage nations." It is consistent with Maupertuis's (still to be discussed) theory of curiosité that curiosity concern itself especially intensely with phenomena of transition, of intervening stages, where these can still be found in nature. Beyond the horizon of the experience of other human beings that is to be expanded into a balance sheet of humanity, there emerges the preliminary stage of man, for on islands in the southern oceans there are still supposed to be "shaggy men, with long tails, an intermediate species between us and the apes. I would rather have an hour of conversation with them than with the cleverest intellect in Europe." 

This desired conversation with the ape-man stands, in Maupertuis's thought, on the border between learning directly from what is present and experimenting with induced effects, and thereby marks a problematic of curiosité that presents itself especially intensely with phenomena of transition, of intervening stages, where these can still be found in nature. Beyond the horizon of the experience of other human beings that is to be expanded into a balance sheet of humanity, there emerges the preliminary stage of man, for on islands in the southern oceans there are still supposed to be "shaggy men, with long tails, an intermediate species between us and the apes. I would rather have an hour of conversation with them than with the cleverest intellect in Europe." 

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limited to its instructing us regarding the origin of languages; it could
teach us many other things, even about the origin of ideas and about
the fundamental notions in the human mind. We have listened long
enough to philosophers, whose science is nothing but a use and a
certain bending of the mind, without having become any cleverer. . .”¹⁶
Experiments on living people here appear as the logical consequence
of a *curiosité* that posits itself as absolute.

The curiosity that is no longer a revolt against a reservation—unless
it is against the reservation constituted by human indolence vis-à-vis
what has not been investigated, the excess of what is supposedly
inaccessible, or against princely reluctance to finance the necessary
large-scale organized attack on what are now becoming the ‘public’
tasks of theory—this curiosity cannot produce from itself any criterion
for its restriction. In Maupertuis it becomes evident that curiosity
understands even the limits of its pretension at any given time as only
‘factual’ [that is, not necessary], conditioned perhaps by historical cir-
cumstances not yet understood. Thus Maupertuis projects experiments
with living subjects. The *curiosité* that developed out of the later Re-
naissance’s enjoyment of the ‘curiosity cabinet’ presupposed that nature
performs experiments, as it were, for man and in his place; think of
Bacon’s rule that one should register *monstra* [*monstrosities*] as indi-
cations of nature’s scope for variation, of the difference between its
positive law (*lex naturae*) and common law (*cursus communis*). The results
of such experimentation are gathered together in the museum, which
now becomes important; and man himself does nothing more than
to exercise care in housing and increasing this stock.

Maupertuis calls for experiments with animals.¹⁷ The traditional
biological morphology offers nothing more than “pictures that are
pleasant to look at.” If natural history is to become a “true science,”
it cannot accept as given the forms of the organisms that are present
but must rather uncover “the general proceedings of nature in their
production and conservation.” And again the appeal to the princes:
Hitherto they had constructed menageries for amusement, now they
had only to entrust “expert naturalists” with carrying out the correct
experiments on these collections. And “experiments” (*expériences*) here
means the breeding of the kind of curiosities that previously were
only collected—intentional, methodical, artful breeding, by means of
“artificial unions” (for example, of the bull with the she-ass, of which
it is said that it happens even in nature, if only the space at the watering place is narrow enough).

*Curiositas* is no longer only the interest in discoverable *curiosa* [curiosities]; it generates them itself. That is what is new. “Rien ne seroit plus curieux que ces expériences: cependant la négligence sur cela est si grande . . .” [Nothing would be more curious than these experiments, though the negligence in these matters is so great . . .]. The appeal to princely munificence is strengthened by the flattering prospect of being able to exhibit “monstrous beasts” as *unica* and *rarissima* [unique species], as long as that diligence and skill are at work, creating occasions for mating, nor shrinking from “forced procreations.”

What license does the program of *curiosité*, as the motor of the progress of the sciences, give itself? Maupertuis proposes experiments not only with living men but on a living man. He appeals to the penal theory of his century, which sees the “good of society” as the purpose of the punishment of criminals; this goal can be achieved to an even greater degree if the convict contributes to the progress of the sciences. The risk, which, to be sure, he does not freely choose, should bring about the pardon of the convict who survives it. For what purpose? For the testing of “the possibility or impossibility of various operations that Art does not dare to undertake”—in other words, a clear break with the traditional ethos of medicine. Maupertuis will listen to no objections; what passes itself off as humanity is only the professional indolence of the established art: “On aime mieux croire l’Art parfait, que de travailler à le perfectionner” [People would rather consider their art to be perfect than work to perfect it]. What is not in the books should be possible; but in medicine too, as already in experimental zoology, nature must be forced if it is to submit. In this connection, in spite of this violence, the teleological background characteristic of Maupertuis still shows through—a teleology, admittedly, that no longer seems to function “of itself” for man’s benefit but must, as it were, be set free by him: “La Nature par des moyens qu’ils ignorent travaillera toujours de concert avec eux” [Nature, by means unknown to them, will always work in concert with them]. In these circumstances *curiosité* appears as the very power that drives through the barriers to setting free the shared activity of nature and man.

This universal promise, which is held out to such uninhibited experimentation, is made precise by mention of the most audacious problem that could be posed, and perhaps solved, in this connection.
This most extreme object that medical curiosity could hope to hit upon here would be—believe it or not—the clarification of the connections between body and soul, "if one dared to seek these bonds in the brain of a living man." He who shrinks from this proposal succumbs to the mere "appearance of cruelty." This humanity permits itself a high degree of abstraction; mankind justifies putting a man's life in the balance: "Un homme n'est rien, comparé à l'espèce humaine; un criminel est encore moins que rien" [A man is nothing, compared to the human species; a criminal is even less than nothing]. We rightly made fun, says Maupertuis at the end of this section, of some peoples who, out of a misconceived respect for humanity, denied themselves the knowledge they could have arrived at through the dissection of cadavers; but we ourselves are perhaps even less reasonable when we do not turn to account a punishment from which the public could draw great benefit and that could prove advantageous even to him who has to undergo it.

Having read this, one is amazed at the title of the final section of the "Letter on the Progress of the Sciences," the "Recherches à interdire" [investigations that should be prohibited]. What could possibly remain to be prohibited? It is startling to find that Maupertuis wishes three problems to be excluded from this point onward because he considers it certain that they are "chimeras of the sciences": the philosopher's stone, the squaring of the circle, and perpetual motion. The reason for having such comparatively harmless hobbies prohibited lies in the squandering of energy and funds that could be devoted to other undertakings that are deemed deserving; this holds especially for those who, while they do not chase after such illusions themselves, do lose their time in examining the supposed results of those illusions. One final time: It is the princes to whom such economy is supposed to appear useful. What a remnant of the judgment against curiositas, a judgment whose tradition seems comparatively noble in comparison to this!

If one now keeps in mind what Maupertuis's "Letter on the Progress of the Sciences" really contains, one is struck by the superficiality of Voltaire's argument with the ideas of this self-same letter in his Diatribe du Docteur Akakia. One becomes inclined to agree with the interpretation according to which this feud with the president of the Berlin Academy was only a convenient means for Voltaire to extort permission to depart from Berlin or, as the case might be, to make it unnecessary.
by provoking the king three times in succession. Nevertheless, whatever the issue was that was being decided, nothing was settled in relation to the subject of the dispute. Voltaire was not able to define the point at which Maupertuis's faculty of projecting problems goes too far, the point where it begins to threaten humanity. Instead he sticks to superficial effects, like the dimensions of the hole by which his opponent—now reduced to the level of a charlatan—wanted to gain access to the inside of the earth.

The focus of Voltaire's ridicule, however, was above all on the *Essai de Cosmologie* that Maupertuis had published in Berlin in 1750. This treatise also contains Maupertuis's distinctive theory of *curiosité*. Toward the end of the third part, he discusses a state of affairs that one could describe as the 'ruined condition' of nature in the present day. Leibniz's thesis of the continuum of beings stands in the background, combined here with a sort of catastrophe theory. Productive nature seeks to produce every kind of being, but the actual or changing conditions of existence mercilessly separate out the forms that cannot stand up to them. What we see before us today in nature is already the result of such breaches in the chain of beings, a chain that exhibits gaps and interruptions everywhere. This theory of nature's infinite capacity for variation and of the selective effect of actual and changing external conditions, as a theory, need not concern us further here. But the conclusion that follows, for the possibility and the urgency of knowledge, from this actual state of nature as it presents itself to us, has a decisive effect on the concept of *curiosité*.

If nature were complete, present to us in the totality of its productions and transitions, it would at the same time be a nature that is intelligible through perception. Insofar as reason is the faculty of representing a totality in space and time, a reality that has become fragmentary through a process of selection must lack immediacy of access for reason but must at the same time stimulate it to undertake the reconstruction that sums up the process of a kind of knowledge that in any case is still possible. Our curiosity is the measure of our backwardness vis-à-vis the ideal of a knowledge that, in relation to a nature that had not yet become fragmentary, would have to adopt an unmediated and intuitive/perceptual approach—the form of knowledge of paradise, so to speak. One can observe the shock effect of the early findings of biology, which had uncovered the "marques incontestables des changemens arrivés à notre planete... Ces terres fracassées, ces
lits de différentes sortes de matières interrompus et sans ordre..."
[incontestable marks of changes that have affected our planet...]
These shattered soils, these layers of different types of material, in-
terrupted and without order...[21] The isolated forms, as remnants
of the continuum of nature, can neither delight us nor convey knowl-
edge of what has been lost. A building struck by lightning no longer
offers us the aspect of anything but a ruin, in which one can recognize
neither the symmetry of the parts nor the architect’s plan. Monstrosity,
which attracted the curiosity of early modern times, is no longer the
rare and sensational special case in nature; rather it is the stigma of
the entire actual stock of remnants of nature: “... la plupart des êtres
ne nous paroissent que comme des monstres, et nous ne trouvons
qu’obscurité dans nos connoissances” [... the majority of beings appear
to us as nothing but monsters, and we find nothing but obscurity in
our knowledge of things].

But it is not only the objects of our knowledge of nature that are
isolated and broken loose from their original context; the subject of
this knowledge is also isolated and pushed out into unconnectedness.
Leibniz’s world, after its destruction, becomes a sphere of unappeasable
curiosity. “Between the beings that we are still able to perceive, there
are interruptions that deprive us of most of the aid they could have
afforded us. For the interval between us and the last beings below us
is no less an invincible obstacle for our knowledge than is the distance
that separates us from beings superior to us.” What holds for the
spatial order of simultaneously existing kinds holds also for man’s
orientation and position in time. At the beginning of the infamous
Venus physique (1745), Maupertuis discussed this position of curiosité in
time as well. The de facto finite temporal extent of the life of the
individual does not induce man to fill this period in the best way he
can but rather to extend his will to knowledge over the time periods
in which he did not yet exist or will no longer exist: “... l’amour
propre et la curiosité veulent y suppléer, en nous appropriant les temps
qui viendront lorsque nous ne serons plus, et ceux qui s’écoutaient
lorsque nous n’étions pas encore” [... self-love and curiosity want to
supplement it, by appropriating for us the times to come, when we
will no longer exist, and the past times when we were not present
either]. Curiosity is the constitutional condition of a being that is no
longer able to see its original connections, that collides with its de
facto locatedness in space and time. It is the stigma of a nature that
no longer fulfills the requirements of harmony, whose history is a function precisely of this “no longer.” Maupertuis summed up in a single sentence the elements of his theory of theoretical curiosity as the will to restore a genetic totality: “When I consider the narrow limits within which our knowledge is confined, the extreme desire that we have for knowledge, and our incapacity to instruct ourselves, I could be tempted to believe that this disproportion, which exists today between our knowledge and our curiosity, could be the result of a corresponding disordering [event].”

If Voltaire had agreed with Pascal that man was made for infinity (“qui n'est produit que pour l'infini”) but had drawn from this the opposite conclusion—namely, that this was his weakness, not his dignity and opportunity—then Rousseau (1712–1778) denies that there was in man an original tension with his given state of nature, that he got onto the track of the progress of the arts and sciences as a result of his essence and genuine need. He praises the happy ignorance (l'heureuse ignorance) in which an eternal wisdom submerged men and out of which only ambitious violence (efforts orgueilleux) made them emerge. Nature wanted to protect man from science, as a mother protects her child from the misuse of a dangerous weapon. The obscurity with which she keeps her secrets hidden is not to be ascribed to jealousy of man’s shared knowledge of them but rather was meant as a warning of the fruitlessness of the exertion of theory.

The picture that Rousseau gives of man’s original state is characterized by the idyllic absence of tension—and by concealed teleological implications. The original man is not tempted to alter his state and to take in hand the conditions of his situation; nor has he the means to do so. His existence is restricted to proximity and immediacy, and the satisfaction of his needs to the zone of the accessible. He does not wonder at what is present, and for what is not present he lacks the power of imagination. Forethought and curiosity are foreign to him because they already presuppose the quantity of knowledge necessary for producing the questions corresponding to further cognitive steps: “...nor is it in his mind that we can expect to find that philosophy man needs, if he is to know how to notice for once what he sees every day. His soul, which nothing disturbs, is wholly wrapped up in the feeling of its present existence, without any idea of the future, however near at hand. ...” The logical circle implicit in the idea that the cognitive will already presupposes knowledge, that curiosity arises only
out of curiosity, can of course only be broken by the assertion of a unique mythical act of aberration. But the critical principle that Rousseau gains from his picture of the beginning of human history becomes ineffective as a criterion for all subsequent steps because it assigns all the responsibility to the mysterious first step; his indictment of culture finds no guilty parties who would have to ascribe it to themselves. It is a philosophy from which no consequences can be derived.

So much the more logically does Rousseau establish the principle of the irreversibility of history, and thus of the inapplicability of his critique to the social conditions of the time; and ultimately he finds himself again with the postulate of the total execution of the law that is operative in the process of culture. Replying to his critic, Diderot, he calls for not the return to nature that is ascribed to him but the consistent and thorough execution of the turning away from nature that determines human socialization, the perfection of technicity: “Montrons-lui, dans l’art perfectionné, la réparation des maux que l’art commencé fit à la nature...” [Let us make amends, in the perfection of art, for the wrongs that art in the beginning did to nature].

Here becomes evident a conception of history that combines insight into the irreversibility of history with cultural and social criticism but through this combination can only confirm, and thereby intensify, the dynamics of the inner tendencies of the modern age. For the agent of its scientific aspect, for theoretical curiosity, this means that each of its results strengthens its motivating power, that each situation conditioned by science can only be compensated, in its deficiency, by more science, that history finally remains possible only as the continuation of what it already is. The same schema holds for the process of technicization: The problems posed by technology at any given time, and the dangers that it brings with it, can only be parried by a higher degree of technicization. The truth about history is a matter of indifference for history—and this is only a partial working out of the implications of doubt about the essentiality of the human need for truth.

Rousseau sees man as bent over the edge of a well, in which—in an image originating in Democritus—the truth has withdrawn. “Sommes-nous donc faits pour mourir attachés sur les bords du puit où la vérité s’est retirée?” [Were we made, then, to live and to die on the brink of that well at the bottom of which truth lies hid?] This consideration alone, he thinks, should be enough to discourage any
man who seriously endeavors to instruct himself by the study of philosophy. According to an old tradition that the Greeks had from the Egyptians, the inventor of the sciences was a god whose intention was hostile to man’s repose ("un dieu ennemi du repos des hommes"). And that is only an allegory for the principle that the sciences arose from man’s vices: astronomy from superstition; rhetoric from ambition, hatred, flattery, and lying; geometry from avarice; physics from idle curiosity ("la physique d’un vain curiosité"); and even ethics from human ambition. He who seeks the truth is obviously at a disadvantage, since what is false can be combined in an infinite number of ways, whereas the truth is present in only one way. The path of knowledge leads through an abundance of error, whose damage the truth cannot make up for by its usefulness.\textsuperscript{27} In that case, can one believe that anyone seriously seeks it? And finally: On the assumption that by a lucky accident we do find it, which one of us will be able to make proper use of it? Rousseau’s pragmatic version of the simile of the truth in the well is, briefly, that we should let it stay there. But he himself, for his own truth, did not want to abide by this advice.

For the German Enlightenment, the earthquake at Lisbon (1755) was distant and Leibniz was nearer. The metaphysically guaranteed correspondence between curiosity about the world and the sufficient reason for the world seemed to exclude any problematic in regard to the human need for happiness. Hermann Samuel Reimarus (1694–1768)—the author of the Schu...
man's natural motives are detached from their points of reference to reality and retracted into an inner economy: Man's powers must be activated.

In the case of curiosity, David Hume had already developed this point of view in the *Treatise on Human Nature* of 1739/1740, in a special chapter "Of curiosity, or the Love of Truth." There he compared the role of truth to the quarry in the passion for hunting and to winnings in the passion for games—that is, to goals that do indeed induce these activities but by no means give them their sense and justification: "The pleasure of study consists chiefly in the action of the mind. . . ." The structural analogy common to hunting, philosophy, and gambling—actions without consequences—is a consequence of a basic human situation that no longer is definable in terms of the riches or deficiency of the world but rather presents itself as the inner quality of "uneasiness." Human life is laid claim to by neither what it needs nor what it admires; it can be made happy by neither usefulness nor truth; it is monotony and lack of spontaneity, and every impulse that sets it in motion provides pleasure even, and especially, if it involves effort.29

The German 'Enlightener' Reimarus puts work in place of "pleasure" and providence in place of the immemorially melancholy basic situation. "If his lively powers do not occupy themselves with anything, then he is a burden to himself, then time seems long to him, then he declines into a dumb ignorance, into a lazy and base voluptuousness and all sorts of other vices. A task, on the other hand, is suitable to his natural exertion and gives him pleasure if it is successful and useful; indeed all the more so, the more difficulties have to be overcome in the process and the more art, wit, reflection, foresight, and science are applied in it." In Reimarus, the Stoicizing formulas of world admiration enter into a peculiar mixture with the suspicion that pure theoretical wonder at the world order could all too readily be accompanied by idleness. To fit even the world's deficiency in easily accessible goods and enjoyments into a teleology that protects man from becoming burdensome to himself and from vice fulfills the highest systematic pretension of this philosophy.

But truth as the fruit of knowledge itself remains peculiarly unattractive in comparison to the work of knowledge. The solid pleasure of knowledge, based on work, has its justification in itself, in the manner of its acquisition, as it were, and cannot become problematical on account of its consequences: "... who can say of true knowledge
that it is too much, that it is immoderate, that it is harmful? On the contrary it makes us ever more perfect, and never causes us to repent of our efforts. . . . The pleasure found in truths and the desire for knowledge accompany us until death; indeed they extend far beyond the limit of our life and our present capacity." On the basis of this position, Reimarus conducts in the later editions of his philosophy of religion his explicit critique of Rousseau, in whose picture of the 'animal-man' he points out a whole catalog of contradictions, among them the following: "The original man is supposed to have a freedom above all other animals, and yet he has no reason or reflection, which is the basis of a free choice. . . . He is supposed to try to make himself more perfect, and yet his circumstances are such that he cannot make himself more perfect by any means. . . . His principal natural gifts are supposed to be freedom and perfectability, and these very prerogatives serve for nothing else, in his opinion, than to make each person and the entire species unhappy. What contradictions!" From this perspective one may be able to insert Lessing's great saying, "Wenn Gott in seiner Rechten . . .," more intelligibly into the Enlightenment context. One should also read the preparatory argument that precedes the much quoted passage: "The worth of a man does not consist in the truth he possesses but in the sincere effort he has applied in order to attain that truth. For his powers are extended not through possession but through the search for truth. In this alone his ever growing perfection consists. Possession makes him lazy, indolent, and proud." The dominant concept in these sentences is not truth but the "worth of a man." The extent to which truth should have been given to man is not determined by the inner value of this truth in itself but by its moving and intensifying function for man's powers of self-development and self-realization. The 'work' characteristic of truth—the "sincere effort" to be applied to it—is fully apprehended here and appropriated, so much so that the process compensates for the inaccessibility of the result: "Absolute truth is for thee alone!" Lessing makes himself say to God finally in the same passage.

The problem of the human relation to truth occupied Lessing throughout his life. This is already very explicitly declared in the early comedy Der Freigeist [The Freethinker] of 1749, in the dialogue between Adrastus and Juliane. Adrastus defends himself against the reproach that he wants to infect other people with his ideas: "If I have often defended them loudly and with a certain vehemence, then I did it
with the intention of justifying myself, not of persuading others.” In libertinism he seeks the taste of the extraordinary, not for the sake of the quality of the ‘interesting’ as such, but rather because he believes that the truth simply cannot become a universal possession, and concludes from this that where an opinion has become generally accepted, one should abandon it and adopt the opposite:

JULIANE: So you seek only what is strange?

ADRASTUS: No, not what is strange, but merely what is true; and there is nothing I can do about it if the former characteristic—unfortunately!—follows from the latter. It is impossible for me to believe that the truth could be common—just as impossible as it is to believe that it could be daytime in the whole world at once. That which worms its way around among all peoples in the guise of the truth and is accepted even by the most idiotic among them is surely no truth, and one need only confidently lay one’s hand upon it to unclothe it, to see the most atrocious error stand naked before one.

JULIANE: How miserable are men and how unjust their Creator if you are right, Adrastus! There should either be no truth at all or it should be of such a nature that it can be perceived by most, indeed by all, at least in essential respects.

ADRASTUS: It is not the fault of the truth that it cannot be perceived thus but rather of man.—We are meant to live happily in the world; it is for this that we were created, for this and this alone. Whenever the truth is a hindrance to this great final purpose, one is bound to set it aside, for only a few spirits can find their happiness in the truth itself....”

In the final version of the Education of the Human Race (1780), this controversy has become philosophy of history. But one should not allow oneself to be deceived by the title; the humanity whose paideutic process is reduced to theses is not the functional unity of the equal rational subjects that Descartes had projected in his method. For Lessing, ‘humanity’ is an aggregate of diachronic, individual longitudinal sections, in which the relation between external divine educational aids and the inner logic of the process of reason can reach entirely different stages at the same times. This is the basis of the deficiency of rational intersubjectivity in history; it is not the case that anyone can reach agreement with anyone else about anything at any time. If everything depends on the inner soundness of the process itself, then philosophy, no differently from religion, can be only a formal
auxiliary but cannot itself be the substance of a truth to be communicated.

Missionary and didactic pathos are forbidden to this German 'Enlightener.' He sees himself "placed upon a hill, from which he thinks he can survey something more than the allotted path of his present day's journey." But he also sees people on their paths and does not trust himself to call to them and correct their directions of travel according to a unified sense: "... he does not call away from his path any wanderer who in his haste wishes only to reach his night's lodging quickly. He does not demand that the view that delights him should also delight every other eye." In this diversity of paths and points of view, there is no longer any valid general criterion of the boundary transgressions of cognition; paths, not regions, determine what befits the individual and what, when integrated, can be precisely the "education of the human race." The image at the end, of the great, slow wheel and the smaller, faster wheels, is meant, even if with some unclarity, to illustrate that fact: "The very route by which the species reaches its perfection must first be traversed by each individual man (this one sooner, that one later)." The man is an enthusiast who looks into the future but cannot await this future. The consequence is that it is only as an individual process, not as an epochal total breakthrough of reason, that enlightenment can be accomplished and the discord of the truth that is untimely for an individual be avoided: "... take care that you do not let your weaker fellow students notice what you scent or have already begun to see." The point is to awaken impulses and powers to that "sincere effort," also to tempt them with the truth that is carefully concealed and held back; and here curiosity is reason's capacity for stimulation, to which appeal must be made: "What I mean by an 'allusion' is something intended merely to excite curiosity and give rise to a question. . . ."

"Wisdom itself has obtained most of its admirers through curiosity," Lessing writes to Moses Mendelssohn on December 8, 1755, in connection with the news that people at court had become curious to make Mendelssohn's acquaintance. Mendelssohn for his part writes on the importance of curiosity in the process of education, "Children's appetite for knowledge must be excited either by fame or curiosity; for the love of truth operates very weakly in youthful minds, and knowledge of it still gives them all too little pleasure for them to subject themselves to troublesome labor for its sake. One sees from
this how little one gains with children when one teaches them easily what others have brought out by means of painful investigations. One stifles their curiosity by satisfying it too early. . . . A strong influence on Mendelssohn was exercised by Edmund Burke’s youthful work of 1756, A Philosophical Inquiry into the Origin of Our Ideas of the Sublime and Beautiful (translated into German by Garve in 1773), in which a little study of the psychology of curiosity in children was to be found.

In the eleventh of his Briefe, die neueste Literatur betreffend [Letters Concerning Recent Literature], Lessing discusses Wieland’s programmatic work entitled Plan einer Akademie zur Bildung des Verstandes und Herzens junger Leute [Plan of an Academy for the Formation of the Understanding and Heart of Young People]. Here the subjective form of “sincere effort” combines with a formal definition of the object of curiosity in such a way that it turns away from Leibniz’s principle of sufficient reason as summing up the justification of all ‘Why?’ questioning and approaches the ‘How?’ of the Kantian Critiques:

The great mystery of making the human soul perfect through exercise . . . consists solely in keeping it constantly striving after the truth through its own reflection. The motives for this are ambition and curiosity; and the reward is the pleasure of knowledge of the truth. But if one imparts historical knowledge to youth right away at the beginning, then one puts their minds to sleep; curiosity is satisfied prematurely, and the path to finding the truth through one’s own reflection is closed all at once. By nature we are far more desirous to know How than Why. . . . The truths themselves lose in our eyes all attraction unless perhaps we are driven by ourselves, at a more mature age, to investigate the causes of the truths we apprehend.

What is shattered with Lessing is philosophical knowledge’s ideal of definitiveness, the idea that—of course not here and now, tomorrow or the day after, but still potentially—knowledge exhausts itself with the evidence of its objects and the truth is definitively obtained. It is the ideal of the absolute truth as a given quality, oriented toward the limiting case of divine knowledge. This idea had its basis in the ancient concept of reality; but it no longer corresponded to the reality concept of the open context, which anticipates reality as the always incomplete result of a realization, as dependability constituting itself successively, as never definitive and absolutely granted consistency. This concept of reality, which legitimates the quality of the new, of the surprising and unfamiliar element, as both a theoretical and an aesthetic quality,
for the first time makes intelligible the linguistic preference for Neugierde [curiosity; literally: desire for the new] over Wissbegierde [curiosity; literally: desire for knowledge].

A confirmation, verging on the anecdotal but no less instructive for that reason, of this profound alteration in the basis of the human relation to reality is given by the peculiar change in the idea of immortality, which in the eighteenth century—with clear traces even in Kant—once again takes up the mythical schema of the transmigration of souls. The repose of the dead in the finality of contemplation of the truth, which was part of the status gloriae [state of glory] for the Middle Ages, is transformed into a continuation of the movement of life, a striving from condition to condition, from star to star.

Queen Sophie Charlotte of Prussia, who stood in a close spiritual relation to Leibniz, died in 1705 with these words: “Do not pity me, for I go now to satisfy my curiosity about things that Leibniz was never able to explain to me, about space, the infinite, being and nothingness...” That is curiosity in its modern form, in the guise of an expectation of finality that is still medieval.

When Lessing published the Vermischte Schriften of his friend Christlob Mylius in 1754, he wrote in the first of the six letters that are attached to the preface,

It is true that he was interrupted in the middle of a great project but not in such a way that he should have had to give it up entirely. His eagerness to become more closely acquainted with the works of omnipotence drove him from his native country. And this very eagerness now conducts his liberated soul from one planet to another, from one world structure to another. He gains in his loss, and is perhaps busy even now in investigating, with his eyes alight, whether Newton hit upon the right idea and whether Bradley measured accurately. An instantaneous change has perhaps made him equal to men whom he could not admire sufficiently when he was here. Without doubt he already knows more than he could ever have conceived on earth.

To think less of happiness than of “sincere effort” and the inaccessible truth and always to wrest more winnings from the latter’s inexhaustible reserve is not a preliminary, merely earthly, suspendable, surpassable idea of existential fulfillment. Lessing can conceive no other bliss for man than this. In the letter describing Lessing’s Faust plan, published by the councilor von Blankenburg in 1784, the first scene is depicted as a conference of the spirits of hell, in which it is reported to the
supreme devil regarding Doctor Faust, "He has only one instinct, only one inclination, an unquenchable thirst for sciences and for experience. —Ha! exclaims the supreme devil, then he is mine, and for ever mine and more securely mine than with any other passion!" In the triumphant songs of the hellish hosts in the fifth act, the apparition of an angel was supposed to break in and cry, "Do not celebrate your triumph, you have not conquered mankind and science; the Divinity did not give man the noblest of instincts so as to make him eternally unhappy. . . ."

The Faustian element became a questionable attribute of curiosity of not so much the human as the German stamp. The intervention of the deus ex machina in the end releases it from the demonic entanglement, but fundamentally it answers the question of human existential fulfillment in the negative. The salvation of Faust is no solution to the questions that the Education of the Human Race had left open. Faust's salvation still has the medieval premises of the answerability of curiosity before a transcendent authority and of the possibility of an act of grace on the part of this authority. If the Faustian grasp at knowledge and power by means of magic and a pact with the devil does not fulfill the condition of "sincere effort" that Lessing had posed, then the heavenly veto against hell's enforcement of its legal title just is not the century's last word on the 'trial' of theoretical curiosity. Friedrich Theodor Vischer, whom dissatisfaction with the conclusion of Goethe's Faust was to move, in the nineteenth century, to a new unavailing effort, had recourse to another name when in 1832 he spoke of the "Lichtenbergian curiosity of a brooding self-consciousness" in characterizing the nature common to himself and Mörke.35

Lichtenberg, in fact, is a figure of reflected curiosity on the threshold of an age that was to turn resolutely away from the problem of the justification of the pretension to knowledge, in order to be consumed entirely in the indifference and unwaveringness of cognitive success. Between experiment and diary, he takes up and reexamines what are soon to be the matters of course of cognition as it passes into the form of industry. The "great moral aim" of all knowledge of nature is his subject. Between the necessity of his needs and the excess of his pretensions, he sees man altering the surface of the earth. What man brings about in the process still appears small to him in comparison with the powers of nature. "We cannot establish volcanoes; we lack the power, and if we had the power, we would still lack the under-
standing to put it in obedient operation. (If only we always lacked the power, where the understanding is lacking!) If we finally had the power and the understanding at once, then we would no longer be the men of whom alone we are speaking here and of whom, unhappily, one knows that activities in which their power is in step with their understanding simply are not always their favorite pursuits.”56 Work, as the alteration of nature, is the characteristic mark of a being that does not and will not know the purposes into which it may be dovetailed. “What then can man do here, where he recognizes so clearly that the whole plan does not lie before him? Answer: Nothing more than faithfully and actively work up the part of the plan that he has before him. What an idea, to try to assist an unknown plan by means of laziness!” To be scientific is to deal with this situation of the hidden universe and its unknown total idea. But just this inability to plumb the depths—the ability only, after the analogy of “plough, spade, and axe,” to scratch at the surface—points us to the moral task of synchronizing understanding and power.57

It is in this dimension of the surface, measured against the volume of nature, that the task of science and its coordination with the “great moral aim” must be seen. The cognitive drive as such has the innocence of a biological characteristic; it makes man into the “causal animal”: “If other animals are equipped only with instincts and powers that aim merely at the maintenance and propagation of the species, this peculiar creature possesses beyond all that some more, whose real aims are not quite so clear. Among these is an instinct to seek out relations that entitles causes, and to concern itself with a multitude of things that appear not to affect it at all in God’s wide world, as though perhaps because there are causes there for the causal animal to hunt, to which it is continually spurred on by a sort of spiritual hunger, by curiosity.”58 This state of affairs, the restriction to the ‘surface’ of nature that is imposed on man, can be expressed by Lichtenberg in the language of the old prohibition of curiositas, but with an explicit barring of the inward path—the path of self-knowledge and salvation of the soul—as the alternative: “To us mortals, Nature seems as it were to prohibit profound investigations and to draw our attention forcibly to this prohibition; for what else could she have meant when she formed us in such a way that we do not even know whether we possess a soul, except that since it is not even necessary
for us to know ourselves, it is much less necessary to know what the unreasoning animals, the stones, and the stars are.”

The double fruitlessness of theoretical exertion—with regard to knowledge of nature and with regard to self-knowledge—nowhere imprints on Lichtenberg the trait of resignation. The retraction of knowledge’s forward positions, the return from the depths to the surface, already has for him—even before he encounters Kant—the critical function not of dictating boundaries but of discovering them, of establishing why it is that we cannot know more. To want to find the truth continues for him to be a “source of merit, even if one goes astray from the path.” But Lichtenberg ironically dissolves just this idea of the “path” to the truth, and thus deprives “going astray” of its contingent status, its correctability: “That so many people seek the truth and do not find it surely follows from the fact that the paths to the truth, like those from one place to another in the Nogai steppes, are just as broad as they are long. Likewise on the sea.”

The error that in this topography has become the norm of human cognitive movement still has its economy, its antidogmatic effect: “Even our frequent errors are useful in that in the end they accustom us to believing that everything could be otherwise than we conceive it to be....”

Doubt about the possibility of arriving at the truth—to the extent that we do not remain on that “surface,” the environment of the “seeker of causes,” but instead pose the larger and the largest questions—is due not only to the uncertainty of the paths but also to the impossibility of imagining the arrival itself. Not even revelation could help us here because it would have to be accomplished in the language of the ideas we have gained from the surface of nature. Lichtenberg tries this thought experiment: “If one day a higher being told us how the world came into existence, I really wonder whether we would be in a position to understand it.” In the case of one of the other great questions, that of the origin of motion, Lichtenberg tries to demonstrate not only that we know nothing but also why we know nothing; and he thinks that “this could be an accurate criterion of where one should begin or desist.... There is here a more definite boundary than elsewhere because it seems to be not so much a lack of experience as rather an absolute dividing wall, or at least a suggestion of where that wall should be sought.” And the consequence: “It is a shame that the best minds venture so eagerly into what is unfathomable and are
glad to hear when the crowd is amazed at their daring, and would rather be called daredevils than peaceful cultivators of a ground whose solidity the whole world admits.”

Lichtenberg's metaphor of the "peaceful cultivator," of "cultivation of the surface," is, in opposition to Bacon's images of seafaring into the uncertain, a metaphor of terra firma, of cultivating labor, with the idea of organic growth and spatially restricted economy in the background. But also the hunt, by which man keeps active without having to reckon up the expense and the return, still belongs to this metaphorical world: "Since the middle of the year 1791 something has been stirring in my whole thought economy that I cannot describe properly yet. I intend only to bring up some of it and in future to pay more attention to it. It is an extraordinary mistrust, almost proceeding to literary acts of violence, of all human knowledge, with the exception of mathematics. What still binds me to (the) study of physics is the hope of discovering something useful to the human species. For we must concern ourselves with causes and explanations, because I see no other means at all, without this exertion, of keeping us in action. Of course someone can go hunting for weeks at a time and shoot nothing; but so much is certain: He would not have shot anything at home either, and that with certainty, since after all it is only in the field that he has probability on his side, however little it may be. . . ."

What lies beneath the surface, the hidden depth of nature, is for Lichtenberg always also man in his role as an enigma to himself. The scornful critic of the fashionable physiognomics had arrived by his own path at Kant's doctrine of the phenomenality even of inner experience, and here the paradox held for him, just as much as with outer experience, that drawing closer to reality can suddenly turn into a withdrawal from it. Regarding Sömmering's book Über das Organ der Seele [On the Organ of the Soul], he notes in 1796,

Is it not strange that when, for example, one reads about the organ of the soul in Sömmering's excellent work, one does not feel more at home than one does in a work on the purposes of Saturn's rings. And yet if one can speak here of place, that is what lies nearest to us. But nearness is no help, since the thing which we can approach is not the one that we want to approach. When, while watching the sun go down, I take a step in its direction, then I approach it, even if only by a little. In the case of the organ of the soul it is entirely otherwise. Indeed it is possible that by an all too close approach, for example,
with the microscope, one would remove oneself even from what one can approach. For example, I see in the distance, on a mountain, a strange mass; I come nearer and find that it is a castle; still nearer I discover windows; and so forth. That would be enough; if I were unfamiliar with the purpose of the whole, and sought still further, then I would end up in analysis of the stones, which would lead me further away.46

In sum, "all study of nature" does indeed lead "... unnoticed, to a great moral end,"47 but this end no longer results from knowledge itself, nor is it reached, of its own accord, as a side effect of the striving for knowledge; rather it lies precisely, in what knowledge denies to man. The world that is no longer made for man's knowledge, and the human nature that no longer fulfills itself in its striving for knowledge, enter into a new relation, reversing the direction of the claim. It is this, the turning of the human interest to itself, that Lichtenberg thinks he has learned from Kant: "The world is there not to be known by us but rather to form us in it. That is a Kantian idea."48

The boundary of knowledge, which knowledge finds and acknowledges, had become the object of the appetite for theoretical knowledge itself in Kant's 'critique.' The autonomy of reason meant even—indeed particularly—here to carry out the restriction of the pretension to knowledge as a result of understanding instead of submitting to the de facto forbiddenness of boundary transgressions. For Kant, the hypertrophy of the appetite for knowledge is the root of all the spiritual phenomena whose negation is called "enlightenment." 'Passive reason,' in its instinct to go beyond what has been achieved without regard to what can be achieved, must be helplessly inclined toward prejudice and superstition. Enlightenment, as not a private but a public postulate, one that defines the condition of an age and a society, is more than 'thinking for oneself'; it is the removal, as it were, of the opportunities for the passivity and thus the seduceability of reason.

In the determination of the "public mode of thought" lies the necessity of the perfected, the irreversible, Enlightenment, but also its intrinsic difficulty. On the relation between the appetite for knowledge and enlightenment, Kant made the decisive point in a note to section 40 of the Critique of Judgment (1790):

We readily see that enlightenment, while easy, no doubt, in thesi, in hypothesi is difficult and slow of realization. For not to be passive with one's reason, but always to be self-legislative, is doubtless quite an
easy matter for a man who only desires to be adapted to his essential end and does not seek to know what is beyond his understanding. But as the tendency in the latter direction is hardly avoidable, and others are always coming and promising with full assurance that they are able to satisfy one's appetite for knowledge, it must be very difficult to preserve or restore in the mode of thought (and particularly in the public mode of thought) that merely negative attitude (which constitutes enlightenment proper).

With this annotation to the Critique of Judgment, Kant revises the philosophical ‘immediate expectation’ of the completion of his critical enlightenment, as he had projected it at the end of the Critique of Pure Reason (1781), in the fourth chapter of the “Doctrine of Method,” as the extrapolation of a “History of Pure Reason.” Here he had more than suggested to his readers that they draw from his result, that the “critical path... alone is still open,” the conclusion of cooperating toward the end of “making this footpath into a highway.” The problem of accomplishing enlightenment does not yet have the weight of having to bring about the transformation of the “public mode of thought,” and thus to withhold from the passivity of reason the conditions contributing to an overhasty satisfaction of its appetite for knowledge. The judgment of his readers seems to him sufficient to achieve “before the end of the present century what many centuries have not been able to accomplish, namely, to secure for human reason complete satisfaction in regard to that with which its appetite for knowledge has occupied itself at all times, though hitherto in vain.” Here the appetite for knowledge is still the organ of enlightenment itself, the unrest that needs only to be brought onto the correct and sole path remaining open in order to find in the near future its adequate and definitive fulfillment. There is no apparent suspicion that the appetite for knowledge could be an excessive impetus, that it could disturb and endanger the critical business of the self-limitation of reason by its claims to the solution of the too great questions and to the inaccessible certainties—that is, that it could be the agent of reason’s seduceability.

What Kant published in the Berliner Monatschrift in 1784, “An Answer to the Question: What Is Enlightenment?,” is already at a skeptical distance from such immediate expectation of the parousia [presence, arrival] of critical reason. The conflict between the requirement of a transformation of the “public mode of thought” and the requirement of obedience to public authority, in his political philosophy, has become
noticeable. What he had expected in 1781 from the rapid judgment and agreement of the reader to the author’s purpose has passed over into the resigned conclusion that “a public can only slowly arrive at enlightenment” and that this depends in the last analysis on the precondition of freedom in the state “to make public use of one’s reason in every respect.” Such public use of reason is defined by the manner in which “someone, as a man of learning,” exercises it as his calling “. . . before the whole reading public.” But to this publicity in the use of reason there is opposed its “private use,” such as has to be practiced by teachers who are public employees and who, in their paid office, represent and disseminate doctrines that, as persons of learning, they would be qualified and entitled to criticize. Thus the use of reason in the service of public purposes, or in preventing the disruption of those purposes, can paradoxically be called a private use.

The character of slowness that enlightenment assumes in the force field between these two agencies has become a reassuring guarantee that excludes the suddenness or even violence of revolution, through which “true reform in ways of thinking will never come about,” but rather “new prejudices will serve quite as well as the old ones as a leash to control the great unthinking mass.” On the other hand Kant convinces himself, equally reassuringly, that the slowing down of enlightenment cannot pass over into a complete standstill, or better, that one factor cannot have any right to slow down or halt the other: “A man may for his own person, and even then only for a limited period, postpone enlightening himself in matters he ought to know about. But to renounce such enlightenment completely, whether for his own person or even more so for later generations, means violating and trampling underfoot the sacred rights of mankind.” The laborious argument for the right to enlightenment has taken the place of the assurance of its early imminence. His contesting the permissibility of a conspiracy to perpetuate “self-incurred tutelage” reveals that Kant saw before him a more dangerous problematic than that of the cognitive appetite of a ‘passive reason’ and sought to ward it off with the ceremonious gesture of appeal to inalienable rights: “One age cannot enter into an alliance on oath to put the next age in a position where it would be impossible for it to extend and correct its knowledge, particularly on such important matters, or to make any progress whatsoever in enlightenment. This would be a crime against human nature, whose original destiny lies precisely in such progress. Later generations are
thus perfectly entitled to dismiss these agreements as unauthorized
and criminal."

In such a projection of the problem into the huge dimensions of
forces struggling over man, the fact becomes lost from view that the
Dialectic of the Critique of Pure Reason had exhibited the endogenous
pathology of the cognitive appetite of reason itself. Only in the light
of the idea that reason, as a result of one of its own instinctive elements,
degenerates, so to speak, and falls into self-loss does it become un-
derstandable that reason's critique of itself, as acknowledgment of its
restriction, does not become humble resignation or a disillusioned
tarnishing of its image, but rather can be presented as the final and
definitive discovery of its own dignity. But Kant conforms more
accurately to the severity of the historical situation of reason in which
he intervenes when he speaks of the self-preservation of reason rather
than its dignity. The platitude of "healthy reason" then acquires a
precise character: The reason that is capable on its own of preserving
itself is healthy.

In the last footnote of the essay of 1786 entitled "Was heisst, sich
im Denken orientieren?" [What Does It Mean to Orient Oneself in
Thought?], Kant formulates the "Maxims of the Self-Preservation of
Reason," in accordance, in fact, with the logical structure of the cat-
egorical imperative: "To make use of one's own reason means nothing
more than to ask oneself, in the case of anything that one is asked
to assume, whether one would indeed find it practicable to make the
reason why one assumes something or the rule that follows from what
one assumes into the general principle of one's use of reason." If
enlightenment is nothing other than this very self-preservation of rea-
son, then the freedom of cognition that it demands is not an arbitrary
but a lawful freedom. In this analogy to moral philosophy, with its
doctrine of the inability of practical reason to move itself to action—
in spite of its capacity to determine the action lawfully—theoretical
curiosity is put in its definitive systematic place. Need sets in motion,
but it does not orient; it is legitimate, but it does not legitimize.

Kant's strict separation of theoretical from practical reason did indeed
lead him to analogies between the two, but not to a morality of theory
itself—except insofar as the self-criticism of pure reason was supposed
to make room for morality. The analogy is expressed as follows:
"Reason does not feel; it understands its lack and produces through
the cognitive drive the feeling of need. Here the matter stands as it
does with moral feeling, which no moral law brings about (for the moral laws arise entirely from reason) but which is nevertheless caused and produced by moral laws, and consequently by reason, since the active and yet free will needs definite reasons." The freedom of reason, insofar as it does not subject itself to its own law but rather surrenders itself to its cognitive drive, is anarchic, so that in consequence "it must bend under the yoke of the laws that another gives it; for without some law or other, nothing, not even the greatest nonsense, can play its game for long." The cognitive drive can stand in opposition to the interest of reason, can degenerate into "maxims of the independence of reason from its own need."

Here the expression "self-incurred tutelage" acquires its political coloring; what is meant is not only the comfortableness of being incompetent, the lack of resolution and courage of which Kant had spoken at the beginning of the essay "What Is Enlightenment?," but also the provocation that the reason that has become 'noopathic' exercises on the external forces of order. One sees how Kant's characteristic concept of the state is systematically entwined with the problematic he saw in the cognitive drive and how the regression of his faith in the imminence of enlightenment takes political recourse to emergency measures into its calculations: "Here the authorities enter the game, so that civil concerns themselves do not get into the greatest disorder; and since the handiest but also the most vigorous means is precisely the best for them, they suspend even the freedom to think and subject this, like other trades, to government regulations. And thus freedom of thought, if it wants to operate independently even of laws of reason, finally destroys itself."

In the same year, 1786, in the concluding sentences of the *Metaphysische Anfangsgründe der Naturwissenschaft* [Metaphysical Elements of Natural Science], Kant brought the 'trial' of theoretical curiosity to a close that, as a systematic explication, was not to be superseded or revised again. Augustine, who had provided the motives and the rhetoric for discriminating against curiosity, had gone no further than the requirement that one renounce the curiosity that turns outward and instead direct one's spiritual attentiveness inward. That is, he had constructed a disjunction of self-knowledge and curiosity, a disjunction that was largely taken over by the Middle Ages. When the modern age rejected the medieval discrimination against the appetite for knowledge, its freedom was limited by these prepared alternatives to the extent that
all that it could do was to avail itself of the opposite. Kant now shows that these are not alternatives at all but instead that the motive of curiosity itself, consistently pursued, by reaching for the totality of the conditions of objectivity finally makes self-knowledge its necessary subject. The metaphysical doctrine of bodies that Kant develops in the _Anfangsgründe_ inevitably ends with the subject of empty space, and thus with an object as inconceivable as it is unavoidable. The discussion shows that the denial of absolute empty space is just as hypothetical as its assertion. Reason's effort to grasp the conditioned through its conditions, and thus finally to reach the unconditioned, ends in an absolute embarrassment: being expected to comprehend something that is not subject to the conditions of comprehensibility and nevertheless not being able to leave off at some arbitrarily chosen earlier stage with an object that, because conditioned, is in fact comprehensible. Nothing remains for reason "when curiosity calls upon it to grasp the absolute totality of all conditions except ... to return from the objects to itself, in order to investigate and define, instead of the ultimate limits of things, the ultimate limit of its own capacity, when left to its own resources." That is no longer Augustine's prescription, since it legitimates resolutely carrying out the theoretical pretension right up to its final consequence and justifies turning away from the objects only through evidence of dialectical indecidability.

**Translator's Notes**

a. These were selections from Reimarus critical of orthodox Christianity that Lessing published as the writings of an "unknown" author, together with his own commentaries, in his *Contributions to Literature and History from the Ducal Library at Wolfenbüttel* (of which he was the librarian), in 1774 and 1777. They generated a protracted storm of controversy.

b. "If God held all truth in his right hand and in his left the everlasting striving after truth, so that I should always and everlastingly be mistaken, and said to me, 'Choose,' with humility I would pick on the left hand and say, 'Father, grant me that. Absolute truth is for thee alone.' " From *Eine Duplik* (see author's note 82). The passage is translated by Henry Chadwick in *Lessing's Theological Writings* (London: Adam and Charles Black, 1956), p. 43.

c. Vischer published a *Dritte Teil des Faust* (Third Part of Faust)—a sequel to Goethe's two parts—in 1862 and a revised version in 1886.

e. The author requested the substitution of the last two sentences in this paragraph for the last sentence in the text as published in Der Prozeß der theoretischen Neugierde (Frankfurt: Suhrkamp, 1978), p. 249, stating that the same change would be made in future German editions.

In the process of the ‘trial’ through which it was legitimated, the concept of theoretical curiosity was concentrated, in terms of its objects, on nature, and especially on the areas of nature whose natural inaccessibility and difficulty of objectification had become ‘canonical.’ One of the indications of the fact that this ‘trial’ was concluded and won is the diffusion of the term to other realms, ultimately to any realm whatever, a process in which consciousness of the daring of such employment—which after all was the impression that the linguistic transfer was originally intended to convey—quickly disappears. The pluralism of curiosity calls for specifications—in language, for adjectives. The plural form of the term, as used quite as a matter of course by Paul Valéry to characterize the contemporary age, “curiosités de toute espèce” [every kind of curiosity], is uncommon.¹

As an extreme case let me mention “military curiosity.” Alexander von Humboldt used this term in 1848 to criticize the participation of the Prussian prince Waldemar in the conflict of the English with the Sikhs in 1845, in which enterprise the prince’s escort, Hofmeister, had been killed. The prince’s participation in this battle in distant Asia was praised as a heroic deed in military circles and at court in Berlin. “Humboldt’s opinion was different. He called Prince Waldemar’s behavior on this occasion imprudent; to stake one’s life out of pure military curiosity was no heroism....” What the term “curiosity” means in this context is pointed up when it is compared to a text half a century older; it comes from the Abhandlung von dem Einflusse der
Part III

Theoretischen Philosophie in die Gesellschaft [Treatise on the Influence of Theoretical Philosophy in Society] of the Göttingen mathematician Abraham Gotthelf Kästner, published in 1742: “And if Pliny’s manner of life seems to us somewhat too tranquil, then think of the duke of Marsigli, who gathered the material for his description of the Danube River not by any curious travels but rather in the course of a bloody campaign. How often did he exchange the sword for the anatomist’s scalpel! How often did he venture, in order to observe the circumstances of a place or a remarkable natural feature, into regions where the philosopher would not have penetrated if he had not been accompanied by a hero! How many discoveries did he make that, now that he has made them, are still unknown to many a scholar who, in his study, considers that he is acquainted with the whole of nature.” The curiosity that is no longer subject to disparagement is indeed permitted to undertake any journey, but frivolity is not becoming to it; it does better as a form of rigorous work or as the digression of a hero in the course of a campaign.

Delight in monstrosities stands on the threshold of a new form of seriousness—even if it is a seriousness of enjoyment—for which it sets up an initial aesthetic: “An object of an unknown kind that has something peculiar and unusual about it is therefore new, but only to a modest degree—unless its peculiarity almost turns it into another kind of thing, in which case its novelty is very great. A child born with teeth and long hair is an object worthy of our curiosity [Neubegierde (eighteenth-century term) = Neugierde (contemporary) = appetite for novelty, curiosity], but still more so is a monster of which one knows not whether it is a man or beast and that seems to have an equal claim to membership in both categories.” But there is still another reason why theoretical curiosity shifts its location rather than becoming differentiated as, for instance, also an aesthetic involvement: The increasing institutionalization of theoretical activity in the form of science, of workings that are carried forward by an immanent logic, allows the theoretical process less and less to appear as conditioned by motives.

There are exceptions, as long as there are still the great solitary figures embodying initiation into theory like that same Alexander von Humboldt, who most nearly typifies curiosity for the first half of the nineteenth century. As such a figure, he was treated with respect even when he was interrupted, at work on his Kosmos (like Archimedes at the storming of Syracuse), by the Berlin barricade fighters of March.
1848. Humboldt had to deal with a new form of curiosity, a species—all too often journalistically stimulated and then satisfied by unsupervised means—that he called “popular curiosity.” A false table of geographical altitudes had appeared in the *Leipziger Illustrierte Zeitung* [Leipzig Illustrated News] and Humboldt writes to Heinrich Berghaus on December 18, 1849, “Is it not enough to drive one to despair, dear professor, to have to see how all of our efforts to disseminate accurate geographical data among the people are in vain? How an object of popular curiosity is botched, you can see from the issue of the *Illustrated News* that I have enclosed. I brought the paper home with me this evening from a royal reception....” The energy of curiosity has turned out to be also a potential for being led astray by new media. And it is just this double aspect that Humboldt expresses by his distinction between curiosity [Neugier] and the appetite for knowledge [Wissbegierde] in a spoken remark from the year 1850 reported by Berghaus: “I am, as you know and as everyone knows, an advocate of the free movement of talent and intellectual gifts, wherever they appear; I am an opponent of all the preliminary and repeated tests that the state considers necessary in order to serve it or society in general, a mania for examinations that extends, no doubt, all the way to field watchmen and night watchmen—with the ridiculous aim of ascertaining (at least) their political convictions. Thus I am anything but a friend of the tutelage that the state assumes to such a terrible extent over us poor fellows; but if it cannot or will not desist from its examination system, then it should direct its attention to the people who, as editors of the sort of unfactual, imaginative publication of which the *Illustrated News* is one, take on the office of instructor of the people. What does this newspaper aim at? The momentary satisfaction of curiosity, not of the appetite for knowledge, and of course deeper learning is entirely out of the question.” The huge impression produced by his *Kosmos* confronted Humboldt with the potential that was present here. Here I cannot even touch on the history of the influence of this work; Humboldt himself spoke of the “Kosmos mania” that spread from the court, through the society of the capitol, all the way to the countryside and the parsonages. The echo came in the form of whole piles of speculative manuscripts on constellations, planetary disturbances, and general world views: “Everyone wanted to be pregnant with a *Kosmos* at once....” Just as the author of the *Kosmos* felt no affection from the stars when he regarded the cosmos itself, so also
the curiosity of his readers was directed not at the cosmos directly but rather at his Kosmos: "... in the salons of fashionable ladies, Kosmos lay uppermost on the coffee table, and opened, so as to show visitors that one had actually read in the learned work of the great philosopher!"

The modern age's initial passage beyond the Pillars of Hercules, its breaking through the Nec plus ultra, was supposed to open once and for all the borders of a hitherto unknown reality. But was the terra incognita that was aimed at there—that of a nature that was finally to be dominated—the final reserve of the unknown? Was Francis Bacon's interpretation of curiositas as a spatial or spatially metaphorizable motivational syndrome the only one possible? It was to become evident that there could be other systematic orientations toward the unknown and the undisclosed, and thus other possible ways of going beyond boundaries. The beginning of the modern age turned out to be a repeatable, or at least an imitable, paradigm.

Ludwig Feuerbach's concept of the "knowledge drive" [Wissensttrieb] reminds one, in its diagnosis of the situation to which it relates, of Bacon's curiosity, but with the difference that its background metaphor is temporal rather than spatial. Like Bacon, Feuerbach, too, characteristically resists the definitive status of a preexisting 'ancient world' and demands that we imagine what lies beyond its limits. But this time the definitiveness cannot be surpassed 'geographically' or integrated into an overall conception, a globus intellectualis. The definitiveness at which Feuerbach takes offense is that of the Hegelian philosophy as the consolidation that, according to Rudolf Haym's formulation, compelled the Hegelians at the beginning of the decade of the 1830s to discuss "in complete and bitter earnest" the question "what the further content of world history could very well be, now that, in Hegel's philosophy, the world spirit had penetrated to its goal, to knowledge of itself." This reminds one of the doubt with which Bacon had to deal, whether after the achievements of the ancients anything at all was left to be discovered or invented.

The motive of curiosity, for Feuerbach, can be described by one of his favorite terms as an aggregate of acts of "anticipation." Even where the knowledge drive seems to be an interest in history, it relates to history as not a dimension of memory and preservation but rather an arsenal and onset of anticipations and projections. At bottom the interest in history is essentially metaphorical, or, more precisely, directed at making accessible what is still metaphorical. The model is
theology as the historical form of a metaphorical, and therefore still withheld, anthropology—the metaphor of an anthropology that evidently was able neither to express itself nor to operate as such, that needed projection into a foreign medium, into the exaggerated dimensions of transcendence, in order to articulate itself. The divinity of this theology is, unbeknownst to it, ”only the logically consistent soul,” the ”unashamed” human will. Theology is ”the true, the objective, the manifest, the complete psychology,” a ”hyperbolical psychology.”

But the treasures squandered in heaven are not only brought back as what they were and have remained. One could say that the whole great episode of projection was like a phase of incubation, that the original idea was, as it were, propagated in vitro [in the laboratory]. Hyperbole makes knowledge possible: The possibility and necessity of magnification, of making the invisible visible, is not restricted to optics—consciousness too has a need for exaggeration as a means of articulation. Theology was a magnifying lense; without it we would have learned less about ourselves. The ancient efforts to understand the infinite, the absolute, the self-sufficient, the self-enjoying, the end in itself, turn out to be necessarily roundabout attempts by man to grasp himself as absolute, to conceive of himself as an end in himself, as having a right to self-enjoyment, and to experience his own sensuality in ”purposeless looking at the stars” as the ”living superlative of sensuality.”

As the retraction of the unique transfer of ununderstood self-understanding, the ”realization of Christianity ... [is] its negation.”

True to this fundamental conception, Feuerbach’s temporalization of curiosity was ‘learned’ early on from the assertion, classified as Platonic and Christian, that man has a ”knowledge drive” by which, on teleological premises, his immortality is guaranteed and given meaning. Feuerbach’s counterthesis is the critical extraction of the anthropological core hidden in the projection of immortality: The immortality extrapolated as the fulfillment of theory is the product of the difference, which is still not understood, between the ”knowledge drive,” which relates to the species man, and its unsatisfied actual state in the individual man. Here the spatial metaphor of curiositas is not only set aside but decisively contradicted; and this applies even to Kant’s ‘setting of limits’ for reason over against its restless impulse toward hypertrophy, and thus toward self-delusion.
Man, according to his species, simply does not want to know what he cannot know; rather he wants to know what is in fact not yet known by himself and men in general but can be known. The knowledge drive does not want to push forward into the inaccessible, which is anthropologically irrelevant, but rather to anticipate what is possible for man, which is the future. “There is nothing that man is further from possessing than a supernatural knowledge drive, such as Christianity or Platonism attributes to him; he has no drive that exceeds the measure of human nature, which admittedly is not a measure that can be gauged by the compasses of a philosophical system, a finite measure; his knowledge drive extends only to things that are knowable by man, in other words, to human objects, which find their completion in the course of history.”

The ‘beyond’ of religion and metaphysical systems is therefore an elementary, though not a fruitless, misunderstanding. The idea of immortality is curiosity that does not yet understand itself in its rational economy; it is the negation of history, insofar as history withholds things from every present time. Man only wants to know what man can know. “What lies beyond this region has no existence whatever for him; so for him it is also the object of no drive or wish whatsoever... What man does not occupy himself with and know here, he does not want to know anything about in the ‘beyond’ either.” Immortality is the uncomprehended aspect of temporality, which translates the externality of the future into the quasi-spatial externality of a nonworldly fulfillment, the utopia in which the totality of human experience falls to the individual. “What man desires to know in the ‘beyond’ is not something that in itself cannot be known in this world; it is only what he does not know now. He only wants to see the boundaries, the difficulties that he has encountered in his province, set aside.”

Thus curiosity is anticipation, not arrogation. The idea of immortality is the mythical representative of such anticipation, the placeholder for an as yet undeveloped consciousness. Here it would not be very helpful to speak of “secularization,” to say, for instance, that the explosive expansion of rehabilitated theoretical curiosity in the form of science was the secularization of the idea of immortality, of the energies that were directed at and attracted by that idea. Immortality is undeniably brought into a worldly context as its future, not, however, as the extraction of an idea from its ‘genuine’ source, but rather as the
retraction of a projection, which was not understood, into its origin, into the ground of the need that is involved in it. Admittedly this is expressed, at the moment of the retraction, in a language that is remarkably 'secularized' precisely because it has to point out the identity of the need whose position is being reoccupied: "Thus the foolish Christian, fixed on the heaven in the 'beyond,' overlooks the heaven on earth, the heaven of the historical future, in which all doubts, all obscurities and difficulties that afflicted the short-sighted present and past, are to dissolve in light."

But the decisive fact is that the idea of immortality that Feuerbach supposedly secularizes is not the Christian one at all but rather the one belonging to the Enlightenment and German Classicism, which is already historicized, that is, set in relation to the understanding of history as the progress of the species, as a human unity. The idea of immortality that is 'prepared' in this way is what gives Feuerbach the right to speak of anticipation. It is true that the scholastic visio beatifica (beatific vision) is also a combination of theory and eudemonia, but the "vision" is a static possession of the absolute, more its glorification than its penetration, a static infinity of the saturating presence of the truth. Here the Enlightenment and Classicism fastened much more concretely on knowledge experienced as movement, and of course also, especially in Kant, with the practical problematic that is unraveled as progress. The important thing here is that it is no longer God Who is the primary 'object' of one's attention in the 'beyond.' On the contrary, that attention continues the theoretical interests and moral obligations of this world; that is, it loses its quasi-worshipful character so as to satisfy, instead, what one's finite individual life denies to one. The basic idea that is emerging here and that underlies the Enlightenment's retention of the idea of immortality could be formulated as follows: It is precisely the asserted and confirmed possibility of the progress of knowledge that makes the contingency of the individual's share in this progress unbearable. One should not water down this connection, in order to make it serve a supposedly higher purpose, by means of the secularization thesis. Hermann Samuel Reimarus gave it the following formulation: "What help are truth and science to us in relation to the kind of contentment that we wish for, when with every little increase in them we only perceive all the more how much we do not know, or disturb ourselves with that much more doubt, and in any case in this life we can never satisfy our appetite for
acquaintance with and certainty about the multifarious things in the world? But if this earth, this first house that we inhabit, is only a school in which we grasp the elementary principles of the sciences, so as subsequently to be led to higher things, then this knowledge lays the foundation for further insight, and from this slight foretaste of truth we can already conjure up the sweet image of the way in which, in days to come in the realm of light, we shall behold the whole of nature, and all the divine secrets that are still hidden, with more enlightened eyes.”

Perfection in the scope provided by immortality is pushed forward by Lessing, Kant, and Herder to the point of the idea of reincarnation; but at the same time it is moralized, in fact for the simple reason that for the perfection of theory, the identity of anamnesis would be necessary, whereas for moral perfection, an unconscious, self-forgetful identity is sufficient.

Feuerbach’s “knowledge drive” reflects what, since Descartes, has been the essence of ‘method’: In the progress of knowledge, individuals are only functionaries, who operate within the totality of the process as transmitters, without ever partaking of this totality. Not immortality but rather the finality of death is the real catalyst for that concentration of existence that at least resists the quality of a mere episode, refuses to be consumed in its functional role. “Away with lamentations over the brevity of life! It is a trick of the deity to make an inroad into our minds and hearts in order to tap the best of our sap for the benefit of others. . . . The shorter our lives, and the less time there is at our disposal, the more time we really have; for the lack of time doubles our powers, makes us concentrate only on what is necessary and essential, and gives us presence of mind, initiative, tact, and determination. There is, therefore, no excuse worse than that of lack of time. There is nothing over which man has greater disposition than he has over time.” The “knowledge drive” is the energy of this concentration of disposition over time. It supports the structure of ‘methodical’ cooperation in history; but it also resists it as something nonsensical and beyond what can be expected of the individual.

Feuerbach biologizes curiosity as a “drive,” and consequently also teleologizes it into a sort of temporal instinct by which the interests of the species are imposed on the individual as an obligation but through which at the same time the individual lays claim to a counterinterest. The knowing subject, the individual, “experiences only those lacks and gaps in his knowledge—and these are the ones he
experiences most painfully—that are demonstrated by the existence and the necessity of an earthly, but not a heavenly, 'beyond'; for he only wants those boundaries of his knowledge done away with that the future generations who pursue his subject really do away with. . . . What mankind desires in the youth that is the past, it possesses in abundance in the old age that is the future."

It is not by accident that at this point Copernicus appears as the prototype of this knowledge drive as it begins to actualize itself in its temporal dimension. The triumph and the melancholy of pretension and resignation lie immediately alongside one another when Feuerbach makes Galileo call after Copernicus, "Oh, if you . . . could have lived to see the new additions to and confirmations of your system, what delight you would have derived from them! Thus speaks the man from the real 'next world,' the man of the future, to the man of the past." While legend, since the beginning of the eighteenth century, had ascribed to Copernicus the prediction of Venus's changes of phase, Feuerbach knows of still another utterance, pressing forward, as it were, toward the telescope, about the deficiency of the unaided human eye—an utterance whose derivation is unknown to me: "Copernicus is supposed to have mourned, on his very deathbed, that in his entire life he had never once seen Mercury, despite all his efforts to do so. Today the astronomers, with their excellent telescopes, see Mercury at broad noon." And here Feuerbach adds the sentence that is central to his theory of anticipatory curiosity: "Thus the future heals the pains of the past's unsatisfied knowledge drive."

The Copernicus anecdote is so fertile for Feuerbach because it determines the relation between thought and sense perception teleologically, in a way that is not self-evident. Vision and touch are not reason's 'raw material,' its substrate, but rather the essence of the fully realized human relation to reality. Only to have reflected on the planet Mercury constructively, but never to have seen it, is supposed to have filled the dying astronomer with sorrow, with the consciousness of a deficiency that only the telescope would have been able to remove. Reason is not the perfection of sensuality but only its anticipation and prelude, the instrument of its 'conjectures.' "Thought is only an expanded feeling, extended to distant or absent things, a feeling of something unseen." And appended to this is a question that, under the premises of this anthropological teleology, would have to be answered in the negative: "Is there anything absolutely invisible?" The
unwritten history of the invisible, as the reservoir rather than the futility of reason, reaches one of its culmination points in this question.

For Feuerbach, the simple negation of theology's reservations vis-à-vis the will to knowledge leads logically to the philosophical position of pantheism as "the essence of the modern era and its philosophy. We owe all the great discoveries and achievements of the modern era in arts and science only to the pantheistic view of the world. For how can it be possible for man to be enthusiastic about the world if the world is an entity different and excluded from God—an ungodly entity? For all enthusiasm is deification." Only if history is not at an end, if the termination of history by the Hegelian philosophy is invalidated, can the knowledge drive fulfill its anthropological function, can the kind of significance that Galileo's telescope had for the unappeased curiosity of the dying Copernicus be continually repeated.

The theory of the knowledge drive is integrated into a more general theory of needs as the indicators of objective possibilities in history. "It is precisely the concept of need that raises a creature above the limits of its subjectivity." The elementary misconception in the theology of a God without needs Who is supposed to be a God of love was the denial of its anthropological involvement, a denial that had negated the reference to history involved in 'needs.' "However self-supporting and independent you consider God to be, if you endow Him with love, then you endow Him with need. Love that derives from the superabundance of perfection is a luxury—love is true and deep only when a being makes up its own deficiency through it." Need is the index of the way in which history becomes the dimension of the fulfillment of the human claim to happiness. Only here does the knowledge drive have its ultimate anthropological foundation: "The happiness drive [Glückseligkeitstrieb] is the drive of drives. Every drive is an anonymous form of the happiness drive, anonymous because it is named only by reference to the object in which man locates his happiness. Even the knowledge drive is only the happiness drive, at first satisfying itself by means of the mind, and later in the course of the development of culture, where the knowledge drive becomes a separate drive, satisfying itself in the mind." The expression "knowledge drive," with the implication of anticipatory certainty of something attainable, is already found in Novalis—"The combination of will and knowledge drive—is faith."—but under the entirely different premises of "creative observation," of the verum/
factum principle: "We know something only insofar as we make it." The pantheistic premise that there is no longer a reserve of truth withheld from human knowledge is preempted here by a principle of equivalence pushed beyond Galileo’s identification of the evidence of mathematics for God and man to a universalized ‘poetics’: “God creates in a way no different from our own—He merely combines... We can come to know the Creation, as His work, only to the extent that we ourselves are God—we do not know it, to the extent that we ourselves are ‘world’—our knowledge advances, the more we become God...” For Feuerbach, the anticipatory character of the knowledge drive is absolute, so that ‘making’ is only imitative: “Man wants to know how something happens or is made so as, if possible, to be able to make it with his own hands—the knowledge drive is originally an imitation drive—or, if that is not possible, at least to mimic it in ideas. But power and ownership—and to own, to be master of what cannot be possessed in bodily form, is, precisely, to know—are objects of the happiness drive.” Here the knowledge drive does not ‘complete’ the making of the object; rather it ‘intends’ the title to its physically completed possession, or at least to an imaginative surrogate for such possession. Truth is the unfulfilled ‘intention’ of having the object in one’s hands.

From Feuerbach’s “knowledge drive” [Wissenstrieb] to Freud’s [Wissstrieb] is not merely an associative leap. They have a common element in the secondary and derivative character assigned to the forms that they take in reality. For Feuerbach, the force that propels the species toward the totality of experience in time, in history, manifests itself in indefinite forms in the individual; for Freud, the model of the psychic mechanism makes an unspecific curiosity result from a central libidinal potency. As a motive for psychoanalysis too, the knowledge appetite has, as it did for Feuerbach, a protective function approaching that of instinct, a function due to the subject’s deception by the unconscious, which the knowledge appetite exposes. What is novel in Freud is the combination of theory and therapy in a simultaneous functioning that could hardly be kept free from conflict. This problematic was already present in Breuer’s hypnotism, from which Freud inherited it: “Thus one and the same procedure served simultaneously the purposes of investigating and of getting rid of the ailment; and this unusual conjunction was later retained in psychoanalysis.” In comparison with the physical therapy of nervous disturbances, the hypnotic therapy
was “incomparably more attractive” because it “combined an automatic mode of operation with the satisfaction of scientific curiosity [Wissbegierde].”\(^{28}\) Freud characterizes the peculiarly ‘unintentional’ genesis of the Interpretation of Dreams (which agrees with his methodology) negatively: “My desire for knowledge [Wissbegierde] had not at the start been directed toward understanding dreams. I do not know of any outside influence which drew my interest to them or inspired me with any helpful expectations.”\(^{29}\) We will begin with such self-ascriptions of knowledge appetite before we come to its theory.

A significant example is found in a transitional passage in Beyond the Pleasure Principle: “What follows is speculation, often far-fetched speculation, which the reader will consider or dismiss according to his individual predilection. It is further an attempt to follow out an idea consistently, out of curiosity to see where it will lead.”\(^{30}\) Such combinations of warnings to the reader not to overstrain the credit that he has accorded to the author, while admitting his curiosity, are frequently found in Freud. Here is one further, very clear, example, which accompanies the assertion of the regressive nature of instincts and indicates a cool distance from the demonic connotations of curiosity: “It may be asked whether and how far I am myself convinced of the hypotheses that have been set out in these pages. My answer would be that I am not convinced myself and that I do not seek to persuade other people to believe in them. Or, more precisely, that I do not know how far I believe in them. There is no reason, as it seems to me, why the emotional factor of conviction should enter into this question at all. It is surely possible to throw oneself into a line of thought and to follow it wherever it leads out of simple scientific curiosity, or, if the reader prefers, as an advocatus diaboli [devil’s advocate], who is not on that account himself sold to the devil.”\(^{31}\) Such sentences ought to be placed alongside the positivistic formulas forbidding the taking of speculative liberties, such as were set up by, for example, Auguste Comte.

The distance inherent in a curiosity that expands in the space between introspection and speculation, and the proximity inherent in therapeutic engagement [involvement] do not compete in Freud because rational insight and self-appropriation [Selbstgewinn] converge. “Freud does not describe the unconscious side of our nature from any simple intellectual curiosity: he wishes us to become aware of it, to control it, to be as self-aware as possible.”\(^{32}\) But this convergence of goals does not prevent
it from being the case that the original motivation passes over into the therapeutic attitude only secondarily: "After the analyst's curiosity [Wissbegierde] had, as it were, been gratified by the elaboration of the technique of interpretation, it was inevitable that interest should turn to the problem of discovering the most effective way of influencing the patient." The model of the Unconscious allows one to ascribe to an agent actions of which he knows nothing and things undergone of which he has no experience. One may think of the schema of Plato's allegory of the cave as the elementary typification of all processes of 'enlightenment': Those who are chained inside know nothing of the deceptive character and shadow quality of the reality present to them—first one of them has to be set free and forcibly brought from the cave into the open air of authentic reality. But the allegory leaves unclear and unstated what motive it is that leads to the accomplishment of liberation and undeceiving—the first event is the return of the one 'undeceived' person into the cave, in order to disenchant the others. This transition from theory (pure contemplation) to practice (teaching) is indirectly made intelligible by the political context of the Republic but at the same time falls under the suspicion that accompanies the acquisition of a relation of power. Psychoanalysis is profoundly involved with this same problem. What motive takes the place of curiosity when it has been satisfied?

Theoretical curiosity is a topic and a problem in psychoanalysis in two ways. On the one hand, in relation to the definition of psychoanalysis as therapy, its origin from a 'cathartic procedure': "Psychoanalysis is a medical procedure which aims at the cure of certain forms of nervous disease (the neuroses) by a psychological technique." However, a therapy based to such a large extent on extracting from concealment material that withdraws and hides itself through a mechanism of camouflages falls easily into the danger—and the suspicion—of regression into what is nothing more than a theoretical interest. This is especially so if—and that is the second aspect—it itself provides a theory of this kind of interest as a transformation of what is by nature an unspecific energy, the libido.

It is the infantile active sexual curiosity to see, from which "curiosity branches off later on." If the "pregenital sexual organization" prepared dispositions toward both sublimation and neurotic compensation for repression, then it is understandable that what Freud entitled the "Wisstrieb" [knowledge drive] is, on the one hand, "at bottom a sub-
limated offshoot of the instinct of mastery exalted into something intellectual,” while on the other hand, it can “actually take the place of sadism in the mechanism of obsessional neurosis” (because in this mechanism the genetic “forerunner” becomes the compensatory “representative”). The unsuccessful sublimation can be replaced by regressions of an infantile character; Freud exhibited this impressively, in connection with theoretical curiosity, in the case of Leonardo da Vinci, who became an investigator “at first still in the service of his art, but later independently of it and away from it.” “The investigator in him never in the course of his development left the artist entirely free, but often made severe encroachments on him and perhaps in the end suppressed him.” This interpretation takes seriously the legendary verdict of the dying Leonardo, reported in Vasari’s Life of Leonardo, that he had done wrong to God and man, “non avendo operato nell’arte come si convenía” [not having worked in his art as he ought]. Conflict between the artist and the investigator in Leonardo appears first as inhibition, in the slowness of his work, and the frequent resignation that left it fragmentary. Freud refuses to believe Leonardo’s statement in the Trattato [Trattato della Pittura: Treatise on Painting] that in order to be able to love the Inventor of the world, he had first wanted to get to know His works. The affective energy, he believes, stands at the beginning and is already involved in the ‘intellectual interest.’ Here the metaphor of a hydraulic machine is characteristic, a metaphor showing that for Freud the cognitive craving can only be a secondary diversion of an original unspecific energy: “He had merely converted his passion into a thirst for knowledge; he then applied himself to investigation with the persistence, constancy and penetration which is derived from passion, and at the climax [auf der Höhe] of intellectual labor, when knowledge had been won, he allowed the long restrained affect to break loose and to flow away freely, as a stream of water drawn from a river is allowed to flow away when its work is done.” But the metaphor has to be kept at the highest level [auf der Höhe] of the writer’s own understanding: In the psychic, as in the physical process of conversion, losses take place in the energy accounts that cannot be made up: “A conversion of psychical instinctual force into various forms of activity can perhaps no more be achieved without loss than a conversion of physical forces.” What this means for the comprehension of Leonardo is that “the postponement of loving until
full knowledge is acquired ends in a substitution of the latter for the former."

It is important to see that this evaluation of the relation between the drive directed at theoretical knowledge and the artist’s productivity still contains, or renews, something of the old conflict between pure theory and the practice that promotes salvation. Theoretical curiosity is already a regression of the highest sublimation—which is not, or is no longer, successful—in the aesthetic work, a regression announced by those symptoms of inhibition and difficulty in creation. Curiosity is an escape from the failure of full maturity: “Investigating has also been known to take the place of acting and creating.” The work is finite; theory is infinite—the detour to practice by way of theory leaves the work in the lurch, as a fragment: “He was no longer able to limit his demands, to see the work of art in isolation and to tear it from the wide context to which he knew it belonged.” The relation of serviceability between the knowledge appetite and the production of works had become perverted; and in the process, it had become apparent that theory could not be instrumentalized. Of course for Freud, that is an indication of the establishment of this dominance in infancy, and of “reinforcement” by sexual instinctual forces, so that the knowledge appetite becomes a surrogate: “Thus a person of this sort would, for example, pursue research with the same passionate devotion that another would give to his love, and he would be able to investigate instead of loving.” When the “forerunner” can become the “representative” in this way, in the knowledge appetite, there has to be a ‘story’ connecting the infantile attitude and the later dominance. On the one hand, Freud typifies this story as inhibition by repression or as fixation into compulsive behavior; on the other hand, he typifies it as successful sublimation and substitution, where the libidinal energy evades repression “by being sublimated from the very beginning into curiosity and by becoming attached to the powerful instinct for research as a reinforcement.” Only this latter type spares itself the constraints of inhibition and compulsion, of repression and the eruption of the unconscious, through continuity in the process of sublimation. Leonardo is a representative of this ‘story,’ which Freud reconstructs from the analysis of a childhood memory, the fantasy of the vulture.

We need not deal with that here. But the hypothesis that the relation between the knowledge appetite and rejection of authority originates in the infantile bond to the mother and rivalry with the father is
important. The rehabilitation of *curiositas* means two things for Leonardo and his time: overcoming the divine reservation and rejecting the authority of antiquity. With his decision in favor of the exploration of nature and against the exhaustive prior accomplishment of knowledge by the ‘ancients,’ “he was merely repeating—in the highest sublimation attainable by man—the one-sided point of view which had forced itself on the little boy as he gazed in wonder on the world,” namely, the illegitimate child’s forgoing of a father and his recourse to the tenderness of his mother (nature). His early sexual curiosity, uninhibited by any paternal bond (authority), stabilizes itself and asserts itself against the religious preserve as well, which after all is only a higher-level father complex, and becomes, as it were, abstract in the adult’s sublimation: “His later scientific research, with all its boldness and independence, presupposed the existence of infantile sexual researches uninhibited by his father, and was a prolongation of them with the sexual element excluded.”

This account of the pathology of Leonardo’s knowledge appetite, however hypothetical its historical content may be and despite the slight attention it pays to the historical conditions affecting the individual biography, nevertheless in an indirect manner makes the problematic of the strained relation between theory and therapy in psychoanalysis itself clearer than is permitted by the first-person declarations—intent on convergence—of its founder, with his devotion to “scientific curiosity.” The curiosity that, in both Leonardo and his analyst, has become an instrument rests on a powerful energetic basis of acquired autarky. The artist, in any case, with his commitment to his work, seems, judging by the analysis of his resignations, to be on a wrong path rather than a detour.

**Translator’s Notes**

a. By “anthropology,” here as elsewhere in the book, the author means not the social-scientific discipline that studies mainly primitive peoples but more literally the study of *man* as such. It is thus similar to what is sometimes nowadays called “philosophical anthropology,” but to avoid the overnarrow connotations of that term (which might or might not cover the work of Freud, for instance), it seemed best to use the term “anthropology” *simpliciter*, as in the original.

b. A phrase from Hegel’s *Theologische Jugendschriften* that the author quoted in part I, chapter 9.
c. Giambattista Vico’s principle that verum et factum convertuntur, truth and fact are interchangeable (“fact,” here, being what is ‘done’ or ‘made’—factum is derived from facere).

d. “Poetics” here must be understood broadly, as creativity or constructive activity. Poiesis, its Greek root, means “making” or “creating.”
IV

Aspects of the
Epochal Threshold:
The Cusan and the Nolan
The Epochs of the Concept of an Epoch

That at some particular time, here and now, a ‘new epoch’ of world history begins, and one could have been present at the event—as Goethe wanted to make the disappointed combatants believe on the evening of the cannonade of Valmy—is never a secure historical fact. Perhaps that was not really such big talk as it sounds to our ears, even as the ironic exaggeration that it may have been intended to be. We acknowledge as an ‘epoch’ only what has been summoned up by the rhetorical hyperbole that speaks of the “epoch maker.”

Philologists’ and historians’ doubts whether the Goethe who in 1820 conjured up *The Campaign in France* had enough of the historian’s attitude to want to report a statement that was actually made or whether, with poetic freedom, he projected onto the evening of the lost battle what he had learned and thought in the meantime about the Revolution and its consequences—these doubts alone are enough to make evident how, since Goethe’s time, a scarcely paralleled accretion of significance has become attached to the term “epoch.” A “new epoch”—one is almost inclined to ask, how many does that make? How many fewer in the year 1792, or even in 1820, than after the inflation of the concept by historicism, with its need to create historical individualities by means of the great phrase divisions of the course of history? When Goethe had first written to Knebel about Valmy, on September 17, 1792, he still had to add the word “important” to the term “epoch” in order to make something of his having been an eyewitness.
Count Corti, in his history of the House of Rothschild, cites an item from the Vienna State Archive that provides a nice illustration of the carefree manner in which, for a long time, “epoch” could still be used. It is a letter of the senior partner Amsel Meyer to Metternich, who was arriving in Frankfurt on November 3, 1821, for the meeting of the Bundestag, inviting him to take his midday repast at the House of Rothschild: “This happiness would constitute an epoch of my life. . . .”1 There is not as much fawning exaggeration involved here as we read into the sentence. The term “epoch” had only begun to have an effect.

Between 1792 and 1820 and Goethe’s two uses of the term for the battle of Valmy lies his historical experience with the rise and fall of the Napoleonic ‘demon,’ with an ‘epoch’ that was supposed to have resulted from the ‘epoch’ of the Revolution. For a contemporary of these events, there was an incomparable historical observation in the fact that, and the way in which, this revolution—whose approach Goethe had felt, and whose outbreak he had seen, as though it were a phenomenon of nature [rather than history]—could be ended ten years later by an action, by a gesture, when the First Consul proclaimed on December 15, 1799, “Citoyens, la Révolution est fixée aux principes qui l’ont commencée. Elle est fini.” [Citizens, the Revolution is fixed to the principles that began it. It is finished.] It seemed that history had reduced its temporal dimensions to those of the ‘life-world’ and had begun to submit to distinct time limits. Goethe writes to Schiller on July 13, 1796, that on this day he experiences “an epoch of his own too”: His married state is eight years, and the French Revolution seven years old. Such parallelisms between his personal condition and the general condition may have been intended as wit more than presumption—the personal epoch is, after all, already a carried-over version of the historical one.2

What is more important is that periods of time have taken the place of points in time. In the letter written to Knebel from the army’s encampment, nothing but the event of the campaign itself had been the “important epoch,” of which Goethe writes that he is “very glad that I saw all this with my own eyes.” When, almost three decades later, he presents his account of the night of September 19, 1792—under the motto “I, too, in Champagne!”—what is now entitled the “new epoch of world history” has become a period of time, which according to the consolation offered to the distressed losers is to “begin”
precisely here and now. One will have to assume that the connection of ideas in the consolation as it was communicated to Knebel lies closer to the probable truth than what was written down nearly three decades later. For the history of concepts, which seeks to comprehend the change that took place between the Enlightenment and historicism, it is only the difference between the two examples that is important.

As regards its linguistic derivation, "epoch" is better suited to designate a punctiform event whose importance is being stressed than the period of time that is, say, introduced by this event and is to be characterized in terms of it. The Greek word "epoché" signifies a pause [Innehalten] in a movement, and then also the point at which a halt is made [angehalten wird] or a reversal of direction takes place. For ancient Skepticism, this root meaning gave rise to the application that commanded restraint [Einhalt: literally, holding in] in the movement of cognition and judgment and at the same time enjoined one to refrain [sich enthalten: literally, hold off], so as to avoid all risk of error once and for all. For the technical language of astronomy, the "epoché" was a special point at which to observe a heavenly body, its transit through the zenith or its greatest proximity to or distance from another star; astrologically, it was a position or constellation traditionally regarded as significant. The distances from definable points could be made useful in the determination of temporal periods; however, it was not these time periods but rather their initial points that were to be entitled "epochs" in the strict sense. Those points retain that status in the application of the concept to historical chronology, which presupposes a schema of discrete event-points and neglects the circumstances that lie between them as 'lowlands' destitute of events.

The individualization of historical periods as complex unities of events and their consequences, and the preference given to states rather than actions, to configurations rather than figures, in modern historiography—these reverse the relation that was originally implied in the concept of an epoch; the event becomes a historical magnitude by virtue of the state of affairs that it gives rise to and defines. When Goethe compares the duration of his sharing of a household with Christiane to that of the French Revolution, then to our surprise "epoch" here means not what began with those datable initial events but rather the length of the distance in time between those events and the present. Here nothing could be more natural than to take the further step of
contrasting the circumstances that commenced then with previous ones and comparing them with one another across this discontinuity.

We find this further step taken only at a late date. In his diary of 1831, Goethe notes “with the greatest wonderment,” after reading in the works of Galileo, the difference that separates his own world from the early times in which knowledge was left simply to common sense and “philosophy [which was] at variance with itself.” Galileo had died in the same year in which Newton was born. One would have expected Goethe, following his earlier usage, to define this year as the sharp demarcation point, as the “epoch.” The fact that this expectation is disappointed makes clear the change that has taken place when the entry goes on: “Here lies the Christmas Day of our modern times. Only now do I begin to be able to conceptualize the contrast between these two epochs. . . .”7 Only the secularizing metaphor of “Christmas Day” continues to relate the strict datability of the original events of modern science to the prototype of the most decisive partition of historical time as it was preformed by Christian chronology. But when the talk is of the “contrast” of the epochs, what is at issue can no longer be the demarcation that separates but only the character and individuality of the time periods separated by it.

This concept of an epoch leaves historiography’s chronological needs behind it. Epochs are not only, and not primarily, divided from one another; they are seen as comparable. The difference between them can be conceptualized. Bishop Bossuet, whose universal history Voltaire was opposing when he invented the philosophy of history, had still related the concept of an epoch to the privileged standpoint of the contemplator of history for whom the comparison of ages was to be possible. It is not history but this contemplator of history who halts at a resting place so as to survey what happens before and after and thus to avoid anachronisms, the errors that consist in confusing one age with another.6 This point cannot be subject to arbitrary, subjective choice; otherwise it would not accord with the distinction between the ages. For what it opens up to the observer must contain the objective criteria to be used in avoiding anachronisms. One can gather what kind of harm the bishop of Meaux has in mind; but what matters is not that but the fungibility of the concept of an epoch. The quality of the ‘epoch’ presents itself, to begin with, as the summation of those features that protect the historian from leveling off the course of history into the monotony of what is always the same, and thus from
the error of thinking that anything can happen at any time. Independently of the clerical universal historian's actual intentions, this would perhaps in fact be the most comprehensive definition of the possibilities of error in historical cognition.

Rather than the point in time, the periods of time that are separated by it begin to determine the concept of an epoch. As a result, the question of the dates of the turning points is overlaid by that of the circumstances and features of the formations that are merely contiguous at those points. And this "prevalence of a specific condition of things" has, in the long run, its methodological consequences. They are associated, superficially, with the question of the real or merely nominal validity of the epochal concepts. The decision between these epistemological alternatives has been made to depend almost exclusively on the condition that it should be possible to provide clear datings for the points of demarcation between the epochs. Those who espouse realism with regard to the epochal concepts have always failed as a result of their willingness to accept this demand. For of course it is a rather external view that leads to the emphatic preference for the year in which Galileo died and Newton was born, since after all these events are as far as possible from what one would call "epoch making" in each of their lives.

Nevertheless, the coincidence on which Goethe relies as the epiphany of the modern age continues to have the mythical suggestiveness that seems at least occasionally to satisfy our need to find meaning in history. That all historical research is influenced by the weight we attach to the possibility of not only adopting an attitude toward or determined by history but also (to whatever minimal extent, be it only by one's birth or death) having some impact on it—this becomes palpable in our need to find distinctness in the factors that bring history about. The tangible markings in time that continue to be associated with the concept of an epoch, even if they are no longer its sole constituents, give one confidence that effective actions, clear decisions, vigorous summonings up of energy and insight have led, and therefore still can lead, to those changes in the "condition of things." One imagines one perceives that history happens neither automatically nor by chance when Luther lifts the hammer to nail up his theses.

Admittedly it is never possible to do enough to satisfy the need for 'significance' of everyone who would like to be a subject of history; the images produced there have always been all too vigorously en-
graved. A science that easily becomes embarrassed about its ‘relevance’ quickly turns to obligingness. That should not prevent us from unearthing the roots of the discontent with history that such science would like to help remedy. Boredom with the classical concept of progress also has to do with the homogeneous unbrokenness of the picture of history that it offers, with its process definition, which—to remain in the language of “epochs”—admits no stopping and turning points that are perceptible and attainable within the ‘life-world.’ This is what Goethe again expressed, with the aid of a very original use of the concept of an epoch, at the beginning of his introduction to the Materials for the History of the Theory of Color. This, he says, will be “more irksome than pleasing to aspiring youth because they would like to begin a new epoch, in fact a regular primeval epoch, themselves...” To a large extent, the ill repute of historicism has to do with this. It had forced itself, in spite of all its individualization of the characteristic forms of epochs, to reduce these continually to what preceded them, in that—simply through the accumulated concentration of its material—it continually produced new transitions and levelings off, quite automatically and without any plan. One need only think of what has become of the heroic zero-point figures of the speculative history of philosophy as a result of historians’ assiduity—what medieval qualities have been brought to light in Copernicus, Bacon, and Descartes, in spite of their posture of turning away from tradition.

By its very success in setting the process of historical cognition in motion, historicism worked against its own intention of demonstrating the reality of epochs as authentic formations of the historical process. The dismantling of the mythicized roles assigned to historical actions and events threw doubt on the admissibility of the ‘epoch’ as a means of historical ordering. What matters here is not primarily the self-understanding expressed in the original sources. A consciousness of decisive separation from its past similar to the one developed by the early modern age cannot be required of any other epoch. It is not even characteristic of the formation of the Middle Ages, which sought their legitimacy directly by annexing themselves to the intellectual system of the ancient world and constructing a continuous identity with that world. That the modern age defined and wanted to realize itself as a distinct era in world history should not in itself give it precedence over the Middle Ages, which sought rather to conceal their distinctness by seeing anticipations of Christianity in the ancient
world. Thus even if the "modern age" itself explicitly wanted to be a new age, and to distance itself from the preceding age by identifying it as the "Middle Ages" falling between itself and the "ancient world," historical cognition does not require that there be a reality corresponding to such a pretension. While the way in which ancient materials were received in the emerging Middle Ages was meant to conceal what underlay this reception, the emerging modern age behaved as if it was determined to make a historical break—behavior that was calculated to mask the process of 'reoccupation,' with its relation to a constant matrix of needs.

The Enlightenment's consciousness of itself as representing the new epoch, in accordance with its rational intention and in its pure form, was contradicted by Romanticism, which reached back to what Petrarch had been the first to call the "dark centuries." And when the category of 'secularization' was used to sum up the processes that constituted the modern age, the Enlightenment's consciousness of itself was contradicted once again. The secularization thesis admitted the existence of a break between the epochs, but it demanded, not without at least a suggestion of restitution and reunion with the underlying identical substance, that the new age admit retrospectively that it had reached back, illegitimately, to what went before it. Romanticism and historicism had begun to bring the centuries from the end of the Roman Empire to the end of the Byzantine Empire back into the unity of the historical conception. In this way, at bottom, they fulfilled Renaissance humanism's secret longing to narrow more and more the distance between the ancient world and its renewal and to display the medieval interim as an incidental failure of librarianship; but they also fulfilled the equally unavowed need of every rationalism to recover reason, after the Enlightenment's polemical black-and-white delineation, as an agency that is present throughout the greater part of human history. The transformation of the Middle Ages into a 'renaissance' that continually expands further backward in time not only dissolved the reality of the epochal differentiation but also helped the always plausible postulate of human 'constants' in history to attain a success that extends all the way to "'topos' research." The whole of European history began to look the way that at first only the modern age had wanted itself to look. If a unified history of European literature existed, then why should not Europe also possess the totality of its unbroken world history?
Would not the situation of the 'epochs' then be the one described in a saying of Heine's, that every age is a sphinx, "which plunges into the abyss the moment one has solved its riddle"? Or did this formula, from the year 1885, four years after Hegel's death, refer precisely to the epochal concept of the 'fullness of time,' insofar as that concept had not withstood the disappointments of idealism's confidence in history? For unless all the appearances are misleading, the phenomenon of the historical 'epoch' should rather be described by the reverse of Heine's dictum: Eras exhaust themselves more in the transformation of their certainties and unquestionable axioms into riddles and inconsistencies than in their solution. Plunges into the abyss are indeed part of the image of the sphinx, which sees its riddle solved and thus its reason for existence destroyed; but historical life, even when it passes through breakdowns and new formations, can only be understood in terms of the principle of self-preservation, as long as one does not want to ascribe to it mysterious death wishes and longings for downfall. Even the change of epochs, as the sharpest caesura of all, has a function of identity maintenance, in that the alteration that it must allow is only the correlate of the constancy of the requirements that it has to satisfy. Thus after the great conception of each epochal project, the historical process produces its 'reoccupations' as restorations of its continuity.

This is, to begin with, only a heuristic principle. It provides a criterion for what can still be understood at all in history, when that history contains deep radical changes, revaluations, turnings, which affect the entire structure of life. The application of this conception will be successful, more than anywhere else, where the admittedly outdated ideal of a 'history of ideas' [Geistesgeschichte] can be realized. That is undoubtedly the case when the topic of the theory of history is, precisely, the history of theory—in other words, what can nowadays, without contumacious, be called "history of science."

Here I am not making a belated plunge into the dispute about Thomas Kuhn's The Structure of Scientific Revolutions. Nor is that necessary, when what is at stake is only the type of theory of the history of science that it represents, insofar as it presents a process form of singular significance. Not only does it make the logical development and the concentration of the historical movement into factors contributing to the inevitability of the radical changes in that movement, but at the same time it also exhibits these changes as serving the self-
preservation and self-confirmation of theoretical pretensions and attitudes that remain below the level of the process being discussed. The historiography of science, which is useful at first in hunting out and ordering facts, simply cannot carry out its anticipatory integration of these results in any other way, whatever case studies of actual influencing factors may produce, whether they be of illumination through dreams or of the influence of social circumstances. 'Scientific revolutions,' if one were to choose to take their radicalness literally, simply cannot be the ultimate concept of a rational conception of history; otherwise that conception would have denied to its object the very same rationality it wanted to assert for itself.

In the progress of a science, the same thing takes place—in exemplary fashion, almost as though in a test tube, with greater clarity—that in more diffuse manifestations keeps the general historical process in motion: An established system produces for itself the instruments with which to secure itself thoroughly and to extend the sphere of objects that it comprehends, and in the process continually refines the forms in which it is justified and applied, with the result that in this way the system itself brings to light and accentuates the data that go beyond what it is able to master and to enclose within the prescribed frame of the accepted assumptions. This is the description of a logical situation that Aristotle had already put under the heading of *aporia* [difficulty of passage, lack of resources] and that Kant had discussed as the fundamental “transcendental dialectic.” In both cases the process of cognition itself forces the abandonment of its presuppositions and the introduction of new elementary assumptions, which, while they do remove the situation from which there was no way out, do not require the shattering of the identity of the overall movement that gave rise to that situation.

The theory of 'scientific revolutions' describes, for the most part correctly, the breakdown of dominant systems as a result of their immanent rigorism, the 'pedantic' disposition of every schoollike mode of thought, which leads with fateful inevitability to the self-uncovering of the marginal inconsistencies from which doubt and opposition break into the consolidated field. This conception of what historians have been pleased to call "downfalls" may be capable of generalization to a high level in relation to historical phenomena. But in relation to the new foundations called for afterward, to the preference given to the new "paradigm," this schema has no explanation whatever to offer.
"Decisionisms" may describe practical conclusions drawn from the embarrassments of theories, but on the plane of the history of theories they do not give access to any analogous insights into the process by which one system is replaced by another. I think that there is a connection here with Kant's first "analogy of experience," against which no experience, the experience of history included, can be adduced as an argument.

For the problem of epochs must be approached from the perspective of the question of the possibility of experiencing them. All change, all succession from the old to the new, is accessible to us only in that it can be related—instead of to the "substance" of which Kant speaks—to a constant frame of reference, by whose means the requirements can be defined that have to be satisfied in an identical 'position.' That what is new in history cannot be arbitrary in each case, but rather is subject to a rigor of expectations and needs, is the condition of our being able to have such a thing as 'cognition' [Erkenntnis] of history at all. The concept of 'reoccupation' designates, by implication, the minimum of identity that it must be possible to discover, or at least to presuppose and to search for, in even the most agitated movement of history. In the case of systems of "notions of man and the world" [Welt- und Menschenansicht: Goethe], 'reoccupation' means that different statements can be understood as answers to identical questions.

Here we are not dealing with the classical constants of philosophical anthropology, still less with the 'eternal truths' of metaphysics. The term "substance" was to be avoided in this context because every type of historical substantialism—such as is involved in, for instance, the theorem of secularization—relates, precisely, to the contents, which are shown in the process of 'reoccupation' to be incapable of this very permanence. It is enough that the reference-frame conditions have greater inertia for consciousness than do the contents associated with them, that is, that the questions are relatively constant in comparison to the answers. The suspicion that what is being practiced here is the implicatıve metaphysics of a metasystem is easy to dispel; it is sufficient for that which assigns the functional framework to the reoccupations to have a durability that is very great in relation to both our capacity to perceive historical events and the rate of change involved in them.

During the phases in which the function of this frame of reference is latent—in the periods, that is, that we assign to the epochs as their 'classic' formations—we must expect, above all, gains by extension
and losses by shrinkage; in the new reorganization, certain questions are no longer posed, and the answers that were once provided for them have the appearance of pure dogma, of fanciful redundancy. A striking example is the fact that people have not always inquired about immortality and apparently will not always be inquiring about it in the future; from its entry into the biblical text after the Babylonian exile all the way to Kant's postulate of immortality, it was a position that, while it could be changed in many ways, every new system had to occupy. It is only the actual lengthening of lifetimes and the less unpleasant ways in which this additional time is spent that have caused the interest in immortality to flag and its systematic position to disappear. It appears that even contemporary Christianity, around the world, scarcely mentions immortality in its rhetoric any longer, and thus unintentionally has abandoned a principal element of its historical identity.

Even if the concept of an epoch, as used by the historian, were only a nominal means of defense against the lack of order in his material, and if, for instance, the unity of the Baroque had not existed, or had existed only in special departments of culture, then such nominalism would nevertheless only be a way of avoiding the burden of proof. That burden will, of course, always lie on one's opponent. In the case of the beginning of the modern age, the conditions could be unique. And they are unique. This is not only a result of the fact that the conceptual presuppositions to which the historian is subject when he operates with the concept of an epoch are already, to a large extent, implicit in the self-understanding of this epoch. More than that, the program of the modern age cannot be assumed as a contingent 'spontaneous generation'; the unfolding of its conceptual presuppositions already reflects the singular structure of the needs that had emerged, compellingly, in the self-dissolution of the Middle Ages.9

That the conditions of a realistic [i.e., nonnominalistic] use of the concept of an epoch cannot be satisfied in the same manner in every case can be gathered from the lack of comparability between the change of epoch that led from the ancient world to the Christian Middle Ages and the change that led from the Middle Ages to the modern age. The delay in the development of the medieval system in relation to its central 'factor,' the original type of Christianity, exhibits this system as not the authentic and adequate interpretation of a historical turning point but rather—at most—its belated elaboration.
Christianity laid claim only very late to having initiated a new phase of history. Initially this was totally out of the question for it because of its eschatological opposition to history and the unhistorical quality that was (at least) implied by it. Late antiquity, although it was suffering from the contradictions of its great schools of metaphysics, had also felt no challenge to a new inclusive conception but rather had developed a sort of worldly resignation that could just as well take the form of openness to transcendent offers of salvation as its opposite, skepticism, or of a private heroism of invulnerability. To that extent, the dissolution of the contradictions of late antiquity was the opposite of the overcoming of the difficulties on which the medieval/Scholastic system was to run aground a millennium later. In the latter case, a program of self-assertion against transcendent uncertainties, rejecting every kind of resignation, had become necessary. The modern age, then, in contrast to the Middle Ages, is not present in advance of its self-interpretation, and while its self-interpretation is not what propelled the emergence of the modern age, it is something that the age has continually needed in order to give itself form. Its self-understanding is one of the constitutive phenomena of this historical phase in its initial stages. This makes the concept of an epoch itself a significant element of the epoch.

What does one expect to see when the question of a change of epoch is posed? Since all history is composed of changes, the ‘epoch-making’ movements must be assumed to be both copious and rapid but also to move in a single, unambiguous direction and to be structurally interconnected, mutually dependent. He who speaks of the reality of a change of epoch takes on the burden of demonstrating that something is definitively decided. It must be possible to show that something is present that cannot be disposed of again, that an irreversible change has been produced.

Jacob Burckhardt asked himself the question in connection with the Middle Ages when and in what way it was determined that the new factor had gained the upper hand, that the decision had been made. Here it becomes apparent that it is easier to answer this question negatively than positively in relation to particular points and states of affairs. To illustrate this by an example: Around the middle of the fourth century A.D., between the reign of Constantine and the conquest of Rome by the Western Goths, the Emperor Julian, the so-called Apostate, could still have turned everything back with his pagan inspiration, or at least made Christianity and the old cults coexist side
by side, if one "imagines him without the Persian war and with, perhaps, a ten-year reign." Then probably paganism would have "at least established itself firmly enough to resist any further dismantling and would then have held out, as a religion inaccessible to any rai­sonnement [argument], alongside Christianity for who knows how long."\textsuperscript{10} But also if Arianism had been victorious, there would have been "no Middle Ages at all, or [they would have been] totally different.\textsuperscript{11} It is not an accident that Burckhardt sees the issue of the Middle Ages as decided along with that of the unequivocal Incarnation of the Son of God—and consequently it can be no more accidental that the issue of the modern age was to find one of its indexes in the most decisive contradiction of the Incarnation: the beginning of pantheistic inspiration in Giordano Bruno.

There are no witnesses to changes of epoch. The epochal turning is an imperceptible frontier, bound to no crucial date or event. But viewed differentially, a threshold marks itself off, which can be as­certained as something either not yet arrived at or already crossed. Hence it is necessary; as will be done here for the epochal threshold leading to the modern age, to examine at least two witnesses: the Cusan [Nicholas of Cusa], who still stands before this threshold, and the Nolan [Giordano Bruno of Nola], who has already left it behind; the Cardinal, who relates to the threshold through his concern for the endangered continuance of his system, and the heretic, who is certain, in his triumphant backward glance, of having crossed it. However, these examinations could not become ‘experience’ of history if they did not satisfy the transcendental principle according to which the alteration of appearances refers us to something persistent [das Beharrliche: Kant’s requirement], which, to be sure, in the case of historical consideration only needs to be something relatively longer lasting, as described earlier. This is why one of the preconditions for attaining clarity in relating doctrines to one another, and thus in differentiating them, is the possibility of demonstrating, through dissection, an identical fundamental system of elementary assertion needs, notions of the world and the self, on both sides of the threshold.

The Cusan, the highly speculative metaphysician of the fifteenth century, who tries to grasp reality one more time in a consistently medieval fashion, and the Nolan, the escaped monk, wandering scholar, and failed Master of Arts of the latter part of the sixteenth century, who postulates and celebrates the new reality more than he grasps
it—they can only be brought into confrontation to the extent that they allow us to recognize congruent position frames for their reality, to the extent that they pose homologous questions to which their answers, in spite of their mutual opposition, still relate. Only this differential analysis makes visible what it is that separates the positions on either side of the epochal threshold; it discloses what must have happened in order to force their incompatibility.

Of course the admission of this assumption that the epochal threshold could live below the surface of chronology and the events datable by reference to it is irreconcilable with everything that could be useful to the self-consciousness of the modern age. For to grant the existence of this cryptic border between the ages would nevertheless mean that the Middle Ages and the modern age existed for a good bit of history intermeshed or side by side, or at any rate without phenotypical distinction. The demand for an identifiable point where the sheep are separated from the goats and the age of sheep from the age of goats is one that an epoch that wants to have willed itself as an epoch can only see fulfilled by an embodiment of this will, by a widely visible and effective boundary figure. Columbus and Luther, Copernicus and Descartes appeared to offer such a tangible quality, without finally meeting the need. For what the consciousness of the time had seen as fulfilling this inaugurative function was to be rejected by historiographical reason. Historiographical cognition—how could it be otherwise?—is ill-disposed toward the notion of absolute beginnings: To understand history as a result of history means that every phenomenon has to be traced back to what ‘was there all along.’ The founder figures succumbed to the erosion inflicted on them by historiographical diligence. What may have seemed like the self-production of the modern age finally proved to be the mere point of convergence of lines of influence coming from the distant past.

What finally is still there becomes the norm of what was there all along. Precursors of the present are found even in the presentiments of the Presocratics. European history turns into a lengthy preparation for the modern age, exhibited, perhaps, in Pierre Duhem’s monumental work Le système du monde [The World System] or in Edmund Husserl’s final outline, The Crisis of the European Sciences, where he has the early Greeks already unknowingly take the turning and set out in the direction that was merely to receive its final definition from Descartes. Such a view of history, despite its consistency in the construction of its object,
deprives itself of the possibility of allowing validity to, and exhibiting, the modern age as a ‘final’ and unique epoch. From the point of view of his need for a defiant and monumental gesture directed against the Middle Ages, Nietzsche was right to blame the Germans for having it “on their conscience that they deprived the last great age of history, the Renaissance, of its meaning.”

For under the pressure of historiographical objectification, the Renaissance had in fact been pushed back deeper and deeper into the Middle Ages, had amalgamated itself more and more with the Middle Ages, while a growing number of ‘precursors’ of the supposedly specific accomplishments of the modern age were found in the thirteenth and fourteenth centuries, indeed even in Alexandrian late antiquity. Thus the dark lacuna of the Middle Ages was narrowed from both sides. The originally two-winged symmetry of the schema of the ‘story of salvation’ [Heilsgeschichte; “two winged” as before; and after Christ] seemed to set itself up once again, on worldly premises this time.

If, for purposes of object definition in historiography, the name of the modern age [die Neuzeit: the new age] contained what now was only a great prejudgment, then there was an irreversible contradiction between the self-consciousness of the epoch, especially in its explicit form as philosophy, and its leveling off by theory. That the figure of Nicholas of Cusa has attracted to itself such a degree of analytical and descriptive attention in the half century since the editors of Friedrich Ueberweg’s Grundriss der Geschichte der Philosophie [Outline of the History of Philosophy] called the Cusan the “most important middle term between Eckhart and Leibniz” has to do with this insolvency.

It is not only that here was a new founder figure, one who might seem to correspond better to the tendency to shift the beginning of the age to earlier periods; it is also that here was a different type of initiating gesture, one stamped by not so much the pathos of beginning anew and opposition to what is past as concern for what already exists, humility before what has already been said, and perhaps also the cunning of intervention through transformation, which would then have taken, unnoticed, its own unauthorized direction. This prototype had to be able to satisfy the diverging requirements of the continuity projected by historiography, on the one hand, and the marking off of epochs, on the other hand, so far as this could be done at all. The Cusan combines traits of medieval piety with criticism of Scholasticism and a new power of disposition over the tradition of antiquity. He is
unquestionably marked by the emerging interest in nature, and at the same time by anticipation of new methods by which to satisfy this interest. Such onsets of the new have been dissected out eagerly and not without overestimation of their originality and their historical influence.

The attempt to localize in history the moment of the original beginning, the larval stage of what is to come, is ambivalent. It does always contain an element of justification of the final transformation, the upshot of things that terminates with ourselves; but at the same time it also contains an element of mistrust of the reliability of a rationality that could ever have engaged in such detours and dead ends, and that consequently does not escape the suspicion that its latest certainty of itself will have to submit to the ‘epoché’ and the future retrospective vision of a reason that has come to itself anew.

In relation to the reason that believes that it can make history, the proceedings under the heading of “epoch” become acquiescence in contingency. Reason’s critique of itself, to the extent that it is the reason of past epochs, includes the expectation of repetition. While it is fascinating to see man liberated from the domination of inherited and unexamined accepted truths, at the same time it equally endangers the fragile consciousness of a rationality that now can no longer admit that what is elementarily rational could also be the old accepted truth. If the modern age was supposed to have been ushered in by a radical break with its past, then this always implies the admission that it was only from this new beginning onward that one could think and recognize what should have been the real issue all along. It appears, unavoidably, that reason owes man no guarantee of its always being present, and this fact puts every present moment in a difficult situation in relation to what it takes to be certain.

But a difference becomes evident in the strengths of the epochal systems. The strength of the medieval system lay in its not being oriented toward confirmations; no ‘life-worldly’ success that depended on medieval presuppositions could ever have reinforced what made the medieval system strong. At the same time, however, its sensitivity lay in the self-contained character of its logic, which had to make every difficulty appear immediately as a contradiction as soon as the formulation of the difficulty as a question had been sufficiently sharpened in the continual refinement of the systematic structure through the untiring arbitration of the differences between schools and the
obligatory work of interpreting the canonic authors. To put it differently: The possibility of refutation was inhibited, was long deferred—by, for instance, the great effort of the Paris decree of 1277; but in return for that it was tied to acute liability to crisis by its daring auxiliary constructions. The strength of the system of the modern age, on the other hand, lay in its being oriented toward continued, almost daily confirmations and ‘life-worldly’ successes of its ‘method.’ In that way, it also had an amazing capacity for correction; its weakness was its uncertainty what ‘totality’ this untiring success could ever bring forth, and its doubt whether a disposition over its process, the possibility of ‘making history,’ still existed for its legitimate subject or had already disappeared.

This description of the indicators of epochal thresholds is the appropriate context for a phenomenon that I would like to describe as that of the “seriousness that is always ‘new.’” Here again Goethe is helpful, with his entirely uncomprehending amazement at the use of the term “seriousness” in the speech of the youthful contemporaries of the old man, who could find in them “no cheerfulness,” and who blamed the “new age” for this: “What is more, artists and friends of the arts have become accustomed to the word ‘seriousness’; they say these artists are serious, but here that means nothing more than a dogged persistence on the wrong path.” The other side of the coin is that he who was displeased by this in turn was no longer taken seriously: this “Goethe with his lullaby.” The consciousness of a new seriousness puts the totality of the preceding attitudes, sympathies, and actions under the suspicion of frivolity; one had not yet found it necessary to take things so to heart, to be so particular, to want real knowledge.

Where did this relativization of the seriousness of what has gone before one begin? Perhaps as early as Thales of Miletus’s statement that everything is full of gods. That may have been a description precisely of the end state of the epoch of myth, in which the conversion of numinous indefiniteness into nominal definiteness seemed complete, everything that was unknown had been named, everything that was uncanny had become addressable and now had its position in the genealogical ordering of the things that bear names; no doubt at the same time it was an abbreviated way of expressing satiation with an all too cursory way of apprehending the world, with the fruitful ease with which things were assumed to be explained because they had
names. Taken altogether, the dictum was a summing up that had to serve as a challenge to approach reality finally with more serious means, that is, with that \textquote{theory} that caused its nocturnal executor to fall into the well. That it was possible to give Thales credit for the first prediction of an eclipse of the sun at least makes evident what was thought to have been important for the \textquote{new seriousness} following on a world of names and stories—namely, to deal with the prior indications of what was to be feared or hoped for in such a way that they in turn became something indicated in advance. One consequence is that—according to the anecdote related by Plato—from the other side, from the still mythical sphere of the Thracian maid, the astronomer's \textquote{new seriousness}, which he pays for with the fall into the well, calls forth only resounding laughter. The beginning of the postmythical attitude to the world has the form of a seriousness that is full of effort, and that throws into relief the loss of sleep and the danger to life and limb that it involves. The laughter of the Thracian maid must, for its part, have seemed comical to the philosopher, even after his fall, as an attitude that was all too superficial and carefree in comparison with the seriousness that reality seemed to him to call for.

Comparable evidence for the change of epoch from antiquity to the Middle Ages would be easy to produce. Here, unexpectedly, a lack of concern about one's own happiness \textquote{Heil} appears as characteristic of ancient life: a frivolous credulity toward the world, insofar as, through a failure to recognize its stigmata of unhappiness \textquote{Unheil}, it has been trusted as the \textquote{cosmos}. The early Christian literature is saturated with scorn for the false serenity of this trust in the world and of its forgetfulness with regard to transcendence.

And this same basic pattern of contrasting one's \textquote{new seriousness} with the past is repeated when the modern age, at its commencement, reproaches prior ages with the credulity of prejudice, with being oblivious to the world and neglectful of the experiences nearest at hand. To have relied on the world management of a hidden God looks like a sheer lack of prudence and care in an existence that is brief but correspondingly all the more in need of being secured. The nature that had been left uninvestigated emerges as not only a previously exposed flank of the art of living but also an inexhaustible source of material, subject to man's demiurgic power, to which no attention had been paid. The \textquote{laboriosa vigilia} \textquote{laborious wakefulness} that Descartes recommends in the last paragraph of the first of his \textit{Meditations} is,
once again, the tension of an extreme seriousness, which resolutely leaves behind it the past sleepiness and negligence in perceiving possibilities and in overcoming precipitateness of both judgment and action. To Bacon, the bygone interest in extraordinary phenomena in nature seems misguided to the extent that extraordinariness is supposed to be indicative of a transcendent violation of nature's regularity—misguided, then, as a form of the inquisitive industriousness (curiosa industria) that had amused itself with nature's unseriousness, with its supposed playfulness (lusus naturae), instead of showing itself to be capable of dealing with nature's serious usefulness (seria utilitas) by relying on the thoroughgoing lawfulness of its phenomena. The imputation of a voluntaristic background to nature becomes the equivalent of the conjecture, characteristic of all magic, that it is possible to intervene cunningly in the way that things happen. Now, just as it came to be intolerable to think that man could be a plaything, it became equally intolerable that he should be able to play. Part of Bacon's program is to reduce the miracula naturae [marvels of nature] to the strictness of forma and lex [pattern and law], in that, in their oddness, they merely represent the uncommon coincidence (concursus rarus) of regularities. These extreme cases were there only for the sharpening and invigoration of the mind, not for its gratification. 16

A stigma like that of the epoch-making 'new seriousness' is not only available for rhetorical employment; it is also capable of simulation. The attitude with which 'history' seems to turn away from what is definitively a thing of the past, as its former frivolity, can be 'fabricated.' It can provide itself with anachronistic opposition figures to be abandoned to ridicule solely for the purpose of self-validation, of rendering new pretensions serious. People had to make the 'bourgeois' ridiculous, as philistine, 'irrelevant,' and narrow-minded, in order to obtain assurance, in support of aesthetic or political projects, of the end of his epoch—at the same time that, as the 'late bourgeois,' he was busy assimilating everything that till then had been unbourgeois and accomplishing, under the cover of his 'downfalls,' a stupendous feat of integration. The imperturbability that had been drawn as one feature of his image was not only a weakness; the cry that now everything is at stake, the final decision is at hand, quickly makes deaf the people whom it is meant to rouse.

The perspective of the epoch-making setting off of the 'new seriousness' against its contrasting background perhaps most nearly enables
us to understand what it is in the figure of the Cusan that has irritated his interpreters. He actualizes for the last time the basic feature of the medieval system: the freely self-supporting speculative construction derived from the attributes of the divinity—no longer, however, with the full confidence of Scholasticism but rather with concern about its decline. This is why this thought structure is impervious to the contradictions that it elevates into its own distinguishing feature, that, in a mystical gesture, it anticipates.

Hans-Georg Gadamer has opposed my characterization of the Cusan as a figure of “concern about the Middle Ages”; he says that I “fail, to some extent, to appreciate the magnificent ease [or carefree manner: Leichtigkeit] with which the Cusan newly appropriates and transforms the entire heritage of Scholastic and ancient thought.” I take this reproach very seriously because it touches the fundamental subject of the change of epoch, since there is no way to eliminate an ultimate doubt whether this “ease” is the final and classical intensification of the principle on which the medieval system was constructed or whether it is only in a final and almost desperate effort that it demonstrates this ability, thus exposing itself without any defense against the coming ‘new seriousness.’

It is not only that the Cusan is attractive to a consciousness disturbed by the questionable aspects of its own epoch that allows us to gather what changes have occurred in the need for an epochal boundary figure. His new inclinations too, which all too often are already taken as belonging to the modern age, and which at least prepare its way, after all do belong to a man who, in not only his external position as a prince of the Church but also the unbrokenness of his piety, is entirely rooted in the Middle Ages and seems bound by their safeguards. As soon as it was possible for the question to arise whether precisely what was new in the modern age should not be held responsible for the epoch’s later experiences of internal and external human destruction, something like a soothing proof of genealogical extraction could present itself: If a medieval mind already showed itself capable of such conceptions, perhaps no great revision would be necessary in order to bring the epoch back to its legitimate dimensions.

It is not a ‘result’ of the research that has centered on the Cusan for more than half a century that it was possible for him to ‘turn out’ to be a protagonist of the modern age. The interest in him is itself guided by the need to relate this phase of history more readily to
what preceded it and to make it less accessible to the reproach, which
draws strength from the supposed consequences of the age, that it
abandoned a proven model of the European style of existence wantonly
and for the sake of problematic gains. A motive of unsecured legit­
imation is involved in this interest. It propels the search for a sphere
of origin that lies far from the historical break and from the posture
accompanying that break. The question of the Cusan's 'modernity'
promises to open up access to the problem of the legitimacy of the
modern age as well. The solution that suggests itself is, with the help
of this early ancestor, to find in the wrong the consciousness of the
modern age, which arose from the will to break with tradition and
formed itself in opposition to the Middle Ages, but at the same time
to find a new sort of legitimacy in the continuity and substantial
constancy that the modern age concealed from itself and is now un­
covered. It would be the kind of legitimacy that is always longed for,
the legitimacy of ingenuousness, of the matter of course that has no
need of justification. It is not the historical 'substance,' then, but only
the special epochal consciousness that was imposed upon it that would
have to be revised—and that would indeed already be revised by the
historical demonstration.

These implications of the choice of the Cusan as the precursor of
the modern age will have to be opposed here. What I object to is not
the failure to choose the 'correct' founder figure. Rather it is the
assumption (which has brought about the need or expectation) that
there can or must be such an 'epoch-making' thinker or actor. It is
true that we must proceed from the assumption that man makes
history—who else should make it for him?—but what we can discover
in history is not identical with what has been 'made' to occur at any
given time. For in relation to actions that could have 'made history'—
whether of the discredited 'great men' or, more recently, of the masses
that are defined by their economic conditions—the element of inter­
ference always supervenes. In the realm of ideas, this has brought
historians to the resigned confirmation of the 'misunderstandings' that
dominate histories of the reception of ideas and that occasionally can
be described as "fruitful." The principle that man makes history cer­
tainly does not mean that what is made depends solely on the intentions
and the precepts as a result of and according to which it was produced.

As long as history was only what can be found in annals and chron­
icles, in treaties and proclamations, there was no need to deny that
legal instruments and public papers document how history was 'made.' It is not the change in the agents to whom the responsibility for history could and should be assigned that altered our assumptions here. What cut deeper was a change in the concept of history that no longer allowed an unambiguous coordination of intentions with effects, of motives with transformations. As long as such a coordination seemed possible, it could be said that with the *Revolutiones* Copernicus brought about the changed view of the world that was important to him; that Descartes produced from the motive of absolute doubt the effect of absolute certainty; and that the Cusan, too, by drawing up the program of 'imprecision,' became the overcomer of the Middle Ages that he should have understood himself to be. Our picture of history is being emptied of 'events' that can be dated and attributed to agents in this way, like the event of November 5, 1937, recorded in the fateful "Hossbach minutes"—and even here the precisely dated, tangible event turns out to be an opportunity to observe rhetorical preparations for a surprise attack with respect to which everything decisive stretched out ahead of it in a ramified system of conditioning and conditioned factors. The artificial datability of the fateful 'action of a century' is an exotic case in which reality is hermetically sealed off.

The distinction between the subject of history, who is supposed to be able to 'make' it, and his object, which is supposed to be 'made' by him, can now be brought to a point in the following way as well: Man does indeed make history, but he does not make epochs. This is a deduction not from the admirable principle that the whole is greater than the sum of its parts but more nearly from the reverse, that it is less than them; that is to say, it is not the equivalent of action. Action takes place within the horizon of the historically possible; but its effect is not the arbitrarily, accidentally 'totally other,' either. The effect also occurs in a context of the reciprocal interaction of synchronicity and nonsynchronicity, of integrative and destructive interdependence. An epoch is the sum total of all the interferences between actions and what they 'make.' In this sense—that actions and outcomes are not capable of unambiguous coordination—we have to recognize that history 'makes itself.' What we grasp in the patterns of history is more the outcomes than the agents.

So also in this case of the Cusan and the Nolan. Neither 'made an epoch'; neither is a founder figure. However, both are distinguished by their relation to the epochal threshold. That threshold is compre-
hended not with them or in them but by interpolation between them. That is the difference between the guiding method here and the trusty procedure of weighing and playing off philosophical systems against one another. The familiar comparison of systems is symmetrical across its axis: the location of the systems in time remains contingent. If one mentally places the Cusan and the Nolan side by side, it immediately becomes evident that they cannot have stood side by side in reality. The impossibility of substituting one system for the other is due to their respective relations to the epochal threshold. The comparison between the systems of the Cusan and the Nolan that was presented, in one of the earliest documents of research on the Cusan, by F. J. Clemens, a lecturer at Bonn, could not grasp this fact. In spite of this work’s keen ear for the ‘linguistic kinship’ between the two thinkers, we can no longer follow the path of that treatise because it sought to make the Nolan into the somewhat dusky foil for the luminous form of the Cusan. To that extent, this treatise from the middle of the nineteenth century is a piece of late Romanticism.

The most instructive point of difference between the Cusan’s relation to the epochal threshold and the Nolan’s can be gathered from the attitudes of the two speculative metaphysicians to the questions associated with the Copernican reform. The pre-Copernican character of Nicholas of Cusa is just as specific to his thought system, insofar as it is ‘not yet’ modern, as is the post-Copernican character of Giordano Bruno, insofar as it is not a mere assent to an astronomical theory but rather an elevation of it into the guiding principle of cosmological and anthropological metaphysics. The Copernican reform represents a systematic point of reference for both thought systems that at the same time makes obvious the impossibility of exchanging their historical positions.

The Cusan neither anticipated the Copernican turning as an event in the realm of theory nor even had a presentiment of it. But he had a sensitivity for those presuppositions that, while they did not make a change like the Copernican one a historical necessity, could indeed define the meaning, for man’s understanding of himself and the world, of its entry into history. One probably does not miss Nicholas of Cusa’s intention if one describes him as wanting to equip the spiritual substance by and for which he lived with flexibility so as to enable it to deal with what had not been foreseen and could not be foreseen in such an alteration of the view of the world. For the Nolan, the Copernican
reform has indeed been accomplished and counts for him as an unquestionable truth, but it has not yet been made to speak for man; it is still confined in the technical language—what was to him the monstrous technical language—of mathematical astronomy, which could only veil the necessity for radically rethinking the premises of man’s existence and for destroying the system in which he believed himself to be secure.

Both of them, the Cusan as much as the Nolan, have their unexpressed ‘reserved thoughts.’ They differ in the degree not to which these thoughts were unspoken but to which they could not be spoken, or, still more clearly, in their relations to the possible ways of ‘putting something into words.’ If it was said of the Cusan that he kept, “so to speak, an index of forbidden innermost thoughts,”¹⁹ then the strictness with which these ideas were excluded is certainly disproportionately greater for him than for Giordano Bruno, whose way of life, as a vagabond “outcast” from Church and society, not only offers the appearance of intimacy with forbidden things but also delights in propagating what is intellectually shocking. It is not enough to make this a matter of national temperament, to see the one as made to seek “not radical impact, but harmonizing synthesis,”²⁰ and the other as abandoned to the dismemberment of life and thought. That something was still possible for the one that was to become unaccomplishable for the other—namely the compatibility of contradictions as a world principle, represented in the saving datum of the Incarnation—was not a matter of differing degrees of readiness for faith or of differing talents for fate but of what was still or was no longer historically possible.

My attempt to comprehend anew the basis and the background of Giordano Bruno’s annihilating fate and of his influence²¹ may at the same time bring out more clearly what Nicholas of Cusa may have been minded to overcome, or at least to allay.

Translator’s Notes

a. The Cusan is Nicholas of Cusa; the Nolan is Giordano Bruno (of Nola). It should also be noted that “aspect” includes, among its various senses, the astronomical (and astrological) idea of the configuration of various heavenly bodies at a particular time.

b. On “topos’ research,” see translator’s note b to part I, chapter 3.

c. On “decisionism,” see translator’s note f to part I, chapter 8.

e. The "Hossbach minutes" record a meeting in which Hitler and his ministers of war and foreign affairs and heads of the armed forces discussed plans for forcibly annexing Austria and Czechoslovakia by (at the latest) 1948/49.
The Cusan: The World as God's
Self-Restricition

All too often we miss in the figures of history the consciousness and explicitness of the crises in which we see them and in whose terms we have to understand their behavior. It is also in vain that we search the Cusan's work for explicit evidence of his knowledge of the critical situation of the epoch to which he still wholly belongs. Yet the motives behind the effort of this work can be understood only if one perceives in it a concern for the continuance of the medieval world. Concretely this means that one has to comprehend each element of this work as an attempt to answer those unformulated questions, whose totality would have defined the critical tensions in the structure of the epoch. The fact that it would not have been possible to formulate these questions, that—not accidentally—they are absent from the texts, constitutes our hermeneutic task. That task, here as elsewhere, consists in relating assertions, doctrines and dogmas, speculations and postulates, as answers to questions whose projection into the background of what is documented is what constitutes our understanding.

The Cusan did not formulate his concern for the continuance of the age. But the unity of his thought can be understood precisely and only on the basis of such a concern. The most definite indication of this fact lies in the 'systematic' effort of his work, which no longer has the almost naïve serial unity of the Scholastic texts of the Middle Ages, the commentaries on the sentences, collections of questions, and summas. The endeavor to hold together a threatened structure leads directly to this 'systematic' consistency, unknown to the ancient world
and the Middle Ages. The three exponents of medieval reality—God, the universe, and man—are not set above one another in a three-storied structure but rather fastened together in such an inner and mutual dependence that we might best use the model of a ‘feedback system’ to clarify the reaction of any change in one element on the others. Here the treatment is not motivated only by a desire to lay claim to completeness; rather the substantial reference to one another of the aspects of theology, anthropology, and cosmology under discussion determines the thought process. In this system of correlatedness, the classical hierarchical ordering of objects no longer exists. Instead, any one of the three aspects can be taken as the point of departure for the understanding of the whole.

The crisis-laden self-dissolution of the Middle Ages can be linked to the systematic relations in the metaphysical triangle: man, God, world. This presupposes an ambivalence in Christian theology. On the one hand, theology’s theme is anthropocentric: The biblical God’s concern, within history and beyond its eschatological invalidation, for man’s salvation is transformed with the help of the received Stoic idea of pronoia [providence] into an idea of world government and the coordination of nature, history, and man, which is fully unfolded in the Scholastic system of pure rationality. On the other hand, there is the theocentric motive: the dissolution of Scholastic rationality through the exaggeration of the transcendence, sovereignty, hiddenness, fear-someness of its God. The first motive holds the metaphysical triangle of theology, anthropology, and cosmology together; the second tears it apart. The ability of the second motive to prevail shows at the same time that the systematic consistency of the structure constituted by the first motive is insufficient, that it is superficially harmonized heterogeneity.

It is here that the Cusan appears to lay hold; he attempts to yoke the basic theological motives, both of them recognized as legitimate, into a structure that is tenable on its own account. It is just this that one can only characterize as the attempt, arising from or at least corresponding to the situation, to save the Middle Ages out of the substance and with the spiritual means of the epoch itself.

The Cusan’s intellectual accomplishment can be developed entirely from the urgency of this starting point: the maintenance, indeed intensification, of the element of divine transcendence, but at the same time the advancement both of man and the cosmos toward the qualities
of this transcendence. From this follows his holding fast to the over­
coming of the Aristotelian epistemology with its idea of a conceptuality
‘taken from’ the objects themselves—that is, his holding fast to the
critical achievements of nominalism, as he had no doubt become
acquainted with them in the school of the Brethren of the Common
Life at Deventer—but at the same time his removal of the new theory
of concepts from the mere functionality of an economic expedient in
favor of acknowledging the authentic and specific dignity of the human
systematic comprehension of reality. And also from this follows his
holding fast to the destruction of the Scholastic cosmos of levels—
indeed his resolutely pushing forward beyond that to the suspension
of that Platonic remainder in the Aristotelian cosmology, which had
consisted in the separation between the supralunar and the sublunar
worlds. At the same time, however, in and in spite of this leveling
off, these follows his enrichment of the object called “the world” with
new significance, with interrogatability, with a metaphysical dignity
that in many ways anticipates the tone of Giordano Bruno.

If one wanted to formulate as a tendency the Cusan’s concern—
which appears in the form described and sustains the whole work,
though it is never expressed therein—one would have to say in a
modernized vocabulary that this tendency is conservative without hav­
ing any inclination toward restoration. The Cusan does not want to
go back to the level of organization, which today is again occasionally
attractive, of the High Scholasticism of the thirteenth century; he must
have seen and acknowledged the inevitableness of the subsequent
critique of that formation. But he had evidently taken exception to
the merely reductive character of this process; he did not believe that
his age could exist on the mere ‘remnants’ of the ‘high’ phase that
preceded it. The constructive effort, even violence, is palpable in the
very language; but the importation of new vividness, after the Scholastic
centuries of continuously increasing abstraction, was not successful.
On the contrary, the wealth of neologisms conceals for the most part
only the iteration and involution of the degree of abstraction already
arrived at. But that in itself is an index of the insolubility of the
imagined problem, that of saving the Middle Ages. From the point
of view of our formulations, everything depends on seeing that this
failure was not accidental.

To define more closely the spiritual situation—and thus the task—
with which the Cusan was confronted, it is necessary to remember
the close proximity of intensification of metaphysical transcendence to skeptical resignation with respect to immanence. In the history of philosophy, this had become unexpectedly evident for the first time—and, even today, it is often still not understood—when within one school generation, dogmatic Skepticism 'broke out' in the Platonic Academy. But the transition from the assertion that the Ideas are unreachably transcendent, that only mystical/esoteric access to them is possible, to the dogmatic assertion that true knowledge or knowledge of the truth is impossible is a tiny and, moreover, a thoroughly logical step. The distance involved is overestimated only by those in whom, in contrast to a highly intensified metaphysics of Ideas, any sort of skepticism only strikes terror—then, of course, one cannot see how close together the two things are logically.

Apart from the Bible, the root of the medieval concept of transcendence is above all Neoplatonic. The conception of transcendence deriving from Platonism can be traced back to a spatial schema in which the primary assertion about the Ideas is that they are nothing in or of this world but rather are located outside and apart from it; on the other hand, the biblical 'transcendence' of God is more a temporal state of affairs, insofar as God's crucial presence for the world and for man either is an exemplary and comforting past—from the Creation up to the interventions in the history of the Chosen People—or else is still impending as His eschatological becoming present to men, which will put everything in order. The biblical God Himself withholds Himself in His transcendence, so as to make possible faith as the attitude of submission and thus at the same time as the condition of the retraction of His withholding of Himself. This sort of transcendence is thus an intrahistorical reservation; it can be canceled in eschatology and thus is not 'substantial.' It can be related only to a process, not to a static system. With the reception of ancient metaphysics, this idea must be reharnessed, as it were, from the temporal horizontal into the spatial vertical and must be interpreted as the difference between what is of the cosmos and what is not. This relating of theological transcendence to the schema of the finite ancient cosmos signifies, among other things, the vulnerability of this conception in relation to any possibility of a nonfinite cosmology.²

To transcendence as a process there corresponds transcending as the pursuit of what withdraws itself, the pursuit pictured by the Cusan as venatio sapientiae, as the hunt not only for wisdom but also of wisdom
for its object. The procedure of such transcending was described once and for all by the Neoplatonist Plotinus in the third century A.D. as the procedure of iterating a rational accomplishment: "As he who wants to see intelligible nature sees without any sense representation that which goes beyond the sensible, so also he who wants to see what goes beyond the intelligible will see it only after the surrender of everything intelligible, since while he does first learn through the latter that the former exists, he forgoes learning what it is." It is always a matter of going beyond an already attained step by the formal means appropriate to that step. The Cusan does not so much oppose his "transmysticism" of the Non-aliud [the Not-Other] to any Platonizing mysticism that defines God as the entirely other as he sets the one upon the other.

He opposes to and superimposes upon the plunge into the all-extinguishing obscurity of the mystical experience of God the 'method' of docta ignorantia [learned ignorance]. "The better one knows that one cannot know this, the more knowing one will be." The condition is understood as instruction in an accomplishment. Ignorance can in fact be known better or worse or not at all—merely accepted as the misfortune of the pretension to truth—whereas here transcendence is understood as a challenge; not yet, indeed, as the challenge to turn away from something futile and apply oneself to the knowable in its defined possibility and in the method by which it is accessible but rather as the instruction to construct limit concepts of knowledge that, so to speak, hedge about and protect the immanence of what is knowable, and, moreover, limit concepts from the point of view of which a very definite confidence is reflected into the realm of immanence.

"Knowing ignorance" justifies not only itself but also the knowledge of that about which not only ignorance can become knowing. The natural predisposition of man to want to know, which was laid down in the first sentence of Aristotle's Metaphysics, cannot be a delusion. On the contrary, it is the key to the turning of docta ignorantia toward man's understanding of himself. "Mira res: Intellectus scire desiderat" [A remarkable thing: The intellect desires knowledge]. If this fact is so surprising, how then does the contradiction get resolved between the fact that reason longs for knowledge and the futility of its effort to arrive at knowledge of the essence of its God, in which it is forced to give itself up and which it nevertheless cannot give up? The Cusan's answer: This reason would not be satisfied with itself if it were the
image of such a slight and imperfect Creator that He could have been greater and more perfect. Here the fact begins to emerge that the idea of being ‘in the image of ...’, which is necessarily the basic idea of any theological anthropology, enables one, indeed requires one, continually to couple the intensification of transcendence with the intensification of immanence—which means the intensification of anthropology and cosmology.

This clasping together by means of the image idea reveals the crucial device with which the Cusan holds together the structure of his system. The same thing that is achieved for anthropology by the image relation is accomplished for cosmology by the schema of complicatio and explicatio [complication and explication; literally: folding together and unfolding]. As an example of how the limit ideas of transcendence reflect on immanence, let me cite a passage in which the Cusan takes as his point of departure the definition of God as the Not-Other, the Non-aliud. All beings derive this very characteristic, that they are nothing other than what they are, from the fact that God defines them as such; but beyond this they also derive from Him, as the Not-Other, the fact that they do not beget something different in kind from themselves but rather something similar. The principle, already established by Aristode, of eidetic constancy, the sole ‘conservation principle’ of Aristotelianism, is detached here from hylemorphic metaphysics and elevated to the status of an absolute principle of the self-conservation of what is worldly. Thus when the Cusan transformed the transcendence of the ‘Entirely Other’ into that of the ‘Not-Other,’ he employed a linguistic step with the appearance of a mystical end in itself as a means of extracting from the world’s having been rendered insecure vis-à-vis its absolute principle an element of stabilization of the world in its continuance and comprehensibility for man. But such an element would have had to be important to him if he had the central concern that we impute to him.

The systematic conflict between transcendence and rationality traverses the history of medieval Scholasticism, which, on the one hand, was committed to carrying out the program of the proofs of God’s existence and natural knowledge of God and, on the other hand, was obligated to promote the intensification of the transcendence of its God. Anselm of Canterbury’s (1033—1109) ‘ontological proof’ of God’s existence from His concept already makes the antinomy manifest, since the concept of a highest being must be definable from positive
predicates only, but the idea of transcendence precisely denies and excludes such predicates. Anselm conceals this dilemma in his *Proslogion*, in whose first chapter he offers his much disputed proof, while in the fifteenth chapter he speaks of two concepts of God, a rational one defined by the intensification of what is thinkable to the point of insurpassability and a transcendent one requiring one to go beyond the limits of what is thinkable. Transcendence withdraws the concept from definability: "Ergo Domine, non solum es quo maius cogitari nequit sed es quidam maius quam cogitari possit" [Therefore, Lord, You are not only that than which it is impossible to conceive anything greater, You are something greater than can be conceived]. But that means that the God Who could be proved to exist is not yet the God that the religious sense calls for. Only an 'ex post facto' reinterpretation of the concept, a projection of rationality into transcendence, makes this distinction disappear. Similar processes are found again and again in Scholasticism. The cosmological proof, which it favored, leads to a world cause, which as the final instance of the causal chain remains within the connectedness of the world. Here more than a projection is necessary in order, first of all, to identify the world cause with the limit concept of thought and then, once again, to undertake Anselm's substitution of the highest thinkable thing for something beyond thought. This is what happens in the identification of Aristotle's unmoved mover—which after all can only provide for the processes of a world given from eternity—with the Creator of this world, the identification that Thomas Aquinas (1226–1274) undertakes. Thus the 'Creator' becomes a limiting case of the 'mover' function. What can be proved in this manner to exist belongs to the connectedness of the world, to which, however, it should not belong if the proof is to fulfill its systematic function.

It is against this theoretical praxis that the reaction of mysticism, nominalism, and the *Devotio moderna* is directed: the voluntarization and the exaggeration of negative language. For the Cusan’s very conscious, even mannered, linguistic constructions, what is important is not only the reflection on language and its insufficiency developed by mysticism but also his discernible effort not to take part in the mere negativity of the language of mysticism. Characteristic of this—to remain yet a moment in the connection with Anselm—is the peculiar transformation the Cusan gave to the ontological argument in one of his sermons: He identifies the concept of a first principle of which it
cannot be thought that it does not exist with the truth as the primary object of thought that must exist even if it is only to be claimed of some proposition—even if it were the proposition that God does not exist—that it is true, which, however, is certainly a claim that belongs to the essence of such propositions. Since God, he says, is this truth, the primary and necessary object of thought, what is asserted in any proposition at all, and particularly in propositions about Him, is a matter of complete indifference. For the condition of the possibility of any proposition as something laying claim to truth is presupposed as real in this proposition itself. "Beyond all opposition and contradiction, therefore, God exists, Who by either of two contradictory judgments is seen necessarily to exist."

This is an exemplary instance of the Cusan’s device of the coincidentia oppositorum [coincidence of opposites]. This device makes logical antitheses into marks of world-bound language, which lead outward beyond world-boundness precisely by negating their perceptual contents. In this process, language is a medium that can only be brought into relation to the truth by taking itself as provisional and tending continually toward the point of its self-suspension. Imagination and language reflect one another from the point of view of the limiting case of their self-suspension; but this is no longer an act of medieval humility, no longer the sacrificium intellectus [sacrifice of the intellect] in view of the mysteries of faith, but rather a quasi-experimental procedure of continually renewed testing of the boundary of transcendence. Every negative theology that revels in the realms of what cannot be said immediately draws upon itself the objection that really there is nothing that one needs to say or can say once one has described God as what is absolutely inaccessible. But the Cusan’s procedure sees an essential difference between muteness and falling silent. The language and system of metaphor that he developed for docta ignorantia do not represent a state of knowledge but a praxis, a method, a path to a certain sort of attitude. They draw intuition into a process, in which at first it is able to follow linguistic instructions, for example, to imagine doubling the radius of an arbitrarily chosen circle and then to imagine it as expanding continuously in this way. But at a certain point, the instruction passes over into what can no longer be executed, for example, to think of the radius of the circle as the greatest one possible or as infinite, in which case the curvature of the circle (which decreases as the radius increases) approaches identity with the curvature
of a straight line, so that the circle's radius and its circumference coincide. The point is to make transcendence something that one can 'experience' as the limit of theoretical accomplishment and for that very reason as a challenge to heterogeneous modes of accomplishment.

The explosive material of such use of 'metaphors of explosion' is the concept of infinity. Its most influential model was the formula from the ostensibly Hermetic Book of the Twenty-Four Masters, according to which God is the infinite sphere whose center is everywhere and whose circumference is nowhere: "Deus est sphaera infinita, cuius centrum ubique circumferentia nusquam est." It is characteristic of the Cusan's endeavor to let the world participate in the 'advances' of the comprehension and representation of transcendence that he applies this formula from what was originally a purely theological speculation to the world as well. The advantage of the mathematical construction for this exercise in transcendence lies in the freedom of variation of the given. The figure of the circle can be brought to its 'explosion' by having its radius conceived of as infinitely great, and its circumference thus identified with a straight line, but also by the instruction to let its radius become infinitely small, so that the circumference and the radius become identical in a point. The perceptible figure stands between the two infinities; it has, as it were, both an outward and an inward transcendence.

The anthropological and cosmological correlates of this theological speculation—once such a correlation is assumed as a systematic principle in the metaphysical triangle—are obvious. This sort of representation of transcendence is called by the Cusan "symbolic investigation" (symbolice investigare), which he describes as follows: "All mathematical objects are finite; nor can they be imagined otherwise. If we want to use something finite like that as an example by which to ascend to what is absolutely greatest, we must regard the finite mathematical figures with their characteristics and relations and then transfer these very relations correspondingly to infinite figures of the same sort. Finally, on a yet higher level, we must transfer the relation of the infinite figures to the infinitely Simple, which is free of any figure. Then only will our ignorance be incomprehensibly instructed as to how we have to think more correctly and truly about the Highest, even if we do labor in an enigma." The helpfulness of mathematics in grasping the difference in kind of the Divine is due to the fact that the construction of the coincidentia oppositorum is formally 'imitated'
by means of this method of double transfer. At the same time, the procedure provides a metaphysical ground plan that can also be traversed in the opposite direction, in that it specifies the inner structure of the origin of the world as the explicatio [explication, unfolding] of the basic complicatio [complication, folding together]. Thus the reflexivity of transcendence—in other words: the continual retranslatability of theology into anthropology and cosmology—continues to be secured. That a speculative theologian who was rooted entirely in the Middle Ages could convey impulses to the conception of ‘world’ and ‘man’ that press toward the end of the Middle Ages is grounded in this retranslatability of transcendence as he conceived it.

The end of the Middle Ages—that also means overcoming the naive attitude to language that induces one to let an equivalent reality be associated with every linguistic element and that sees in this association a closed circle of accomplishment. Here nominalism had first cleared the way critically, but only in the direction of an economically regulated restriction of the association function. The Cusan begins to see the function of language as ‘instruction,’ and specifically in such a way that language always ‘fulfills’ its function when it refers one outward from the realm of what can be discussed. To cite the modern linguistic critic: “My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them—as steps—to climb up beyond them....”

Only with Wittgenstein’s metaphor of throwing away the ladder is the Scholastic remainder that the Cusan did not yet see, the coordination of transcendence of language and transcendence of the world, definitively eliminated; transcendence of language for the first time really leads one into the world. But such an end point of the break with the association function of language can hardly be understood without a glance back at that first escape from Scholasticism.

The formula of docta ignorantia, of learned ignorance, whose origin the Cusan describes as his philosophical ‘Damascus experience’ during his sea voyage from Byzantium to Italy in 1437, unites an element of skeptical resignation vis-à-vis the metaphysical pretensions of the age with an element of indefinite expectation of a knowledge that could no longer have the form it had had hitherto. Man’s situation in relation to transcendence, where there is no hope for theory, is newly illuminated as the prospect of understanding oneself more clearly precisely
in and from this perplexity. To that extent the formula, which seemed in its rudiments to be more than a millennium old, was nevertheless new. Augustine’s *pia confessio ignorantiae*, the humble confession of ignorance, which he had opposed to the thoughtless pretense of knowledge, was precisely not the knowledge resulting from and sought in the fathoming of ignorance but rather the mere point of the surrender of the pretension to knowledge in going over to faith. Precisely in the retention of the linguistic elements of the formula from the beginning to the end of the epoch, the lack of constancy and the radical change in its meaning emerge here. The Cusan’s *docta ignorantia* differs from both Socrates’s statement that he knows that he knows nothing and the *scientia nihil scire* [science of not knowing], which was Seneca’s term for the various tendencies of Skepticism. The ‘known negativity’ is different from the knowledge *resulting from* negativity, which Philo of Alexandria (ca. 25 B.C.–ca. 50 A.D.) was probably the first to formulate: “When the God-loving soul investigates what that which exists is in its essence, it falls with its investigation into the formless and the invisible, from which a highest blessing accrues to it: comprehending that God, Who is in Himself, is incomprehensible to every one, and of seeing precisely this, that he is invisible.” In Philo there is already found the definition of this positivized negativity as “seeking in itself, which is very much worth striving for, even without finding.” Petrarch (1304–1374) was the first to use this formulation in what was no longer a mystical context, and made it into the basic formula for criticism of the Scholastic pretension to knowledge. He alone could become knowing who recognized himself as ignorant and therein abhorred himself, since the painful insight into one’s own backwardness is the point of departure for its overcoming.

One recognizes the ambivalence of this basic idea; on the one hand, it leads to the humble resignation vis-à-vis immanence that leaves everything to the Divinity, the leap of faith of the self-sacrificing intellect, while on the other hand, it leads to becoming conscious of a factual—and thus always objectionable and worth changing—state of knowledge. This was what was entirely lacking in Scholasticism, which seemed, in each of its representatives, to stand at the end of the summation process of what is humanly knowable. With the Cusan there begins a recollection of the unknown, no longer only in order to reject the presumptuousness of the pretension to knowledge but also at the same time to refer to the still unknown scope for the expansion of knowledge.
The reproach that the Middle Ages had ascribed the character of definitiveness and completeness to their state of knowledge and thereby crippled in themselves the will to theoretical progress and the acknowledgment of new experiences is part of the arsenal of the early modern age's critical distancing from its past; to have expressed it was more characteristic and more effective for thinkers of Francis Bacon's type than even the advances that they could claim to have made in science. Rousseau was to generalize this reproach as cultural criticism and to speak of the good fortune of ignorance (l'heureuse ignorance), which protects us from the disappointments that come with the corrections to our supposed knowledge. In his letter to Voltaire dated September 10, 1755, he writes that what we do not know harms us less than what we think we know. "If we had not pretended to know that the earth does not turn, then no one would have punished Galileo for having said that it turns."16

Of course the critical potential of docta ignorantia was not exhausted by the Cusan; it was only set out as the capacity to reflect on the surpassability of the state of knowledge at any time. But that this humility does not turn into the resignation of definitive finitude, that it allows one to see systematic stabilization as a possible exhaustion of the will to know, is the unrest that it restores to the age.17

Instructive evidence regarding the direct challenge of docta ignorantia to Scholasticism is the opposition that it provoked from the Heidelberg professor Johann Wenck von Herrenberg in his polemic De ignota litteratura [On Ignorant Erudition]. Wenck resists the introduction of a novel cognitive procedure, that of the comprehension—uncomprehending, and resulting from this incomprehension—of the incomprehensible: "Quomodo ergo in hac vita incomprehensibia incomprehensibiliter apprehenderemus?" [Now how in this life were we to understand incomprehensible things incomprehensibly?] In this life there are for man only two sorts of comprehension, namely, in concepts and in images. For knowledge of God, man was assigned, in the thirteenth chapter of the first Letter to the Corinthians, knowledge through reflection and riddle [through a glass, darkly]. What is feared here, as so often in relation to a mystical theology, is the effacement of horizontal/temporal transcendence by the supposed possibility of being able to displace in the vertical the boundary of the Divinity's concealment. The eschatological condition of blessed contemplation, the visio beatifica, which is held in reserve for man and so must at
present, in statu viae [en route], be withheld from him, could be anticipated or usurped if the possibilities of knowledge were demarcated less strictly.  

The assumption that knowledge proceeding by way of concept and symbol to contemplation is limited by the eschatological reservation was the common property of Scholasticism. It is also the basis of the peculiarly static character of Scholasticism’s conception of the human possession of knowledge as a stock that was completed in the tradition and only needs to be arranged and defended ever anew. This context makes clear how it is that the Cusan’s conception, in spite of its indubitably conservative intention, was de facto directed against medieval spirituality’s basic attitude. This becomes particularly conspicuous where the Cusan seems to comply with the restriction to concepts and images as the only possible alternatives by himself speaking in images. These carried-over descriptions are not the sort that refer to a static state of affairs, as had been presupposed by the Middle Ages’ classical doctrine of the figurative sense of a text.  

The Cusan’s ‘symbols’ are precisely not of the kind that signify or even reveal a particular hidden state of affairs; rather—as I already tried to express by characterizing them as “exploding metaphors”—they are figurations of a method, models from which a rule can be derived that can be applied and repeated in continually new operations.

At bottom, in spite of Grabmann’s two-volume and incomplete work, there never was such a thing as a Scholastic method. The transposition of the modern concept of method to the Middle Ages belongs among the supposedly justifying deobscurifications of the Middle Ages that were long held to be necessary. What was called the Scholastic method consists simply of formal prescriptions for disputation and the composition of treatises. It is not an epistemological method. The imputation of a method presupposes that the stock of knowledge can be amplified by the application of definite rules; the concept of method is related to the concept of progress—not necessarily to the concept of an infinite progress, but potentially so.

Here lies the heart of the difference between Wenck and the Cusan. The assertion of the possibility—even if only a presumptive one—that one could open up new regions to knowledge, could displace the fixed boundaries of the hitherto existing stock of knowledge into the region of the unknown, always implies an attack on the eschatological reservation. The idea of infinite progress is not the ‘secularization’ of
Christian eschatology; vice versa, when this conception became possible, when its preconditions came into view, temporal transcendence—the eschatological future—ceased to be The Promise. It lost its compellingness as a possibility of heterogeneous fulfillment of the human desire for happiness and truth. Here Wenck went entirely astray in his arguments when he held it against the Cusan that *docta ignorantia* deprived the natural cognitive striving of the consciousness that it could be satisfied, by reducing the *terminus ad quem* [end point] of the realization of knowledge to infinite shades and approximations. With his appeal to the first sentence of Aristotle's *Metaphysics*, according to which all men by nature desire knowledge, Wenck thinks he intervenes directly against the Cusan and in favor of confirmable progress in the acquisition of knowledge; but he fails to see that Scholasticism under the authority of this sentence could perfectly well rest content with the static inherited stock of knowledge.

It was yet to become evident, in connection with Descartes's mistake regarding the finite perfectability of knowledge of nature, that the impulse of the theoretical will can be put in question by neither the suspicion nor the certainty of the infinitude of theoretical progress. On the contrary, the impossibility of specifying or adhering to an idea of completion only makes this process yet more forceful.

Very closely associated with this is Wenck's opposition above all to the Cusan's doctrine of the essential "imprecision" of all finite knowledge. He argues that intellectual movement ceases to be movement when it has no point at which it can complete itself and against which it can measure its progress, so that consequently it becomes meaningless and futile. Wenck argues in behalf of a progress that after all had not occurred under the presuppositions he defends. He reproaches the Cusan with destroying, by his presuppositions, the scientific process (*destruente omnem processum scientificum*)—a process that the Cusan certainly did not intend to induce as such, but the possibility of whose conception he unintentionally created through the antithesis of his presuppositions to the Scholastic ones. Precisely in the mirror provided by his inferior opponent, the Cusan's historical position emerges more clearly than in his own statements. The polemic against the logical consequence of the infinitude of the path of knowledge, against the insurpassably approximate value of each of its stages, for the first time makes disconcertingly clear how, from the still entirely medieval anxiety about the intensification of the transcendence of the absolute,
a new inference easily presents itself, one which, however, can appear as a daring anticipation of one of the basic ideas of the modern age only to someone who already knows what is to come.

The difference between Wenck and the Cusan can perhaps be most penetratingly comprehended in terms of their use of metaphors that derive from what one could characterize as the leading medieval system of metaphor: that of the ‘vestige’ or ‘trace’ (*vestigium*). With the idea of the vestige, the basic Platonic idea of the universal character of the world of appearance as the image of an original is restricted and reduced, specifically in the sense of a restriction of this characteristic to anthropology; only man is meant to remain in the strict sense an *imago* [*image*]. Nature receives the basic character of a vestige, in the sense of not an image of an original but rather an impression of a feature that refers one to its Author. The vestige contains something of the figure of analogy, of partial identity; it becomes accessible through a causal inference from the impression to the Author. Although it is not a representation of the essential and the substantial, still it is an eidetic element, an authentic mark, a hermeneutically translatable value. Thus between the absolute and the world there must indeed be, for Wenck, an unequivocal and overwhelming difference, but at the same time there must be a definite proportion, just as there must in principle be a proportion between the precise definition of a truth and an arbitrarily imprecise statement of the same truth. The basic intellectual pattern employed by the opponent of *docta ignorantia* is analogy, static proportion.

The Cusan, on the other hand, developed the metaphor in the direction of one of its entirely authentic possibilities of association by understanding the vestige as not the static signature of the Creator in His work but rather the reference, marking a path, of a fugitive goal to be pursued: "First there is the truth, then its vestige; one cannot seek after the truth without following its trace." For Wenck, ‘vestige’ and ‘image’ lie close together; the image is, as it were, the fully unfolded intention of the vestige, the full presentation of what is only hinted there. To that extent man would be a peculiarity of the Creation only in degree, not in kind. So far the knowledge that is possible from the vestige, knowledge arrived at through a process of inference, is still completely acceptable under the norms of the Aristotelian idea of science. For the Cusan, the ‘trace’ is a direction for movement, for pursuit. His image, introduced explicitly against Wenck, is the
hunting dog on the trail, the *venaticus canis in vestigii*. There is no 'proportion' between the 'trace' and the game that is pursued. The trace has the character purely of a signal; it has no imitative quality. The trace appeals to man's desire for truth, but it furnishes him with no fulfillment, not even a measure of it. Here a form of truth possession makes its appearance, in which each acquisition of knowledge only has the function of making possible and provoking the next step to a new application of the cognitive method.

The metaphor of the hunt, already abundantly employed by Plato, is for the first time developed fully, and beyond its medieval presuppositions, in the Cusan's last work, *The Hunt for Wisdom* [*De venatione sapientiae*]. But precisely here it turns out that the fully drawn consequence of a basic medieval idea, once it is set free, brings to light something entirely new: the hunt as the 'pursuit' that is necessarily always involved in the authority, for modern thought, of the concept of method.

The Cusan answered Wenck temperamentally but firmly, with the *Defense of Learned Ignorance* [*Apologia doctae ignorantiae*]. In his own modification of the old simile of the sun, he likened *docta ignorantia* to the knowledge of the sun that is possessed by one who sees, in contrast to a blind man's knowledge of it: The blind man believes, after he has heard much about the sun and the unbearability of looking at it directly, that now, through what he has heard, he knows something about its brightness, about which he in fact remains entirely ignorant; the sighted man, on the other hand—precisely because he had to answer the question how great the brightness of the sun is with the admission that he did not know—has the knowledge of this ignorance, since from the experience of his own attempt to persist in looking at the sun directly, he is certain that its brightness exceeds the capacity of sight.

Visual clarity causes a peculiarly dangerous lulling of the mind. The Cusan's own illustrative images always aim, of course, at making use of the attractiveness of the visual; but at the same time they aim, by breaking through what they accomplish, to lead one to the limit of this visual clarity. The recoining of the metaphor of the 'vestige' must be kept in mind here when he resists the division of all knowledge into knowledge in concepts and knowledge in images, the division that had been held up to him. The truth is by no means present in the image unless the image is always immediately suspended as such.
For while each image does represent the truth, at the same time, as an image, it has already fallen away and is hopelessly distant from it. This general formula is meant to be applied to both the language of revelation and mysticism and the character of the world itself as an image. This ‘functions’ only when it is understood as a vestige in the sense of the signal that sets thought in motion.

Docta ignorantia is ‘method’ in the preliminary and undogmatic sense that it does create a consciousness of a ‘path’ that can be followed. To the Scholastic form of thought, which all in all is characterized by belief in ‘definition’ in the widest sense, it opposes the indefinite as the unsurpassable restriction of man’s situation. The sharp distinction between concept and image disappears once both have been seen as means for the preliminary direction of thought toward an objectivity that is never entirely to be reached, received, or accomplished. Such disjunctions, such alternatives disappear for docta ignorantia because they appear as aspects of a movement: “Docta vero ignorantia omnes modos, quibus accedi ad veritatem potest, unit” [Truly learned ignorance unites all the methods by which it is possible to approach the truth].

But docta ignorantia is not only the maxim of an intellectual process; it is also the means of orientation in this process. In the Defense of Learned Ignorance, by comparing it to the knowledge of the hunt of one who, stationed on a high tower, can survey the hunter’s search activities, the Cusan represents docta ignorantia as a knowledge that is withheld from one who remains entirely bound up with his methodical ‘trace.’ The need for such an orientation, for the determination of one’s own station on a path, had never occurred to Scholasticism.

The modern idea of science will be a sum total of such orientations. In it too, knowledge of one’s ignorance is an essential element, though admittedly less to know that one knows nothing than to know what one does not know, perhaps even what one cannot know, and, very important, what one does not need to know—the negative wisdom that belongs among the kinds of orientations that become ever more important in a world of surplus knowledge. All of this is quite certainly not yet present in the Cusan when he defends his idea of knowing ignorance by his opponent’s arguments (ex ratione adversarii contra ipsum). He did not yet know that the progress of knowledge, the extension of the mastery of reality, could be achieved by restricting one’s pretension.
It is a constitutive element of the modern age that it expands through restriction, achieves progressions through critical reduction: Renunciation of the principle of teleology discloses for the first time the full efficacy of the application of the causal category to nature; the elimination of the question of substance, and its replacement by the universal application of quantity, makes mathematical natural science possible; and renunciation of the phantom of the requirement of absolute accuracy makes possible an exactitude that can set itself tolerances for its inaccuracy. The knowledge of the modern age was decisively rendered possible by a knowledge of what we cannot know, and by the resolute concentration that made possible upon a realm that had become accessible to judgment. That essentially distinguishes modern knowledge from medieval Scholasticism's forms of knowledge and consciousness of knowledge. In this respect the schema of docta ignorantia already belongs to that which, with the means and in the questions of the Middle Ages, is no longer medieval: "Quia non est scientia, qua quis credit se scire, quod scire nequit, ibi scire est scire se non posse scire" [Because there is no knowledge where someone believes he knows something that cannot be known, in such a case to know is to know that one cannot know].

The polemic between Wenck and the Cusan shows that "learned ignorance" had, to begin with, broken through the traditional schema of concept and metaphor, of literal and figurative speech. The treatise De coniecturis [On Conjecture], immediately following the Docta ignorantia in the year 1440, already reveals that the Cusan felt the need to give the concept of learned ignorance a positive correlate in the form of "conjecture." This was so even though at least the second book of the Docta ignorantia had already shown that hidden in the basic conception of the knowledge of transcendent objects—in this case, of the totality of the universe—there was a potential for positive speculation and the variation of traditional doctrines.

Between that which one was supposed to be able to know with certainty according to the criteria of the Aristotelian/Scholastic doctrine of science and that which, as unattainable mystery, was supposed to originate exclusively from the source of revelation and faith, a scale of possibilities opened up that rested directly on the fact that in the systematic structure of the metaphysical triangle, what one might call "projection rules" hold. If the concept of infinity proves to be the means of representation of the docta ignorantia for transcendence, then
for neither cosmology nor anthropology can this remain without consequences. The world is not only the appearance of the invisible God, but God is the invisibility of the visible itself.\textsuperscript{26} Such symmetry, derived once again from the Neoplatonic model, means not only that the assertions of metaphysical and mystical theology offer points of departure for speculation about the world and man but also that the propositions of the teaching of faith can provide premises for considerations that reach downward from the realm of theology.

Here it turns out that faith and conjecture, \textit{fides} and \textit{conjectura}, are functionally equivalent; they provide reason with the presuppositions that it lacks, proceeding from which it can arrive at items of knowledge within the total system. The Cusan saw that the threat to the scholastic architecture posed by the cynicism of the ‘double-truth’ theory could not be removed from the world by obstinately repeating the apodictic assertion of the necessary agreement between reason and revelation but more likely by making visible a continuum of shadings, applications, projections. What did it really mean for man’s image of the universe that he had learned of its creation from nothingness by an omnipotent and infinite Author? Could inferences be drawn from that fact, since after all the cosmology of the Middle Ages was still the same one that had been developed, even independently of the biblical theology, in the ancient world? And had consequences followed for man’s knowledge of himself from the fact that he had heard that he was meant to be the image and likeness of his Creator? Was it not valid here frankly to digress into conjectures?

But Scholasticism had done none of that seriously, nor had it even experimented with it. Now one sees, as soon as one investigates the Cusan’s descriptions of the act of faith, that Wenck’s opposition to the effacement of the distinction between the status of knowledge in this world and in the next was not groundless. The antithesis of earthly faith to the \textit{visio} [vision] in the world to come disappears when faith itself is defined as \textit{coincidentia visibilis et invisibilis} [coincidence of the visible and the invisible] and the intellect takes the content of revelation \textit{in certitudine, ac si vidisset} [for certainty, as though it had seen it].\textsuperscript{27} This mediation between faith and knowledge seems at first to tend, entirely in the framework of the medieval, toward positing faith as absolute; but faith can now equally well stand in the service of knowledge, in that it postulates freedom for playing through new possibilities of knowledge. Here the original ambivalence of \textit{docta ignorantia} between
skeptical resignation and encouragement of theory manifests itself: Knowledge of one's own ignorance is always in danger, as a result of consciousness of absolute transcendence, of turning into dogmatic skepticism, to the extent that no encouraging prospects of accessible possibilities offer themselves.\(^2^8\)

The Cusan presses the functionalization of faith a step further in the treatise *De genesi* [*On Genesis*]. He recommends that one should accept the declarations of theological authority as though they were made known by divine revelation, and only then should one attempt to grasp intellectually what one has at first assumed. He explicitly grounds this recommendation on his own experience.\(^2^9\) Here faith has drawn quite near to conjecture. They have in common the hypothetical function that has to prove itself by experience.

Nicholas appeals to Augustine's formula of faith as the point of departure of knowledge (*fides initium intellectus*). But this formula has gone through a noticeable change of meaning. The presupposition on the basis of which one is supposed to understand why God revealed and offered Himself to faith in a particular way is the human spirit's cognitive pretension, to which God, as the essential fulfillment of the spiritual nature that He created and endowed for the infinite, cannot refuse Himself. But this nature's equipment is not sufficient to satisfy the requirements that emanate from its relation to infinity. The redemptive meaning of revelation, of passion and salvation, recedes, and there is already an intimation of what will be completed in the Cusan's doctrine of the Incarnation—his Christology as the last degree of intensification of his anthropology. The problematic of certainty that characterizes the end of the Middle Ages and that was to make necessary the modern age's attempts (typified by Descartes) at establishing foundations, had become centrally operative here. Everything seems to be designed to prevent the crisis created by the fundamental situation of learned ignorance from leading to resignation. Hence faith is offered to reason as not the unreasonable demand that it sacrifice itself but rather the disclosure of the possibility of its self-fulfillment. That is clearly an attempt to restore the Middle Ages by means of their own substance.

It is in this context of a projective speculation that breaks through the constraint of Scholasticism and its binding force that the Cusan's cosmology,\(^5\) the most influential part of his intellectual accomplishment, must be set. Placing it in this context is already sufficient to show that
the Cusan cannot be regarded, as has been suggested again and again since Giordano Bruno and Kepler, as a forerunner of Copernicus, even if Copernicus did read him. Today, since the medievalness of Copernicus himself has become ever clearer, the tendency is to go further and to state that the Cusan was less a preparer of the Copernican turning than a diviner of consequences of it which were still entirely hidden from its author: “Nicholas of Cusa really failed to discover the Copernican doctrine in the fifteenth century only because he already occupied the standpoint of the relativity of motion, which Copernicus did not reach”;³⁰ and “A correct cosmological conjecture must avoid the new deception of a heliocentric doctrine just as much as the old mirage of the geocentric world view.”³¹ Independently of the question whether there is really any difference between the Cusan’s theory of motion and Copernicus’s other than that Copernicus still preserved the finite reference space of the traditional cosmos, absolutely bounded by the outermost sphere, there are no grounds at all for the view that the Cusan would have changed, would have wanted to change, or could have changed anything in the preexisting world model constructively and in regard to any astronomical problems and data whatever.

F. J. Clemens, the early pioneer of research on the Cusan, was quick to publish a note from the Cusan’s own hand that he found on the last page of an astronomical work, preserved in the library of the hospice of Cusa, that the Cusan had obtained in Nuremberg in the year 1444.³² This cosmological meditation, as I would like to entitle the page, does not in the least enter into the scandal of the difficulties and confusions of the accepted Ptolemaic system; nor does it even implicitly take these into consideration. Consequently to bring it into direct relation with the problematic of an astronomical reform seems to me to be a misinterpretation. The point of departure here, as in other questions bordering on the empirical, is the principle of “imprecision” as an application of the general rule of prudence that had followed from the initial step of docta ignorantia. It disputes the three essential claims to precision that had been made by the ancient and Scholastic cosmology: the precision of the circular orbits and of the regularity of the movements of the bodies along these orbits, and the precise centering of the earth at the midpoint of the world. The premise reads as follows: “I have arrived at the view that no movement can hold precisely to the circular form and that consequently no star
describes a precisely circular orbit from one rising to the next. The inference that the Cusan draws from his premise reveals that, at least in this note, he holds to the conception of the fixed stars as distributed on a sphere. He argues that the metaphysical prohibition of the precision of any process in the world, applied to the orbits of the heavenly bodies, necessitates the movability of the pole of the eighth sphere, so that the distances of the individual fixed stars from the pole will also be changeable.

To believe that the Cusan intended here, with divinatory foresight, to supplement changes in the station of the earth with the westward drift of the equinoxes (precession) or even the oscillations of the pole of the heaven of the fixed stars (mutation) seems to me to be an entirely inappropriate extravagance of the historical amusement that consists in making everything have already been present, if not forever then at least since the earliest possible period. The unsteadiness that Nicholas ascribes to the position of the earth in space has nothing to do with the phenomena with which astronomy had been familiar since the time of Hipparchus; otherwise he could not have speculated about a complete inversion of the poles of the heavens—an idea that was still to influence Giordano Bruno. But what deprived this speculation of any value for astronomy was its lack of any tendency to compensate for empirical "imprecision" in the prediction of its periodic regularity by postulating sufficiently long observation time spans. For a theoretical attitude, imprecision could never be an ultimate characteristic of its objects, but only an intervening phase between the supposed precision of an imagined stellar "simplicity" and a future, more complex precision of superimposed periodicities.

Thus precisely as a speculative metaphysician, the Cusan could not even be the initiator of the reform of astronomy. This statement does not prevent him from having provided an opportunity for the renewal of the foundations of our view of the world, from having encouraged the forcing of a breach in the wall of the system. That is where the long-term relevance of the thesis that denies praecisio [precision] to the world lies: Imprecision is not the speculatively anticipated and necessary state of affairs but rather first of all a scandalous contingent fact, which through the discovery of a regularity that lies within the tolerances of measurement can finally be theoretically resolved by a causal explanation—in the case mentioned, by reference to the forces of attraction of the other bodies of the solar system, with their influence
on the movement of the earth's axis. The divergence, as such, disturbs and irritates the empirical attitude, drives it to increase the precision of its measurements, and the periodicity of the divergences that then emerges assures it of at least the possible application of a causal hypothesis.

With the Cusan, imprecision is a metaphysical postulate, which must be seen in its ambivalence. It can be a formula of resignation, as when Ptolemy, in the second chapter of the thirteenth book of the *Almagest*, had already deduced from the incomparability of terrestrial and stellar conditions a formula of epistemological resignation for astronomy. But it can also be a formula that stimulates attentiveness and energy directed at experience, for which attention to the world and investment in the technology with which to carry out measurements are motivated precisely by the fact that the constitution of the physical world cannot be arrived at by deduction. This kind of motivation was to become characteristic of early modern astronomy, with its consciousness of the necessity of increasing the accuracy of observation and the intervals of comparison. It prompted an empirical persistence that made its first great step forward with not Copernicus but Tycho Brahe. With the inferences that Kepler drew from Brahe's precise observations it won its first triumph over the things that traditional astronomy had taken for granted, over its metaphysical predecidedness, when Kepler departed, in the case of the orbit of Mars, from the classical requirement of circularity. Of this, I repeat, nothing was yet present in the Cusan's cosmological note in codex 211 at the hospice of Cusa, nor is there even a presentiment of it. But—and this is already a great deal to set against a dogmatic form of thought—the note does allow for this as a contingent possibility and puts it in a position where it could, potentially, be noticed by an observer (an observer who, however, was not the Cusan).

The case is similar with the second part of the cosmological fragment as well, in which Nicholas arrives at the conclusion that the earth cannot stand still but rather must move like the other stars, and in fact in such a way that it revolves once a day around the polar axis of the universe. This idea could only be regarded as an approach to the Copernican revolution if it had been conceived as an explanation of the daily rotation of the heaven of the fixed stars, and thus intended to perform an astronomical function. But that is quite manifestly not the case. For the assertion immediately following, that the eighth
sphere, the heaven of the fixed stars, makes a double revolution in the same time—so that the simple apparent daily motion comes about through the subtraction of the earth’s own movement from the movement of the heaven of the fixed stars, which is twice as rapid—keeps the explanatory force of the Aristotelian/Ptolemaic system in effect. In this context, the assertion of a special movement of the earth has nothing at all to explain but must be an inference from metaphysical premises of the Cusan’s cosmology. We know, after all, from Plato’s *Timaeus* that such a special movement of the earth, which is neutralized again by the movement of the sphere of the fixed stars, fits into the context of a philosophically based world system better than the assumption of an absolutely resting world body, whose special properties Aristotle was able to explain in his cosmology only with difficulty and by violating the principle of rational economy. With the Cusan, here as in other passages, the emphasis is on treating the earth as like another star (*ut aliae stellae*).

This deviation from Aristotelianism, with its assertion of the heterogeneity of the terrestrial and stellar realms, was to be the lasting triumph of the Cusan’s cosmology; here he really does anticipate developments beyond Copernicus. But this anticipation in itself would not have been able to produce anything of theoretical relevance if the speculative stellarization of the earth had not been given—by Copernicus, of course—a constructive foundation. It was only on this basis that the speculation could become one of the universal hypotheses of physical astronomy.

To return to the fragment, codex 211: The metaphysical principle of imprecision was not sufficient to lead to constructive alterations of the world system. Even if it motivated the Cusan to say that the earth did not stand precisely at the center of the world, still this does not yet mean that it had exchanged places with another world body within the system of planets or that there should no longer be any talk at all of the center of a system because the no longer finite world could not have a center. Rather it stands in the context of all the theses that repeatedly speak of the impossibility of occupying a point precisely or of having precisely a certain shape, for example, the spherical form for the heavenly spheres or the earth. In any case the earth remains nearer to the center of the system than any other world body, and consequently the system as such is not modified.
It is a mistake to claim the Cusan as a forerunner of Copernicus, despite the fact that Calcagnini, Giordano Bruno, Kepler, and Alexander von Humboldt praised him as such. Such a claim always presupposes that what was meant plays a mysterious and historically irrelevant outsider's role in relation to its own time and as what was really intended—and thus justified—bears a hidden relation to the new.

The astronomical essay that lies before us in codex 211 could not represent a contribution to the reform of the traditional world model if only because it does not even reach the empirical level of medieval astronomy and is not at all comparable with the work of either Ptolemy or Copernicus. Nevertheless, it is evidence of the origin of the theoretical unrest of astronomy that characterized the subsequent centuries. Just as the simple layman in the Cusan's Idiota dialogues is able to open a new dimension of possible truth to the Scholastic who is heavily armed with book learning, so also Nicholas himself, while he did not actually initiate the reform of astronomy or prepare its method and its approach, did actualize the presuppositions under which the question of the constituents of reality could be newly and openly posed at all.

The fragment in codex 211 lay dormant until its rediscovery in the library of the hospice of Cusa; that would be the most external reason for the fact that it exercised no influence. But the second book of Of Learned Ignorance had a radiating influence that should not be minimized. The amazing thing about this second book is that now the ‘method’ of docta ignorantia is applied to the universe. In fact its transferability seems to be unlimited; it leads ad infinita similia, quae pari arte elici poterunt [to an infinite number of things of the same kind, which can be educed in the same way]. And the very first example is astronomy and the application to it of the basic thesis that the lack of precision is an index of nondivine reality. This imprecision is described as one of measurement, which is understood as applying to both time and heavenly place. The astronomical technique of calculation, the calculatoria ars, is said to presuppose (in relation to time) that motions of the planets can be measured by means of the revolutions of the sun. But here precision is just as impossible as it is in regard to the arrangement of the heavens or the determination of the locations of the risings and settings of the constellations or the elevation of the pole of the heavens. In regard to the measurement of the times of revolution of the planets with the help of the sun's movement, one may assume that the discussions of the Nominalistic school regarding
the incommensurability of the motions of the heavens were not unknown to the Cusan. The ambivalence of the formula of imprecision becomes evident once again. This formula may just as well lead to a demand for and a claim to an unrestricted increase in the accuracy of measurement as to resignation to the expectation that astronomy can offer nothing more than a solution to the difficulties with the calendar.

The transfer of the cognitive mode of docta ignorantia to the world goes far beyond the defect of imprecision all the way to the determination of those characteristics of the indeterminable that withdrew the foundation from the traditional assertion, essential for Scholasticism, of the finitude of the world. One must let this assertion of the Cusan’s, which was so influential in the subsequent period, stand in the framework in which it originally belongs, that is, as a piece of docta ignorantia, of the conscious restriction of the will to make assertions regarding the form of the world. Only God Himself is, in the language of this metaphysical theology, a negative infinitum [negatively infinite thing]; the world is indeterminable in regard to its form and limitation, a private infinitum [a privatively infinite thing]—but that can also be formulated as saying that it is neither finite nor infinite.\textsuperscript{38}

But this statement cannot be understood merely as an epistemological antinomy. It contains a presupposition that I would like to call the postulate of the adequacy of the Creation vis-à-vis its Author. “It is as though God had spoken His ‘Let it be!’ and because no God could come into being, Who is after all eternity itself, something came into being that became as similar to God as it could.”\textsuperscript{39} In this passage in particular one can observe how the Cusan advanced his question of the adequacy of the world to a point beyond which he himself could on no account go but at which, with the given ground plan, the resolute reoccupation that Giordano Bruno was to undertake appears as a possibility. But for the Cusan, it is already clear that the Creation is no longer merely the act of Divine Majesty, no longer the sovereign decree of arbitrarily chosen content that the nominalists regarded as the epitome of transcendence, but rather an act in which the essence of its Author must unavoidably be invested, in which there could be no arbitrary reservation. The universe is a likeness of the absolute; it unfolds in time and space the original unity, the complicatio [complication, folding together]. Consequently movement is the fundamental char-
characteristic of nature, for it is the unfolding of original unity, the explicatio quietis [explication—unfolding—of rest].

Movement is therefore the fundamental characteristic of the world in a more original sense than is the case in Aristotelianism, where the principle of movement, the unmoved mover, is brought in on the assumption that there is a continual need for an additional supply of movement causality to be provided from outside. For the Cusan, this assumption cannot be held to, if only because of his abandonment of the finitude of the universe. The Cusan’s God is no longer the unmoved mover of Aristotle and High Scholasticism; but consequently He is also no longer the God Who can be verified by way of the classical proof of God’s existence. Wenck saw correctly that the Cusan, with his theory of complicatio and explicatio as the definition of the relation between Creator and creation, had destroyed the Aristotelian support of the entire Scholastic metaphysics: “Hoc corollarium destruit primum motorem, contra philosophum” [This deduction destroys the prime mover, contrary to the Philosopher (Aristotle)].

In the Aristotelian cosmos, God is the last external factor on the radial scale of the transmission of movement to and in the cosmos; he is absolute rest as that which is utterly opposed to movement, and as such he is, as it were, the ‘energy’ of all processes of movement. For Aristotle, the movement of the first sphere is the epitome of the eternal and eternally futile attempt to approach the prime mover, of the loving imitation of his self-reflexiveness—an imitation that takes the form of eternal circling as the ‘substitute’ for fulfilled rest. On the other hand, for the Cusan, without his admitting it, complicatio and explicatio stand in a relation of equivalence, in fact an equivalence of interiority, of emanation from a center from which everything real unfolds itself. For that very reason, for the Cusan, the center is metaphysically, and no longer cosmologically, accented. The ‘center of the world’ in this conception is no longer the lowest point of that radial scale, occupied by the inert mass of the earth, but rather the center of emanation—as Kepler will be the first to interpret it physically as well, relating it to the moving power of the sun in relation to the planets. If one considers this reversal of the fundamental metaphysical ‘direction’ in the world, it becomes comprehensible why Wenck so emphatically charges with heresy the Cusan’s thesis that God is the center of the world (deus est centrum mundi). He remarks at the same time on the connection of this assertion with the other, that the earth
is a world body of the same rank as the heavenly bodies ("Subdit quod terra est nobilis stella maior luna" [He adds that the earth is a noble star, greater than the moon]).

It is critically important to pursue the connection seen by Wenck, for in it the immediacy of each member of the universe in relation to transcendence is postulated, and thus the Scholastic hierarchical order of things, including the traditional assignment of last place to the earth, is abandoned. The destruction of the traditional cosmology is already implied in this understanding of the idea of transcendence, although no alternative model can be given. Wenck still believed that he could at once expose and dismiss the unheard-of contents of the new conception by a simple appeal to the (for him) entirely indubitable Aristotelian cosmology: "Conclusio contradicit scientiae de caelo, nec adiectum prius unquam est auditum" [This conclusion contradicts (Aristotle's) science of the heavens; nor has such an addition ever been heard of before]. Inferior to the Cusan though his opponent may have been, still he possessed a capacity to scent out and see clearly the inner consistency of the overall picture that the Cusan draws.

The denial of the earth's location at the center of the world thereby acquires a further aspect. Imprecision and infinity are only irritants to the traditional system. The deeper-lying motive is the reoccupation of the center, which now no longer has to be the mere point of reference of a scale of order but is rather the substantial source point of the ontological viability and dignity of the whole. In the eleventh chapter of the second book of the Docta ignorantia, it can clearly be seen that the Cusan's primary concern was to establish the impossibility of identifying the earth with the center of the world, and thus to make possible the no longer physically verifiable assertion of the pseudo-Hermetic proposition according to which the center and circumference of the world coincide in infinity and God is simply this coincidence of center and periphery. It is only from this premise, that the earth cannot stand in the center of the world, that its movement and thence in turn its equal rank with the other world bodies are inferred: "Terra igitur, quae centrum esse nequit, motu carere non potest" [Therefore the earth, which cannot be the center, cannot be without movement]. But then the central component of the Aristotelian cosmology is also eliminated, according to which there is a radical division, not to be overcome by earthly experience, between the astral and the sublunar worlds. In the treatise of his old age on the hunt for the truth [De
venatione sapientiae], the Cusan formulated the consequence of this intracosmic dualism: Aristotle had indeed made reason into the first cause and the principle of movement but had nevertheless ascribed to it a direct administratio [administration] only with respect to the heavenly bodies. Such a control was supposed to operate over earthly things only indirectly, through the mediation of the heavenly bodies, so that it simply did not embrace the whole universe in the same way.42

In this context there is found the remarkable sentence in which Epicurus appears to be praised for having ascribed to God the job of looking after the universe without any mediating instance or instrumentality: "Epicurus vero totam deo soli sine cuisscumque adminiculoo universi tribuit administrationem" [Epicurus attributes in fact the entire control of the universe to God alone, without any aid whatsoever]. This sentence, which could scarcely be surpassed in historical falsehood, becomes more intelligible only when one recognizes that what was most prominently impressive for the Cusan in Epicurus's universe was the equivalence of the worlds. For in his own cosmology, the concern is precisely to set aside the apparent differences of the world bodies, for instance, their division into dark and bright, reflecting and self-illuminating bodies, as illusions conditioned by one's standpoint. To judge from its construction, our world could have been designed to mislead man, who lives in it, as to his position and the nature and form of the whole. This suggestion, with its flavor of nominalism and voluntarism—a suggestion from which a direct line of descent could lead to Descartes's thought experiment with the genius malignus [malign spirit]—was certainly not what the Cusan intended. But his thesis of the interchangeability of the fundamental orienting concepts—center of the world, pole of the heavens, axis of the earth, zenith, sphere—does nevertheless take into account the great skeptical apprehensions of the fourteenth and fifteenth centuries: That in his endeavor to gain insight into the plan of creation, man could be a victim of futility. The Cusan's cosmology seems directly aimed at constructing a system of possible limitations of standpoint and observer's illusions, thus forestalling, in imagination, the eventualities to which nominalism saw itself delivered over. This is at any rate the way the last sentences of the eleventh chapter of the second book of the Docta ignorantia read, according to which one should test, with the help of imagination, the interchangeability of central and polar observers.43
The upshot of such thought experiments is the statement that one cannot comprehend the world, its movement and its form, because it offers itself as a wheel within a wheel and a sphere within a sphere and nowhere possesses a center or a circumference. At first glance, "learned ignorance" plays the same role as is played in nominalism by the consciousness of being excluded from access to the truth of the Creation; it is a prescription for playing through possibilities all the way to paradox, just like nominalism's theory of hypothetical inferences—only the Cusan's anthropology is permeated by the idea of the richness and authentic imaginative power of the human spirit, which therefore, in contrast to the barren nominalistic idea of the merely 'emergency' function of reason, realizes its status as a counterpart to the creative world origin. It is thus able to achieve indirectly, by detour through that quality of being an image of God, what cannot be reached directly, in the pure subject-object relation. The imagination, which gets 'on the track' of the mechanism of the world, thereby at the same time invalidates the burdensome metaphysical apprehension that in his whole theoretical relation to the world man could be led around by the nose. The 'unsuspected' no longer exists. And deeming this accomplished has always been one of the elementary historical achievements.

A good example of this sort of imaginative world orientation is provided by the theory, already mentioned, of the apparent difference between dark and bright, reflecting and self-illuminating world bodies, which at the same time helps to underpin the basic thesis that the earth is a heavenly body.

The black color of the earth is no proof of its having little value, for if someone were on the sun, even its brightness would not appear to him as it does to us. For if one regards the body of the sun, one sees that toward the middle it contains something like earth and that the fiery brightness lies around the outside, and between both a sort of water vapor and transparent air—so that the elements are arranged in layers as in the earth. If one were outside the fire region of the earth, then the earth would appear to him in the whole extent of the fire region as a brilliant star, just as to us, who are outside the fire region of the sun, it appears to us so exceedingly brilliant. On the other hand, the moon appears to us to be not so bright because we no doubt find ourselves within its outermost elemental zone and more toward the inner regions, perhaps in the region corresponding to the
element of water. Consequently its light is not visible to us, although it possesses a light of its own, which, however, becomes visible only outside its outermost periphery, while we perceive only reflected sunlight in it... The earth consequently appears to stand between the (outermost) elemental region of the sun and the (innermost) elemental region of the moon and takes part through their mediation in the influence of the other heavenly bodies, in which cases we behold only their bright regions because we are entirely outside their peripheries. So the earth also is a noble star (*stella nobilis*), which possesses its light and its warmth and its influence....

In this passage the cosmological accomplishments of the Cusan's speculation can be viewed in their totality: stellarization of the earth and thus homogenization of the physical structure of the whole universe; establishment of the equivalence of all observer's standpoints, or actualization of a methodical reflection on the conditionality of the observer's standpoint; suspension of the Aristotelian unilateral direction of the causality of movement; and establishment of the principle of reciprocal action in the universe, of the reciprocity of all sorts of *influentia* [influence].

The ancient/medieval world picture was geocentric in not only its static but also its dynamic structure. The earth not only 'stood' in the center, but it was also the ultimate pole of reference of all cosmic influences, which always passed from 'above' to 'below.' The God of High Scholasticism still made use, for the exercise of His world regime, of mediating agencies, secondary causalities, and thus adhered to the very schema on which the continuing acceptance of astrological ideas also depended. The Cusan breaks with this schema; the heavenly powers no longer flow only in one direction, from above to below, from the sublime spheres to the purely receptive and thus all too 'earthly' earth. That old idea now proves to be dependent on the cosmological illusion of the central position of the earth, toward which the directions of influence of the universe appear to converge—a dubious interpretation even of an anthropocentric teleology, if it has to assign to man the location of greatest passivity. The ancient and medieval hierarchical cosmos has lost its reality, and indeed precisely because its mediating function between God and man has been eliminated. The operation of the Divinity streams unhindered and unmediated into the world, and in spite of intensified transcendence is more intensively omnipresent than could be conceived in the shell cosmos of Scholasticism.
The Cusan's transcendence is not only a transcendence of externality and distance but also at the same time of interiority and proximity. That is why the transfer of the mystical formula—so awkward when regarded by itself—of the intelligible sphere, whose center is everywhere and circumference nowhere, from the Divinity (for whose mystical representation it had originally been invented) to the universe is such a significant accomplishment. Transcendence is no longer related to an objective topography, a cosmic ground plan. It appears precisely when man, in the manner of Scholasticism—as though upon the ladder of the hierarchical cosmos—wants to pursue his argumentation to a successful conclusion and in the process has an opportunity to experience the incomprehensibility of the world’s form, the infinity of the finite; transcendence is a mode of negation of definitiveness of theory. This instability of predicates makes Wenck break out into the most extreme and daring and most desperate of all possible reproaches: The author of the Docta ignorantia deifies everything, annihilates everything, and presents the annihilation as deification (“Omnia deificat, omnia annihilat, et annihilationem ponit deificationem”).46 That is the tenor of Wenck’s entire opposition. Transcendence and immanence, divinity and nothingness have become interchangeable in such a way that they no longer represent real predicates and localizable agencies in a well-ordered cosmic configuration.

Traditional antinomies of metaphysics show themselves for the first time in the Cusan’s speculation as magnitudes bound to the position and pretension of the observer. In the dialogue On the Globe Game, at one point the duke of Bavaria says to his interlocutor, the cardinal: “If it were possible for someone to have a standpoint outside the world, then for him the world would be invisible, like an unextended point.” The cardinal praises this conclusion because it comprehends the world as a magnitude that can neither be surpassed nor undercut: “Et sic concipis mundum, quo nulla quantitas maior, in puncto, quo nihil minus, contineri, et centrum atque circumferentiam eius non posse videri” [And so you understand that the world, than which no magnitude can be greater, is contained in a point, than which nothing can be smaller, and that its center and circumference cannot be seen].47 For the world to become nothing to someone, he would have to regard it from outside; for one who considers this a chimerical requirement, an Archimedean point—for one who perceives the internal standpoint as unrenounceable—the world remains or becomes an all-including,
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all-providing, insurmountable magnitude. The metaphysical speculation that thinks it can choose a standpoint outside the world, that operates with the infinite, is not accessible by any process of transition. But is it also the normative standpoint, to which man has to transfer himself if he wishes to gain a concept of the world as a whole? This is the point where the insistence begins that separates the Cusan from the mysticism of the late Middle Ages and from its Neoplatonic tradition. The mystic strives 'to adopt God's standpoint,' by seeking identification with the absolute; this point of view, before which everything real collapses into nothing, is for him the only valid one. For the Cusan, the standpoint from which the variety of the visible world shrinks to the status of an invisible point is only the external aspect of the finite, and to imagine oneself occupying it represents a possibility that cannot be equated with the mystic's ardent desire to exist on that basis, that is, as it were, to become external to both himself and the world.

The choice between observing the world 'from outside' and 'from within'—between the standpoints of God and man—was contested by the Cusan's followers (chiefly his followers in language) to the point of an explicit refusal to allow the nothingness of the world. Thomas Campanella, the tragic contemporary and equal of Giordano Bruno, obstinately insists that if the earth is a point in the universe, in any case it is the object of our science, and thus for us it is not a point. The objectivity of theory permits subjectivity's self-assertion: What may be a metaphysical point for him who need not live with or on it is for man his all in all. The hierarchical order of objects that Scholasticism had either set up or retained no longer means much in comparison to the certainty that can be gained from what lies 'near at hand' [was 'nahe liegt': what is nearby, or what is obvious]. The quality of being known is decisive, as against the worthiness of being known—the security of the subject as against the absolute magnitude or value [Größe] of its objects. The Cusan made this decision visible, but he did not make it, nor was he able to make it. It was beyond him on account of his readiness to regard, and to force together, as mere aspects of one system, things that on the contrary pressed toward the 'unilateral' character of the human standpoint, toward bracketing out the medieval option.

The Cusan's cosmology has immediate consequences for his anthropology. It is not only that the center of the universe could no longer
be a distinctive and descriptive position for man. More important was the fact that the equivalence of the heavenly bodies as ‘worlds’ (partes particulares mundiales unius universi [particular worldly parts of a single universe]) implies not only their inhabitability but also the playing through of the idea that the universe has other aspects besides the one it presents to man and that this latter aspect no longer has any precedence. The world is no longer something that was created on behalf of man and around him as its central point. Plato and Aristotle are blamed—incorrectly, to sure—for having ascribed to the heavens the purpose of being serviceable to man. 49 God created the world for His own praise, but He could do this only by expending His potential without reservation; this premise involves man’s dignity and rank to a higher degree than does the idea of a teleology directed at man and perceivable by him in the world. It forces one to put in place of the passive anthropocentrism that had made man the viewer and beneficiary of the universe an active existential determination of man, realized in terms not of his circumstances in the world but of self-realization.

In general the Cusan has an aversion to teleological interpretations in his cosmology; teleology appears to him as compensation for a deficiency in creatures such that the latter are supposed to find in the preparation of their world circumstances what is denied to their self-realization. Creation without reservations excludes economic teleologies; the stars shine in order not to give light to man or to other beings but rather to fulfill their own nature. Light shines by virtue of its nature—that its light also allows one to see is not its primary definition but rather a secondary process of putting it to work—a process that is based on the activity of the seer, that is, on what he makes of the world. 50 It is evident that the Cusan wanted at the same time to save and to take the edge off of the oppressive idea of Aristotelian Scholasticism that God created the world only for Himself and for His own glory and created man as a mere functionary to admire this work. Precisely because and if it was the case that God indulged in this self-referential behavior, His work had in the highest degree to give to each being what belonged to it. But this train of thought has its limit—the very limit that Giordano Bruno will transgress: the irreducible difference between the Creator and His work as infinity and finitude, whose mediation makes the Incarnation the pivot of the system: “God created all things for His own sake and in such a way that the universe
would have its full greatness and perfection only in relation to Him; 
but even this could not become one with Him, since for the finite 
there is no proportion to the infinite.51 God's lack of reservation in 
the Creation, as a principle of the enhancement of the universe, has 
not yet been thought through to the end.

Thus the fact no longer speaks for man that he alone inhabits the 
physical world and may refer it to himself. But neither does he need 
to refer the inferiority of his standpoint in the universe to himself, to 
interpret it as an orientation regarding his own rank in reality: "For 
even if beings of different rank came forth from God, as the center 
and circumference of all the regions of the heavenly bodies, into the 
respective regions, so that so many places in the heavens and on the 
estars would not be deserted and not only this earth—which after all 
may be one of the smaller heavenly bodies—would be inhabited, still 
there is no more noble and perfect being of this kind than the nature 
endowed with reason, which is at home here on this earth and in its 
own region, even if inhabitants of another species may be at home 
on other heavenly bodies." This comforting assumption, which of 
course is not retained much longer in the later tradition of speculations 
about inhabitants of the heavenly bodies, is substantiated by the Cusan 
immediately after the cited passage with the root proposition of his 
anthropology that "man has no desire for a nature other than the 
one he has, but only wants to bring to perfection that which he is."52 
This self-affirmation of man, presupposed as a fact of consciousness, 
determines his view of the world from within. This axiom for the first 
time completes the revaluation of the universe, which, although it 
appears from the point of view of the infinite as the mere nothing of 
a point, still cannot be this nothing if within it man possesses such a 
consciousness of the sufficiency of his nature for itself and the attain-
ability of the perfection of this nature.

The Cusan is a mystic without the mystic's 'absolute interest in the 
absolute.' That interest is directed at consuming what is finite and 
destroying any possible standpoint in it. What is described as mystical 
experience destroys itself as experience insofar as its object forces the 
subject to abandon itself. If one considers that this idea was already 
familiar to Neoplatonism, one sees that the Cusan opposes not only 
Scholasticism and its theoretical self-contentedness but also the tradition 
in which he is rooted. One can describe the unifying basic feature of 
the traditions to which he adheres as one of 'demanding too much.' 
He does not give up the demand that is posed there, but he strengthens
and enhances the addressee who is supposed to satisfy it. Just as he seeks to keep cosmology in systematic communication with theology, he also supplies compensatory substance to anthropology.

It is true that for Nicholas of Cusa the new cosmology was nothing but the consequence, thought through to the end, of the old idea of creation. But what happened to man while the cosmos grew into the infinite with its Author? The step in metaphysical speculation by which finitude was suspended had as its consequence not only that from then on the world was, as it were, ‘on the point of’ itself becoming divine, but also that it became——instead of a realm of experience capable of completion and thought to have been largely completed—a field of data that are in principle always surpassable, an inexhaustible store of objects of knowledge. For man, according to the Cusan’s picture, there emerge as a result two dimensions in which the truth can be pursued into the infinite: on the one hand, the imprecision in principle of any given whatsoever, and with it the inexhaustible potential of the theoretical comprehension of each object; and on the other hand, infinity as the never-to-be-overcome indefiniteness of the universe of empirical knowledge, the imprecision, as it were, of the universe itself.

It was no accident that precisely the Cusan’s speculative approach led in a direction in which infinity and imprecision could be positivized. It will emerge in full clarity for the first time with Leibniz that there is an indissoluble connection between the concept of infinity and that of individuality because only the infinity of the universe of monads excludes any repetition in the always finite actualizations of its representation in the monads. The uniqueness of the subject is secured by the (now permitted) infinity of its constitutive elements. Since the subject is understood as the power of representing the universe, the latter’s intensification into immeasurability is indirectly to the former’s advantage. For the Aristotelian tradition of High Scholasticism, on the other hand, individuality had been seen only in the horizon of a finite multiplicity of essential forms, whose concrete individual presence could not be taken into account in a cognition whose sole appropriate object had to be the universal. But individuality was the refraction of the universal form in the medium of the material. It is easy to see how little this harmonizes with a conception for which the world is the manifestation of an infinite will. For how can the matrixlike duplication of identical essential forms be adequate to this will, since
after all such duplication seems practically to demonstrate the exhaustibility of the stock of forms? Or should one impute to the infinite power and infinite will a sort of self-restriction to that which the human understanding, with the finite capacity of its conceptual faculty, could represent? But how, on the other hand, could the concern of the divine will with the fate (the salvation or damnation) of the individual man be appropriately interpreted if the individual has only the arbitrary character of an 'instance' of its general species form, which possesses intelligible dignity only in its universality? Although one would think that this motif should have become pressing for the Middle Ages, nevertheless the ancient, predominantly Aristotelian idea of individuation was overcome only laboriously and late.

But this very circumstance could become the precondition for the fact that the modern age could be the first to see in the discovery of the individual one of its most intimate and authentic accomplishments. This is one of the most important phase displacements, nonsynchronicities, that we know of in our intellectual prehistory. Something that, judging by the urgency of its motives, should really have been due in the Middle Ages experienced its realization only this side of the medieval system. The turning away from the Aristotelian doctrine of individuation that set in as early as the Franciscan line of High Scholasticism did not prove very fruitful for anthropology because in this school it was immediately—that is, at the latest with William of Ockham and the Ockhamists—interpreted purely epistemologically and pushed on to the extreme of nominalism. It is true that the universal lost its constitutive meaning, but the realm of the concrete was by no means assigned a higher value thereby; rather it became an amorphous sea of particulars, on which the concept-creating understanding had to set up orientation marks. The Cusan tried to maneuver through between the Scylla of Scholastic rationalism and the Charybdis of nominalism. It is palpable that he accomplished this in neither epistemology nor anthropology; it only shows that he became conscious of this problem as one of the fundamental matters in question in the situation in which he stood.

It is no negative assertion if one must state that the Cusan’s attempts at mediation between the Scholastic structure and its destructive ferment, beween rationalism and nominalism, remained more or less stuck in the purely linguistic realm, in an ingenious artificial intermeshing of rationalisms and voluntarisms—with the high point perhaps
in the formula of the work of his old age: "deum ab aeterno concepisse velle creare" [God has, from eternity, conceived the will to create].

In this passage, a Platonizing exemplarism conflicts with the absolutism of will that is supposedly owed to the sovereignty of the Divinity: "Quid igitur aliud sunt exemplaria illa . . . quam termini determinantes omnia?" [What then are those ‘examplars’ . . . but termini determining everything?] Certainly it will be possible to view the juxtaposed appearance of rationalistic and voluntaristic terms for the intradivine preconditions attributed to the world’s prehistory as a piece of the Cusan’s coincidentia oppositorum. But then one discovers how little this piece of doctrine really performs in relation to the historical task with which the Cusan is confronted as soon as it is meant no longer only to bring about mystical obscurification but to accomplish the harmonization of destructively incompatible positions. If it is said of the determination of the intradivine exemplars that it is "rational," then this would be meaningful only if such rationality permitted additional reasonable assertions. But this is not possible because the Cusan explicitly rejects the path, later taken by Leibniz, of the ratio sufficiens [sufficient reason].

The Cusan’s path from the Docta ignorantia to the Venatio sapientiae, over almost a quarter of a century, is not consistent. It begins with a God Who, as the [absolute] maximum [der Gröste], could produce likewise only a work of His order of magnitude, the [restricted] maximum [das Gröste]. This God is replaced by a God of complicated formulas, for Whom the world that He was actually to create had no precedence over any other entirely heterogeneous—to us, admittedly, inconceivable—possible world contents. It is just as understandable as it is instructive that the reception of the Cusan’s ideas related almost exclusively to the early works. Only in connection with them can Leibniz, with his attempt to dissolve the intolerable contingency of the world for man, be related to the tradition of the Cusan. The later Nicholas of Cusa returns to the intradivine volitional decision, which is indeed asserted to be rational but is not accessible as such, and which ordains this world like a decree. That this was not supposed to be voluntarism becomes evident from the effort to separate the positing of reality from the positing of possibility. But this is no more than an indication that the Cusan was conscious of what he was doing, and that he escaped from this consciousness into hairsplitting.
In the treatise *De possest*, composed in 1460, he attempts to bring the concept of possibility (*possibilitas*), which was so irritating for Scholastic thought, into dependence on the creative Origin itself, and thus to divest it of its critical function vis-à-vis what actually exists. The universe of unrealized possibilities cannot be played off against the actual universe. For the Cusan, the logical concept of possibility is only a reflex of the metaphysical reality of the creative ground of being. Thus every 'it could be' is legitimized by an absolute 'it is.' Nothing has happened except that the universe of 'unexplained facts' [*der Faktizitäten*] has been reduced to an Original Unexplained Fact. This does not diminish reason's characteristic offense at everything [merely] factual. But one can certainly see an effort to undertake a reduction of the questions that come up and are often posed in this context, and in this way to settle the surplus of problems inherited from a theological age, an age that had entangled itself in insurmountable contradictions precisely in connection with the concept of possibility and its liberation by the theological principle of omnipotence.

In the interval between the treatises *De possest* (1460) and *De venatione sapientiae* (1463), there appears in the Cusan a certain resignation regarding his own attempt at disposing of this problem, which is evident particularly in the increase in the variety of formulas that are tried out. Their mutual inconsistency is made obvious by a thorough reading of chapter XXVI of *The Hunt for Wisdom*. Here the important thing is to see the virulence of the problematic of possibility precisely in the fact that in it man is implicitly concerned with himself because at bottom he is asking whether he could have a 'right to exist' if and although what is at stake in the Creation is after all only the *gloria dei* [glory of God]. For this roundabout glorification would mean nothing but a reflexive procedure, mediated by the world, of the Divinity with Himself—the self-glorification of the absolute, detouring by way of man and inconceivable to him in its necessity. Can man, who is inserted into this circle, lay claim to insight into the possibility and security of his existence as something other than an accident?

The man of the modern age declares himself by the fact that he no longer endures the consciousness of perhaps being a venture hazarded by a God. The concept of 'providence,' which had already been comforting for the ancient anxiety about the world, lost all its dependability and protective function for man in the working through of Scholastic speculation, especially in its combination with Aristote-
lianism and the latter's image of the god who is turned toward himself alone. This is already evident early in the Cusan's work, when he tries to draw the concept of providence into his system in the *Docta ignorantia*. It is true that the essential constitution of the world is not yet grasped here as a variable assumption, but the administration of the world certainly is, insofar as it is composed of individual destinies. The principle of the origin is not the principle of history.

What the Cusan tries to do here for providence already carries in itself the germ of the return of voluntarism to the concept of creation that characterizes his late phase. He deduces the universality of providence from the unity of opposites in God. If God is the folding together of everything—that is, even of opposites—nothing remains that could escape His providence. This universality can neither be increased nor decreased, even if it had provided for something other than what it has in fact provided for or will provide for, and although it has provided for much that it did not need to provide for. A concept, then, which in its native philosophical environment was supposed to guarantee the possibility in principle of interrogating the world regime and the world's course is here transformed into an instrument of the assertion of its radical contingency.

The example that the Cusan adduces to illustrate his thesis is significant: If a man were born whose birth had never been anticipated, then nothing would be added to the extent of human nature, as also nothing would be taken from it if the man were not born, no more than when those who have once been born die, since the *humana natura* [human nature] comprises both those who in fact exist and those who do not exist and will not exist, although they could exist. Thus in the Cusan's early-work, providence is already referred to the concept of possibility, so that it would remain unaltered even if something were to happen that in fact will not happen. But that means that the individual cannot find a justification of his existence in the concept of providence.

If one considers the Cusan's anthropology from this angle—the establishment of creative exemplariness [*Urbildlichkeit*] and its restriction to the universal *eidos* [form, Idea]—then one does not see how this entanglement in the difficulties of the problem of universals could have led out of the late-medieval crisis. But the systematic difficulty reaches yet further. It is magnified precisely by the way the Cusan, as it were, repeats the diagram of theology on the levels of cosmology
and anthropology. For this means that not only is the universe the unfolding of what lies folded together in the Divinity but the ‘natures’ of which the world is composed are in turn foldings together of the infinity of characteristics that are realized in the individuals of a kind. Thus the Cusan can compare these ‘natures’ with divine providence itself, with the result that human nature also “contains infinite things folded into it because it comprises not only the men who have been, who are, and who will be, but also those who could be, although they never will be—in fact it comprises changeable things in an unchangeable way.”59 If one pursues this analogy further, it has the consequence that while unfolding into an infinity of individual destinies is indeed founded in human nature, as individuality it remains below the threshold of what is necessary and relevant for divine providence. His Platonism, his fundamentally Scholastic realism regarding universals, prevents the Cusan from really closing the systematic gap between God and the individual, between humanity and man. Everything that he contributed to the positivizing of individuality and freedom must be seen under this proviso.

What can it still mean, in this constricted situation, to say that the individual is no longer the instance of an essential form multiplied like cookies from a cookie cutter as Aristotle and the Scholasticism that was obedient to him had seen it, but rather arises as the explicatio [unfolding] of the complicatio [folding together] of the one nature? “Everything that exists in the universe enjoys a uniqueness that it shares with no other thing.”60 This conception still gives no inner value to individuality. It only establishes that the great number of mutually differing individuals is necessary in order, as it were, to demonstrate the complicatio of the kind. Multiplicity, as such, is justified, not the uniqueness of the individual. The latter remains contingent because the possible variations are not after all exhausted but only played through ‘in examples.’ Again it was Leibniz who saw and tried to eliminate this inconsistency also, by making the universe of monads and consequently the predicates of each individual monad infinite. For the Cusan, the concept of freedom stands in this gap, freedom that over and above the differentiation of individuality is a special form of self-realization for man, one that breaks through the schema of “explication.”

All of this finally makes it understandable that nothing irrevocable had yet been said about man’s position in the universe either—
especially if one thinks of the geocentric passage in *De venatione sapientiae* XXVIII 83, which seems like a demonstration of timidity on the part of the aging man, like a senile recession. What is more important is that the indicative function of a cosmic position comes to nothing in the moment in which man has become a being who regulates and centers himself in the world, or has begun to see himself as such. The question of *where* man may find himself in a pregiven world of natural things has lost its relevance for his self-consciousness. In this context the concept of freedom as man’s special independence from the determination of nature gains a new aspect. Not only is man’s moral quality seen as the epitome of his capacity for self-determination, but also his self-consciousness is freed from its orientation to nature and nature’s ‘framework of positions.’ The interpretation of the Copernican reform as a catastrophe for human self-consciousness signifies a regressive fixation on something incommensurable with this freedom. If the Cusan can be regarded as a forerunner of Copernicus in any respect at all, then it is surely in the fact that, for him, man’s cosmological placement gives no information as to what he can credit himself with and regard as his worth. This suspension of the indicative nature of cosmology for man’s self-consciousness found its finest formulation after the Cusan’s death in another unique work of his century, the *Oration on the Dignity of Man* of Giovanni Pico della Mirandola (1463–1494).61

This oration was conceived for the opening of a mammoth disputation on 900 theses, for which Pico had invited people to come to Rome in 1486, but that was prevented by the condemnation of 13 of these theses and the subsequent proceedings of the Inquisition. Pico places before us the creation of man and imagines God addressing man. When God (*summus Pater architectus Deus* [supreme Father, God the master builder]) had finished creating the world, there arose in Him the wish (*desiderabat*) for a being that could estimate the dimension of this work, could love and admire it (“...esse aliquem qui tanti operis rationem perpenderet, pulchritudinem amaret, magnitudinem admiraretur”). The result is not only that man’s place is the last in the work of creation, but also that he does not belong, he is heterogeneous to the primary order of beings: “Idcirco iam rebus omnibus...absolutis, de producendo homine postremo cogitavit” [Accordingly, now that all things had been completed, He lastly considered creating man]. The decisive fact here is that no pattern for
this creature had been provided in the original ‘world program’: “Verum nec erat in archetypis unde novam sobolem effingeret ...” [But there was nothing in the archetypes from which He could mold a new offspring ... ] Here the biblical idea naturally suggested itself that precisely for lack of an ideal paradigm, God could only create man in His own image; but Pico does not avail himself of this opportunity, no doubt because it would have stood in the way of his later statement that man was meant to be “sculptor of himself.” The idea of ‘creation in the image of ...’ has already become too static, as is made very manifest by a comparison with another passage in Pico, wherein man is compared with the statue that a ruler causes to be erected in a city that he has founded. In the Oratio there is no place for man in the world, which is already complete [‘voll’endet]—he is a ‘superfluous’ creature for nature, necessary only for his God: “... nec in subsellii totius orbis, ubi universi contemplator iste sederet. Iam plena omnia; omnia summis, mediis, infimisque ordinibus fuerant distributa.” [ ... nor in the galleries of the whole world was there a place where that contemplator of the universe could sit. Everything was filled up; all things had been assigned to the highest, the middle, and the lowest orders. Accordingly God’s speech of investiture says, “Nec certam sedem, nec propriam faciem, nec munus ullam peculiare tibi dedimus, o Adam, ut quam sedem, quam faciem, quae munera tute optaveris, ea, pro voto, pro tua sententia, habeas et possideas” [We have given to thee, Adam, no fixed seat, no form of thy very own, no gift peculiarly thine, that thou mayest feel as thine own, have as thine own, possess as thine own the seat, the form, the gifts which thou thyself shalt desire]. Man is not so much placed in the center of the world as exposed there. The privileged position of the world viewer in Stoicism has become the point of departure of the world masterer and self-shaper, who is able to engage in contemplating and admiring only after he has realized and regulated himself.

For his part, the Cusan—with his characteristic tendency to appeal to names defamed in the tradition—cites Protagoras’s thesis, in disrepute since Plato, that man is the measure of all things, so as to indicate sharply the untenability of the cosmic/physical orientation of human self-consciousness. According to the account that Plato gives us of this dictum of the sophist, it runs, “Man is the measure of all things; of that which is, [he judges] that it is; of that which is not, that it is not.” When Nicholas refers to this sentence four times in his treatise On the Beryl, it is with an attitude directed against the conception,
predominant in the tradition, of the human cognitive faculty as a receptive imaging process, which makes the presence of things and their mediation by the senses into the measure of man. What Protagoras might already have seen is the heterogeneity of knowledge and reality, at least in one entirely elementary case, the distinction between existent and nonexistent objects, as a possibility that exists only in judgment but reflects nothing in what is present. The nonexistent is precisely that which does not exist and consequently cannot be represented receptively as an image of an original, even in a true judgment whose content is just that this thing does not exist. The possibility of negative propositions is based on the fact that man sets up the standard of his concepts and measures what is given him against it; the given itself does not contain the standard against which it is measured.

I will not make what I believe would have to be a futile attempt at a unitary interpretation of the Cusan’s theory of knowledge. Here in particular the inner consistency of his philosophical accomplishment is doubtful. The reason for this can be specified: It lies, again, in the inability to deal with or successfully to evade the consequences of nominalism.

The standard-setting character of human logic with respect to the world, which Protagoras had discovered in the quality of judgment, is extended for the Cusan by the paradigm of mathematics. Mathematics shows that the fundamental relation between the spirit and objectivity is not receptive but projective, and that means that in what can become objective for him, man ultimately only meets with himself again: “Whenever the soul by means of itself and from itself stretches out to everything else, it finds in the manifold of the sensibly perceptible just what it also finds in itself, thus everything is similar to it. And the more it stretches out to other things so as to know them, the deeper it penetrates into itself so as to know itself.” Self-referentiality as the basic form of all cognitive acts, even of those directed outward, carries a theological category over into anthropology. That fact is expressed in the third chapter of the first book of On conjectures: Conjectures are supposed to issue from our mind as the real world issued from God’s infinite reason. For by virtue of its exalted similarity to God, man’s mind participates—so far as possible—in the fertility of creative nature and produces from itself, after the image of the omnipotent formative power, intellectually existing things in approximation to concretely existing things.
Thus the human mind becomes the formative power of a world of conjecture, as the Divine Mind is that of a world of things: "... but since God does everything for His own sake, in order that He may be both the intellectual origin and the goal of everything, so also the unfolding of the world of intellectual entities comes to pass from our mind, which contains it folded together, in that our mind creates it for its own sake. But the more profoundly it recognizes itself in the world unfolded from itself, the richer the fertilization it experiences in itself...." This analogy between the cognitive procedure and the creative process means not only and not primarily an anticipation of the emphasis on spontaneity, on the projective character of knowledge, but rather, above all, a supersession of the theory of truth finding that saw the problem of knowledge as exhausted in a relation of individual objects to individual assertions. Since man is now supposed to be conceived as quasi alius deus, as "like another God," his knowledge also will necessarily have to be assimilated to the conception that had been developed of the origin of the totality of the objects of knowledge.

If the world is a structure of meaning emerging from the radical unity of the complicatio and preserving this unity in spite of all of its unfolded multiplicity, knowledge cannot consist in assigning individual assertions to individual objects. The totality of possible assertions about the world is to be grasped as a unity that is systematically interdependent in itself. The Cusan recognizes that comprehension of human knowledge as the explicatio of an underlying complicatio can be gained only if attention is paid not primarily to the connection arising between object and judgment but rather to the immanent unfolding of a system of assertions, "conjectures," which can be related to and tested against the encountered reality only once it has gained a certain complexity and consistency. This intraintellectual explicatio sets up the human mensura (standard of measure) against whose prestabilized metrics things can then be examined as to whether they accommodate themselves to it. Thus the Cusan's medievally pious effort to take seriously and to think out the biblical description of man as the "image and likeness" of God leads to a revision of the traditional formulations regarding knowledge.

When he tries to describe man as a creature of divine self-prodigality, he acts as though he is conscious of the fact that if this effort were to fail, man's enhancement would be effected not with theology but against it. Of course the Cusan may not have suspected in connection
with this concept that the formula of quasi aliud deus [like another God] could also be isolated and taken into service as a metaphor of human existential autarky and that this long-term effect was to be preceded first of all by a rapid metastasizing of the formula to all possible realms of human realization and activity.

The isolation of man’s quasi-divinity was a detachment of the self-comparison to God from its foundation in the relation of image to original, a reverse translation from the quality of a distinct substance into marks of accomplishment. The adoption of ancient formulas could not be the motive operating in this process because divinity for the ancient world meant primarily not at all omnipotence and omniscience but rather immortality and self-sufficiency, in other words, a syndrome of characteristics that does not manifest itself in actions. When the Cusan posits the discovery of logic and of mathematics, of systems of rules of games and the forms of artificial objects, as comparable to the divine capacity for creation, the metaphorical quality of the comparison (its not being meant ‘strictly’ or literally) is protected precisely by the fact that God’s analogous ‘accomplishments’ are specifically heterogeneous in kind; the creation of the world remains something incomparably sublime in comparison to the invention of logic and arithmetic. As long as this is the way one ‘likens’ man to God, the quasi aliud deus formula retains its good medieval appearance, at least remaining on an equal footing with the biblical relation of man “in the image of” God. This still holds even for the standard analogy between the poet and artist and the Creator of the world. But it no longer holds when the unsurpassability of an accomplishment can be grasped in its own evidence, and thus [human/divine] equivalence makes any relation of foundation a matter of indifference, and it no longer holds when the supposedly given condition of being an image [of God] becomes something that one wants to be, as the full enjoyment of a newly discovered potentiality. The latter, as the radical velle se esse deum [wanting to be God oneself] of human sinfulness—precisely in wanting to be good—was what Luther suspected; the former was discovered by Galileo when he thought that he had disclosed, in mathematized natural science, a level of truth unsurpassable even for God. Husserl still formulates the eidetic evidence of the phenomenological act in such a way that even God cannot have given Himself anything more or anything else of the essence of, for instance, red than one who knows in that manner, just as Goethe had already said to the
chancellor, Müller, regarding the "Urphänomen," that "God Himself knows it no better than I do."

The Cusan’s development of the idea of man’s likeness to God also relates to the theological predicate—speculatively just as fruitful as it is destructive—of infinity. Only by that means can docta ignorantia also become the anthropological ‘method,’ as it was the theological and the cosmological method. The nature endowed with intellect is in potentia infinita [potentially infinite], is “infinite in its power of comprehension,” but it is this essentially in time as a process of semper plus et plus intelligere [always comprehending more and more]. If the infinite potentiality of the human spirit as progress in time realizes itself in an always open dimension, then this idea at least does not exclude a conception of the realization of knowledge that would have to functionalize the individual man and his finitude for itself. If, in the modern age, such a foundation of the idea of infinite progress in a genuinely theological image of man has no longer been attempted, then that proves neither the radical heterogeneity of the idea of progress nor that it originated, as is asserted, in a ‘secularization’ of theological eschatology. Instead the theological speculation itself had both given rise to the necessity and also provided the systematic connection to set the categories that had been gained from speculation about God in communication with the idea of man.

However, this communication system did not yet allow the fact to emerge that the triad infinite God/infinite world/infinite human spirit opened up alternatives, that it held in readiness the possibility of each of its components becoming autonomous. For the Cusan, it was still entirely beyond question that in spite of its infinitude, the world could not offer man an essentially adequate, fully satisfying object. The fact was still concealed from him that this privative, indefinite infinity could fail in its ‘Platonic’ effect of referring to the ideal infinity of God and, precisely in its lack of definiteness, could become the compelling motive of cognitive movement for man. An interpretation of the Cusan that sees the aspect of his work that points toward new formations and begins to move toward them as resulting from a basically conservative motivation will of course have to respond to the question to what extent pretensions are granted to man in the Cusan’s anthropo-
always remains the presupposition that can be reduced to the formula, Man is great because his God is great.

This appears most clearly in the ascription to man of an originating, creative potency. The entire intellectual structure of man is understood in terms of this potency, and yet within the unity of this structure there is an entirely definite and very problematic differentiation. The cognitive capacity of the human spirit, its accomplishment all the way from the construction of concepts (notiones) to the projection of conjectures (coniecturae), is understood, as we saw, according to the theological model of the unfolding of an original simplicity: “Anima rationalis est vis complicativa omnium notionalium complications” [The rational soul is the power of folding together (complicating) all conceptual unities (complications)]. This conception of knowledge remains peculiarly unproblematical only because in the case of man the Cusan leaves out the difficulties of his theological model. It appears self-evident to him that the performance of the divine likeness, for its part, is also a likeness; it imitates not the world, but the origin of the world. So the explicatio that is carried out in the human spirit becomes a ‘representation’ of the divine explicatio of the world.

The possibility of things, insofar as it is projected by the human spirit, cannot be traced back behind the act of will in which God posited the possibility of the world before He created it. What a world is or can be is preconceived and predecided in this aggregate of exemplary possibilities as something that, being beyond question, is reassuring for one’s attitude to the given and rejects or restricts the problem of theodicy. Consequently, a world of concepts and conjectures, insofar as it is merely a ‘world,’ simply cannot fail to hit the mark that is the world of things. In this context, the proposition that “the similarity of the human intellect to the divine lies in its creative activity” is a logically necessary result of the human intellect’s capacity for truth, insofar as what can result from a process that can be called “creation” seems to be firmly established. But now the Cusan’s theological deliberations, which we have already described, show what difficulty arose for him from the fact that the power of God the Creator had been conceived as an omnipotence independent of the exemplary pregiveness of a uniquely possible world and realizing the world, as a contingent fact, only by a volitional decree. From this position, the Cusan can polemicize against Aristotle’s metaphysics of substance and deny reason the right to demand a reason for the specific constitution
of the world. He compares this denial to the fact that no reason, but only stipulation, can justify the establishment by decree of particular units of measure within a state: "Why the heavens are the heavens and the earth, the earth and man, man—for this there is no reason other than that He willed it so, Who created them. To question beyond that is just as foolish as to demand yet more proof in the case of Aristotle's first principles." The human spirit imitates the God Who created it, not the God Who willed its possibility.

Thus the Cusan deprives his anthropology of his own formulas, in which he distinguishes between reason and will in the prehistory of the Creation. The will is the world aspect of the infinite, and the world therefore has an elemental communicative character; it is "like the Word become an object of the senses." The Cusan always simplifies this basic problem when he is concerned to stabilize the relation of complicatio and explicatio as the firm and dependable dimension of his speculation. Then he asserts that the theologians have simply identified the exemplars of the Platonic tradition, the Ideas, with the biblical concept of the divine will. Where, on the other hand, the Cusan speaks outside the consistency constraints of his system, for instance, as a preacher, he gives way to the voluntaristic sovereignty proviso of the late-medieval concept of God, with its exposure of the world as a contingent fact. In the sermon *Ubi est qui natus est rex Judaeorum* [Where is he who was born King of the Jews?], he takes up the obtrusive questions regarding the problem of the Creation and rejects them with a citation from the prophet Jonah (1:14): "Sicut voluisti, fecisti" [Just as He wanted it, He made it]. One would have to answer those questions by saying that if God had willed it, He would have been capable of it ("Sic igitur respondeas: si voluisset, potuisset"). Under the pressure of the question of the reason for existence, the authorities of reason and freedom diverge, and the place of the required reason is filled by the appeal to the decree of freedom: "Unde non est alia responsio nisi: voluntas dei est libera, et pro ratione respondet libertas" [Whence there is no other answer except that God's will is free, and freedom answers instead of reason]. That which in the preacher's edifying discourse puts impious further inquiry in its place cannot be similarly blunted in the thinker's system. Does man's creative potency also possess in this respect something of its divine original, so that it must be granted the capacity to posit contingent facts, to advance into the realm of unrealized possibilities? Could the Cusan
break through the principle of imitation, the obligation determining all human productivity since the ancient world.

So long as nature in its constitution was not a contingent fact, so long as it realized exhaustively the full scope of the possible, because the eternal exemplars were already imitated in it, nothing was left to man either except to imitate this pregiven stock in his turn. This world might be worse than its original, and then man could undertake to represent it not as it was but as it should be. Man’s latitude lay in the distance between original and image, between concept and reality. That was also the theory, dogmatized by Aristotle, of art as the perfection of what nature had been able to bring to a certain point. But the late Middle Ages’ consciousness of contingency cut the ground from under this conception. The perplexity aroused by the question why the Creator had singled out this and no other tiny particle from the sea of infinite possibility, the idea of a choice without human intelligibility, made reality indifferent with respect to what surrounded it as the corona of possibility. Of course the question was not meant that way; it was meant to enforce not utopian speculation but rather submission and acceptance of the mortgage attached to the revealed promise of salvation.

It is true that the means by which this coercion could be evaded was also resignation regarding the question of the justification of the world, but given this resignation, it was also the new urgency of the question of what then was left for man. It was left to man resolutely to turn his gaze to the scope of what was not pregiven in the factual world but could perhaps be realized by his own power. In the difference between reality and possibility, between infinite omnipotence and the factual world—taking offense at the scandal of the unfathomability of the world—man discovered that he could be something other than an imitator of nature.

Could man be a creator? This question was prepared in the history of one of the Scholastic questions that were entirely devoted to working through the concept of God and the predicates reserved to it. In the Sentences of Peter Lombard, to comment on which was obligatory journeyman’s work for every teacher of theology, there also arose the problem whether anything besides God could bear the attribute creator. Into the fourteenth century it seemed perfectly obvious that this question could only be decided in the way the Lombard had decided it, that is, negatively. The unequivocalness of the answer then became
dubious, from two directions: first of all from the side of its provability, which William of Ockham, against Duns Scotus, was the first to hold not to be given; and second, from the side of the speculation about omnipotence, which finally had to pose for itself the question whether a restriction of God’s omnipotence was not implied when one denied the possibility of His creating a being with the power of creation. Here, as so often, it turns out that Scholasticism first raises, in the composed presumption of unequivocal answerability, those questions on which its positions were finally to shatter.

For the Cusan, the question is not already decided by the fact that in his theory of knowledge he interprets man as creative. For this daring is blunted by the requirement that what man projects must be appropriate to the divine Creation. The question is now posed more radically, and specifically because it seeks in man’s status as “created in the image of God” the element of infinitude as well. In the treatise On Conjectures, man is designated as humanus deus [a human God]: “Human being (humanitas) is a unity, and that means that at the same time it is infinity realized in a human manner (infinitas humaniter contracta). Now, however, it is the nature of such a unity to unfold beings from itself (ex se explicare entia), for it contains in its simplicity a multiplicity of beings. So also man has the capacity (virtus) to unfold everything from himself into the circle of the region he inhabits (omnia ex se explicare intra regionis suae circulum), to make everything arise from his power as the center (of that circle) (omnia de potentia centri exercere).” Here the diagram of circle and center represents the inclusiveness of the relation between creative origin and projected world, the way in which the reality that arises from man refers back to him. “Human being itself alone is the goal of the creative process (activae creationis) founded in it. Man does not go beyond himself (non pergit extra se) when he is creative (dum creat): rather, in the unfolding of his power, he comes to himself.”

Inevitably this is followed, once more, by the restriction that still is and must be self-evident to the Cusan in this phase of his thought, namely, that man, who is creative in the unfolding of his essential unity, produces only the universe of possibilities that is already laid out in him and therefore creates nothing new in the process (neque quium novo efficit). Creative production and true knowledge are still identical here: “There is no difference between advancing in apprehension to everything and containing everything in oneself.”
even as the origin of a creation, as *principium contractum creationis* [the restricted principle of a creation], man continues to be harnessed into the correspondence structure of theological, cosmological, and anthropological infinity.

About a decade later, in his *Idiota* dialogues of 1450, the Cusan makes the Layman, the simple craftsman, say something different to the philosopher about his own handicraft, woodcarving. This man displays a spoon he has carved and says, “The spoon has no original other than the idea in our mind *(coclear extra mentis nostrae ideam non habet exemplar)*. If the sculptor and the painter take their models from the things that they strive to imitate, that is not true of me; I who make spoons out of wood and dishes and pots out of clay. In this activity I do not imitate the form of any naturally given object, since the forms of spoons, dishes and pots arise by virtue of human skill alone. Consequently my art is more perfect than one that imitates the forms of objects, and thus is more similar to infinite art.” The Layman represents a new type of human self-consciousness, opposed to Scholasticism and rhetorical humanism. When once the philosopher says to him that he appears to be a follower of Pythagoras, he answers him, “I don’t know if I am a follower of Pythagoras or of someone else. But I do know this, that I don’t allow myself to be fixed by the authority of any man, even if it seeks to influence me.” To this consciousness of original self-realization belongs the triumphant indication of the realm of his technical forms, which are no longer something he owes—as having been read from nature—to a piously accepted pregiveness but rather are supposed to have come into existence *sola humana arte* [by human art alone]. It is important that the Cusan presupposes no specifically ‘elevated position’ of reflection for this self-consciousness. It is not the traditional special circumstances of artistic production on which such a self-consciousness is based; on the contrary, the spoon carver directly contrasts his accomplishment with that of painters and sculptors, who depend on the imitation of nature—*non tamen ego* [but not I] is his formula.

It is significant that this pathos of ‘creative’ man commences here with the technical, not the artistic, type. If one keeps in mind how in the following period the testimony of creativity concentrates almost exclusively on the fine arts and poetry, so that it will belong to the manifestation of art in the modern age that the author begins to speak of himself and his productive moments, whereas technical invention
and production still had to contend for a long time for self-appreciation and recognition on the same level, and then finally nevertheless could only reach back to the language of the self-interpretation of the fine arts in order to formulate themselves—only, then, if one keeps this in mind, does the figure of the *idiotas* [layman] obtain its significance. But it is nevertheless not a figure of human self-empowerment. In the final analysis, the Cusan breaches the principle of imitation in describing man’s productive relation to the world only in order to use the concept of *imitatio* all the more emphatically and exclusively for the other side of his metaphysical triangle: When man does not imitate, but rather originally produces, he imitates immediately the absolute origin of everything imitable. He was created for this one imitation. In the dialogue *On the Mind*, he makes the Layman say that the Mind was created by the art of the Creator as though this art had wanted to create itself. But, precisely, only “quasi”; if this “as though” were missing, Giordano Bruno would be closer at hand.

Can this anthropology that reaches ahead of itself in daring formulas arrive at a concretization, a confirmation in man’s complex performance structure? The Cusan gave perhaps the finest, most deliberate exemplification of the originality that is characteristic of his image of man, and one that still points least of all toward modern technicity, in his treatise *On the Globe Game*. Here the guide for the investigation of human spontaneity is not the tools of self-assertion but rather the invention of a game as a reality closed in itself, a ‘world’ that unfolds itself with its own elements according to set rules. The ideal of knowledge of a coherent reality is thus derived from the way in which man knows, precisely, his world of play as the reality that is continually derivable from and perspicuous through his positing. In *On the Globe Game*, the invention of the new becomes the possibility of the self-discovery that the soul practices with itself so as to assure itself of its power, self-movement. The difference between man and beast is sharpened to this very specificity, that man hits upon the idea of inventing new games for himself. Further: Man alone is able, in the absence of light, to help himself and to make vision possible by the light of a lamp; he alone can aid deficient vision with eyeglasses and correct the errors of sight by means of the art of perspective.

Regarded in this way, phenomena move together, become visible in their genetic convergence, which previously had scarcely been seen in such proximity. Language, writing, number, and syllogism each
become particular world-explications, like the invented game; in the second book of *On the Globe Game*, the disciplines of the quadrivium—arithmetic and geometry, music and astronomy—represent original inventive accomplishments of man, which, we are explicitly assured, have the condition of their possibility exclusively in the human soul.

Man's 'equipment' is regarded less from the point of view of its function as means to ends than from that of its explicative worldliness; the astrolabe of Ptolemy and the lyre of Orpheus are exemplary novelties of invention, which are structurally closed in themselves and yet at the same time are mediating orientations, reified conjectures, as it were, for knowledge. The world map that the cosmographer produces is an especially characteristic simile for the Cusan; it does indeed bear a similarity to the represented world, but it is anything but a combination of images of what it represents. It is a reconstruction, and resembles conjecture in that it is indeed 'participation,' insofar as it represents, but participation in otherness. The cosmographer furnishes a representation of the whole world apprehensible by the senses because, while it is true that he works up, orders, and brings to a common scale the data and information brought to him from outside, nevertheless in fact he remains at home, shuts the door, and turns his gaze inwards to the world ground that lies in himself, which alone provides him with the principle of the unity of all the facts brought to him from outside. Nicholas made use of an experience of his own in this picture of the cartographer; he had had a map of Central Europe drawn on the basis of critical accounts of journeys, which, however, was only engraved in Eichstätt in 1491, long after his death.

Finally, in the work of his old age, *De venatione sapientiae*, the Cusan uses the example (exemplum remotum) of the creation of the art of the syllogism, not indeed for the creation of the visible world, but rather for that of the ground of its possibility, its *posse fieri* itself. Here the voluntaristic element that presses forward so strongly in this late work is already allowed for in the initial formula: "Intellectus magistri vult creare artem syllogisticam" [The mind of the master wants to create the art of the syllogism]. The teacher of logic posits and secures the possibility of this art's coming to be ("Ponit igitur et firmat posse fieri huius artis"). However, the forms of the procedure of inference are grounded in reason (in ratione fundatae) in such a way that every syllogism that is concretized in language must imitate them—at this point, then, the imitative moment joins the creative one. This is why it is
possible for the inventor of this art (inventor magister) to hand it down to the teachable student. And just this is the simile for the origin of the world artifice: “Sic forte se aliqualiter habet mundi artificium” [Perhaps it is the same with the world artifice]. God also creates first of all the world’s posse fieri [possibility of coming to be] and hands it over to obedient nature as though for ‘application.’

When the Cusan brings up geometry as a further example, it is significant that this exemplification does not lie on the same plane. It is said of the geometer, as distinguished from the logician, who imitates God immediately in the creation of the ground of the possibility of his art, that he imitates nature. The geometer directs his gaze at the pregiven concept of the circle, its praedeterminata ratio, and seeks to carry through in construction the instruction given there. He imitates nature inasmuch as he arranges the transition from concept to perception. This concept is not that of an absolutely precise ideal figure, from which all concretely drawn figures deviate by their imprecisions. Rather it is an instruction concerning the distance of specifiable points on the circumference from the center of the circle, an instruction that says nothing about the magnitude of the radius, and thus also permits the symbolic paradox of allowing it to increase infinitely. Only such instructions are inventable; their constructive execution, the concrete rendering visible of their implications in a figure, is nothing but explicative carrying out, imitation. For the Cusan, the geometer stands on a different level from the logician.

This special position of geometry as compared to arithmetic and syllogistics is not yet seen in the Cusan’s early writings. Between De docta ignorantia and De coniecturis, which favor (respectively) geometrical and arithmetical metaphors, there is no distinction in the evaluation of the guiding realms. In the first of the two early works, the topic of methodical utility is explicitly raised: Mathematics helps us the most toward comprehension of the differentness of the divine (“Quod mathematicalia nos iuvet plurimum in diversorum divinorum apprehensione”). The advantage of the mathematicalia [mathematical things], as against the naturalia [things in nature], in illustrating the knowledge of God lies in the fact that as products of human construction, they are ‘deformable’ by following specific rules, like that of making the radius of a circle infinite—that is, it lies in the fact that man is not bound to a pregiven essential form that he has to respect. Hence the possibility of employing ‘explosive metaphor’ in this field as a means
of symbolic investigation (ad divina per symbola accedendi nobis via [a path by which we approach the divine by means of symbols].

His Platonist start has led the Cusan so far beyond Plato that in the treatise On the Beryl he can charge him with the error of not having distinguished between the ideas that are given to us and those that we ourselves produce and of having missed the differentiation of truth that goes with this. "For he said that one could regard the circle in its name or its definition, in a drawing or a mental concept; and with all of that one would not have the nature of the circle. Its essence, which subsists free from all contradiction, simple and immortal, can, on the contrary, only be seen by reason. In fact Plato asserts this equally of all things. If he had reflected on this, he would have found that our mind, which creates the world of the mathematical, has that which it can create more truly and more actually in itself than it is outside of it. Thus man has shaping art, and the configurations of this art, more truly in his mental capacity of conception than they can take shape outside it . . . And so it is with all that sort of thing: with the circle, with the line, with the triangle, so also with our concept of number—in short, with everything that originates from the human mind and not from nature."

At this point, if not earlier, the question arises whether and how the freedom that the Cusan grants man as the independence of his theoretical and technical accomplishment from pregiven reality includes the final and central element of every anthropology, the moral autonomy of an active being. For the Cusan's system of synchronized intensifications in the metaphysical triangle of God, cosmos, and man, this question must acquire a critical importance. Can the theological speculation about transcendence be 'translated' into the idea of human autonomy? In connection with this question, research on the Cusan has depended on the testimony of the treatise On God's Vision. This treatise, produced in 1453, explains man's self-conception by the simile likening it to the portrait that seems to look all of its viewers in the face at once. Thus each individual in his place stands immediately before the absolute. No position is distinguished above the others; transcendence levels off hierarchies and stratifications in what it surpasses. Everyone who raises his gaze to the picture is regarded; but he is regarded only when and because he, for his part, looks toward the picture. The plurality and individuality of the viewers are not
opposed to the identity of the picture; rather they are the partnership appropriate to it that for the first time unfolds its mysterious potentiality.

Not all of the Cusan’s metaphors are equally successful and clarifying. One need only think of the simile of casting peas, in the second book of *On the Globe Game*, with which, perplexingly, something entirely opposite seems to be meant, namely, that the variety of objects in the world, as a deviation from absolute unity, is simply not founded in the will of the Creator: In the casting of a handful of peas to the ground, the falling motion of the individual peas results in accidental variation, although the caster has after all performed only one cast. It is true that the simile is meant to retain the uniqueness of the individual, but at the same time it leads to the indifference of accident and thus to a devaluing origin; between the will of the Creator and the individual a mechanical factor intrudes. Aristotle and Epicurus appear to be harmonized in this image, and the fact betrays itself that toward the late works, the power of more than superficial harmonization diminishes in the Cusan, and the thinker’s achievements, which seem to be bullied out of the Scholastic tradition, nevertheless still occupy insecure ground. Of course in the case of the simile of the all-seeing picture, which originated ten years before the pea-casting simile of *On the Globe Game*, one could also adduce the misgiving aroused by the element of illusion. But that belongs to the emphasis on perspective in the Cusan’s thought and includes the attempt to establish a systematic consistency between cosmology and anthropology, between the loosing of human self-understanding from the orientation of cosmic localization and the definition of its freedom vis-à-vis the absolute origin.

When each individual before the all-seeing portrait in the simile conceives of himself as the one who is expressly and uniquely regarded, an optical illusion arises analogous to the one that is described, for each location in the cosmos, as the illusion of centrality. “It seems to everyone, whether he finds himself on the earth, the sun or another star, as though he himself were at, as it were, an unmoving center, and as though everything else were moving.” But just as that cosmic illusion of centrality was not only an illusion but also a metaphor of a metaphysical state of affairs, so also the illusion before the all-regarding picture is not only an illusion. “Thus the world frame will, as it were, have its center everywhere and its circumference nowhere, because circumference and center are God, Who is everywhere and nowhere.” The fact that the world has no actually designatable center
and nevertheless everywhere furnishes the viewer with the appearance of being in the center is thus the cosmic metaphor of the metaphysical state of affairs familiar in the Cusan’s thought as the pseudo-Hermetic doctrine of the infinite sphere. This might have served to prevent any disappointment resulting from the Copernican exposure of the geocentric illusion and to ascribe a new symbolic role to the world, symbolic in relation to absolute transcendence.

The gaze of the all-regarding picture, which every viewer can refer to himself, ‘exists’ just as little as does the center of the world; but the very illusion that cannot be objectified discloses to man his position, which can no longer be read off from worldly realities. In the reciprocity of the transcendent relation, in free and response-awakening turning toward [God], he finds himself made capable of a self-consciousness that even, indeed particularly, over against the absolute is not pure lostness and utter dependence. Thus the Cusan has man experience his emancipation in the simile of the all-regarding picture: “When I thus rest in the silence of contemplation, you, Lord, answer me in my own breast, saying: Be your own, and I will be yours. You, Lord, have left me free to be my own, if I will. If I have not become my own, then You also are not mine. You make my freedom necessary insofar as You cannot be mine if I am not my own. Because you have left me free for this, You do not constrain me, but You expect that I will decide to be my own.”

One will not diminish the importance of the passage by asking what type of concept of freedom is intended here. For precisely in the implications of this concept of freedom, the Cusan’s acute concern regarding the disintegration of the Middle Ages becomes tangible. This disintegration had led at first to the position of nominalism, which had deprived human freedom of any significance over against God’s absolute demand for justification and had put man in the position of having the condition of his salvation offered to him in naked contingency, as something to which to submit. And then even this submission was supposed to have resulted from an act of election on the part of the Divinity. Nominalism had seen God’s demand as humanly unfulfillable and had thus posited the path of grace as absolute. Moral quality and fulfillment of the theonomic condition of salvation had parted company. After that, any attempt to satisfy God’s demand became entangled in human self-validation and necessarily failed to meet the intentio praecipentis [teacher’s intention]. Luther will formulate
this paradox of theonomy in the treatise De servo arbitrio as follows: "Man is not capable of humbling himself fully until he knows that his salvation depends, entirely outside his powers, decisions, efforts, outside his will and his works, on the free judgment, the decision, will, and work of another, namely of God alone." On the question of human freedom and its significance for salvation, the Middle Ages disintegrates—its dissociation is effected—into radical self-disempowering, on the one hand, and equally resolute self-empowerment, epitomized in the zone of what will be called the "Renaissance," on the other hand.

It is only as a countermove against the unreasonable demands of theology's contesting of freedom that it becomes possible to understand the attractiveness gained by the ideal of the Stoic wise man, who satisfies himself in the rigorism of the inner consistency of his virtuous will and withdraws from the accident and uncertainty of worldly fate into the undisputedness of his disposition over himself. But even this ideal undergoes an essential change in its presuppositions. The ancient wise man secures for himself the space of his undisputedness by not meddling with what is not open to his power of disposition. He seeks his happiness as inwardsness. The new premise, however, is that man does not meet with the boundary between what is and what is not at his disposal as a fixed determination, but rather that he begins to regard nature also as something potentially masterable.

The program of knowledge of nature is governed by this presupposition, that the theory of physical processes suspends the pure externality of nature and brings under control those of its workings that are relevant for man. The systematically complete connection between a Stoicizing ethics and a new concept of science will become evident in Descartes. For him freedom is bound to the presupposition of mastery over that which without insight remains pure accident and delivers man over helplessly to the conditions of the reality surrounding him. Knowledge makes nature into man's property. The connection between property and freedom persists also and particularly in this conception.

If one keeps these two directions of the final medieval dissociation process in mind, then the Cusan's conservative effort becomes evident here too; he attempts at a late hour to make the autonomous power of man, which is in the wings, result yet again from an empowerment, and thus to bind it to an original act of absolution or emancipation [Freisprechung]. But he can do this only by holding to and thinking
through further a basic figure of the traditional concept of freedom, namely, freedom as the suspension of a property relation, as a passing over of the property right to one who is 'set free' from the original property relation. God, so says the Cusan, wants man to take over for himself and to exercise the original property right of the Creator in His creature. The theological concept of man's absolution [Freisprechung] liberates from guilt; the philosophical concept [Freisprechung in the sense of emancipation] liberates from dependence on the ownership that God, as the Author of his existence, has in man.

That freedom has its origin in an act of liberation is founded, as a basic idea, in the ancient tradition and conception of right. The Cusan's taking over of this idea has the difficulty that the emancipation is not an effective legal act in itself. On the contrary, a duty is ascribed to man, which as such already presupposes freedom, to bring about the conveyance of his property in himself and to assert himself in it. This construction of a 'theonomic autonomy' is fragile enough. It is not a purely metaphorical illustration, however, but rather stands in a thoroughly medieval frame of reference, which, at the same time, it points beyond.

For the background of the leading metaphor of property and liberation, it is instructive to go back to some testimony from the beginning of the Middle Ages, which is found in Augustine's argument with Julian, the Pelagian. In the disputation that Augustine simulates, Julian proposes a definition of freedom of the will: The free will by which man is released from God's power of disposition consists of the possibility of admitting sin or abstaining from it. Augustine answers with a sentence that does not enter at all into the main part of his opponent's definition but rather refers to the subordinate clause: Julian speaks of man's liberation by God—does he not notice, then, that what happens to someone who is set free in that way is that he no longer belongs to the father's family? Perhaps one may find in this short exchange of words one of the basic decisions that underlie an age, or that one must think of as underlying it if one wants to understand it as a meaningful unity. The Cusan made of the liberation an act of self-emancipation, which, however, at the same time is the epitome of obedience and does not dissolve the 'family bond' but rather is grounded only in God's self-abandonment to the free man.

At this very point, where the discussion of the Cusan's anthropology culminates and could be concluded, an essential systematic piece of
the Cusan's speculation must be brought up, whose indispensability already follows from remembering that the *Docta ignorantia* has a third book, of which we have not yet spoken. This third book contains the essentials of the Cusan's Christology. One could say that he then crosses the threshold into dogmatic theology. But the Cusan's anthropology is not complete without his Christology. It is the central element of a system that is meant to carry out the exaggeration of transcendence without paying the price of the annihilation of immanence, that is meant to let the additional gain to the absolute flow back into the substance of the conditioned. But even independently of the desirability of presenting the Cusan's system in the integration that he himself gave it, the Christology is indispensable in order to make visible the epoch-making difference between the Cusan and Giordano Bruno, the Nolan. The intellectual offense that ultimately led Giordano Bruno to the stake is directed against the dogma of the Incarnation.

For a Christmas sermon, Nicholas wrote regarding the necessity of God's incarnation, "God created all things for His own sake and in such a way that the universe would have its full greatness and perfection only in relation to Him; but the universe could not unite with Him, since there is no proportion between the finite and the infinite. Consequently everything has its goal in God through Christ. For if God had not taken on human nature, which as something intermediate includes the other natures in itself, then the whole universe would be incomplete; indeed it would not even exist." To represent the Incarnation as the inner consequence of the Creation, to lead the eternal predestination of the Son of God to become man, of which Duns Scotus had already spoken, out of the voluntarism of the concept of predestination and to bring it nearer to human comprehension by means of a rational deduction, is the program of the first four chapters of the third book of *On Knowing Ignorance*.

Whereas the first book had dealt with God as the absolutely greatest (*absolute maximum*), and the second book had dealt with the universe as the restrictedly greatest (*contracte maximum*), the third book deals with the simultaneously absolutely and restrictedly greatest (*de maximo absoluto pariter et contracto*). The concept of *contractio* [contraction, restrictedness] causes difficulties for the understanding: on the one hand, it is the opposite of *abstractio*, and then it signifies the concrete object's being characterized by a drawing together of predicates each of which in itself is abstract—and on the other hand, it is the restriction
of the individual, which as something actual never exhausts the range of the possibilities of its realization. "Restriction" is thus the general and thoroughgoing characteristic of the actual world and of what is actual within it. What is actual is this or that, which is to say that as this and not that, it is actual at the expense of possibilities no longer open. Nothing actual is what it can be. That makes movement the continual conversion of possibility into actuality, a conversion characteristic of all reality in the world. Hence there is a multiplicity of the individuals of a species in the world—an admission, as it were, of the inexhaustibility of what is possible within the species by what is ever actual in it. But the universe also, as a unique whole, the universi prima generalis contractio [the first, general contraction of the universe], which is followed by the further degrees of restriction into genera, species, and individua, does not exhaust the horizon of possibility, which is defined by God's omnipotence.96 "The universe does not reach the limit of the absolutely greatest, just as the genera do not reach the limit of the universe, the species the limit of the genus, the individuals the limit of the species. So everything that is, between the greatest and the smallest, is to become ever more perfect, and only God is to be the origin, center, and goal of the universe and of the individual things. . . ."

Here reflection on omnipotence, the most agitating motive of late-medieval speculation, falls into one of its antinomies: If the universe exhausted the creative potential of its origin, then it would be at the same time the limitation of this potential, insofar as it would manifest the inability to do more; but insofar as the universe is supposed to be the work of the highest wisdom and goodness, which manifest themselves in it, it is inconceivable that that potential could not have spent itself in its prodigality and not have realized the greatest thing possible for it. Thus the Creation must, on the one hand, possess the highest possible perfection and may not, on the other hand, reach the limit of what is possible for its origin. Formulated differently: If God could not make the world into the most perfect possible work because He would have contradicted Himself in the process, then He should not have willed this work. This is the basis of the idea pursued in the passage quoted from the sermon, that the universe would not exist at all if it were not capable of being brought to perfection.
This antinomy is 'resolved' by the Incarnation. There must be among the realities of world, among the aggregate of restrictions, one real thing that exhausts the potentiality of the species in which it exists. "If there were an entity that as an individual represented the greatest in the restriction of a species (maximum contractum individuum), then its existence would have to be the fulfillment of that genus and species and it would be the way and the form, the essential reason and truth in the fullness of perfection for everything possible in this species. Such a maximum in restriction would surpass the nature of restriction and would at the same time be its final goal, since it would contain in itself all its perfection..." But the world, of itself and in itself, cannot contain such an entity because it would violate the requirement that God's omnipotence not be restricted from outside. Only if this creature could at the same time be the Creator would it lose the character of externality with regard to God and become the perfection of the Creation as the Creator's self-restriction. "Such an entity, insofar as it is something restricted, would not be God, Who is the pure absolute (absolutissimus), but instead, as the maximum in restriction—that is to say, as God and creature—it would necessarily be absolute and restricted at once, and specifically in a mode of restriction that could not subsist at all in itself if it did not subsist in what is absolutely greatest (in absoluta maximitate)."

Thus we are led in a purely hypothetical consideration to the basic idea of the 'hypostatic union' of God and creature. This idea does indeed remove the antinomy of omnipotence, but by means of a solution that in its turn, as the Cusan himself admits, entirely exceeds our understanding: "Haec admiranda unio omnem nostrum intellectum excelleret." This mysterious unity of creator and creature is to be conceived neither as mixture nor as composition (absque confusione et compositione).

What is now still lacking from the introduction of the dogma of the Incarnation is only the demonstration that the species of creature that would be most perfectly disposed for this union is human nature. This occurs in the third chapter through the thesis that that entity is suited for union with the Divinity that includes in its being the most of the universe of reality. This should be neither an extremely lowly nor an extremely sublime substance, then, but rather a natura media [intermediate nature]. Such a nature in fact is human nature, which was already correctly designated by the ancients as a microcosm. "If this nature were elevated to union with the greatest, then this would be
the fulfillment of all the perfections of the universe and of its individual beings, so that in human being everything would reach its highest stage of existence." Once the path has been traversed this far, what is still needed is only the scarcely more difficult demonstration that only an individual human nature and only a particular person of the trinitarian Divinity could enter into this unification.

But so far the discussion has been entirely in the mode of potentiality. The proof must still complete two steps: first, that this solution not only does not contradict God's essence but rather is in the highest degree suitable and essentially appropriate to it; and second, that this unification of natures has been manifested as an actual phenomenon in the world.

The first step already resembles the significance of the ens perfectissimum [most perfect being] in Descartes, with which he extracts himself from his experiment with doubt. "If one does not recognize this path," the Cusan writes, "then everything could still be more perfect than it is; but no one, unless he is a denier of God or His goodness, can rationally dissent from this train of thought. For all jealousy is foreign to One Who is pure goodness, and His actions can have no defects; just as He Himself is unequaled, so it is also with His work, which comes as close as possible to being unequaled. But the unequaled power has its limit only in itself..." This requirement is fulfilled when a man is elevated to unity with the unequaled power itself, so that he is no longer man as a creature subsisting for itself but rather in unity with infinite power, so that this power is limited not in the creature but in itself. The Cusan accomplishes the second step by subsuming under the foregoing premises the additional one that the temporal position in history required for the appearance of a human individuality is already given, so that this historical appearance can be designated with a name.

As with other doctrines, Wenck did not characterize the Cusan's Christology as incorrectly as might be expected. In the passage in which he reproaches the Cusan with turning annihilation into deification, he also imputes to him an identification of the generation of the Son of God and the creation of creatures. This imputation is not so false, since while for the Cusan the generation of the Son of God is not an event bound to the act of Creation, his Incarnation is such an act, one which alone removes the antinomy of the Creation and is thus necessarily implicated in it. Not only does the Incarnation
complete the Creation, it is only the reality of the Incarnation, determined from eternity, that makes the Creation possible at all. This is bound up with a further accusation made by Wenck against the Cusan, namely, that he universalizes human nature in Christ (universalisatione humanitatis Christi) and inevitably does away with the historical concreteness of this figure (tollit singularitatem humanitatis Christi). But then Christ's redemptive service would be ascribed to human nature itself.

Now this last remark in particular fails to hit upon the essence of the Cusan's Christology to the extent that the latter's saving significance [Heilsbedeutung] is hardly in redemption and a merit gained for men but rather in the fulfillment of the essential potential of the world and man. This has made the Incarnation a universal, a cosmic event. Nowhere is there talk of the fact that man's sin has compelled God to sacrifice His son. The Creation, not sin, the deficiency of nature, not that of man, presses toward this consequence.

But is it already the ultimate consequence? Has the theological furor of the late Middle Ages been successfully reconciled with the will of perplexed man to secure his own right over against transcendence and not himself to come to nothing in the face of an inflated God? The death of Giordano Bruno will be a beacon signaling the failure of this reconciliation.

**Translator's Notes**

a. See translator's note b to part III, chapter 7.


c. This paragraph begins an extended discussion of the Cusan's cosmology. The chapter is completed by a discussion of his anthropology (and, finally, his Christology) that begins with the paragraph of text corresponding to note 49.

d. I have inserted the Cusan's distinguishing terms, "absolute" and "restricted," in brackets here in lieu of the difference in gender (der Grösse versus das Graute) in the original text. On the concept of "restriction" (contractio), see the text corresponding to note 95 of this chapter.

e. A term coined by Goethe to designate a primary, irreducible phenomenon or experience that illuminates day-to-day experiences.

For the Cusan, the moment of the Incarnation of the son of God, which he believed to be accomplished in historical individuality, was at the same time the culminating point of metaphysical speculation, with its all-dominating effort to 'overtake' the transcendence of the Divinity by means of the communicating transcendence of man and to draw the universe, in its representation by man, by an individual man, into the reflection process of the Divinity. Precisely this basic figure of the Christian self-conception—God's entry into the singularity of man in the universe—becomes the fundamental scandal, the offense that could not be suppressed by any threat, to which Giordano Bruno of Nola testified on February 17, 1600 at the stake in the Roman Campo di Fiore by averting his face from the crucifix that was held before him, a kind of testimony that had been regarded, in the early part of the epoch that now and not least with this event came to an end, as the highest martyrdom for the truth.

Bruno did not die as a doubter, as one of the heretics whose dogmatic deviations always strike the historical observer as intra-Christian goings-on. Bruno died for a disagreement that was directed at the center and the substance of the Christian system. In the notice of the burning of the Nolan that the Avvisi di Roma carried on February 19, 1600, emphasis is placed on the dogmatic irregularity of the element of caprice, which was also to be taken over more or less explicitly by the literature on Bruno under the rubric of 'hypertrophic imagination': The Nolan had "di suo capriccio formati diversi dogmi contra nostra fede" [capriciously
formed diverse teachings contrary to our faith), and in particular he had directed his opposition at the Holy Virgin and the saints. For this, so the incidental newspaper announcement emphasizes, he wanted to die as a martyr: “... volse obstinatamente morire in quelli lo scelerato; e diceva che moriva martire e volentieri...” [The villain obstinately wanted to die for them, and said that he was dying freely, as a martyr].

The substantial direction of thrust is clearer in the accusation made against the Nolan in an older document from the time of the negotiations for extradition between the papal nuncio and the Senate of the Republic of Venice, on December 22, 1592, in which the Incarnation and the Trinity are named explicitly as the subjects of the heretical errors of which he was suspected. This state of affairs requires emphasis not only because the documents could tend to give the impression of dogmatic arbitrariness in the deviations but also because the circumstances of Bruno’s death by fire as established by historical research are not congruent with the impression that it produced, historically, in which it appeared as the widely visible beacon of the Copernican truth. This assignment of symbolic status to the event in history is not, indeed, a misunderstanding, but still it is not correct in the direct manner in which it was undertaken; it could only be verified by means of a systematic linkage between Copernicanism and the ‘Incarnation trauma,’ a linkage that is not manifest at first glance.

The ready expectation that the Nolan was a victim of his Copernican enthusiasm is not confirmed by the documents of the proceedings of the Inquisition against him that have become accessible so far. It is characteristic of these proceedings that the sole mention of the Copernican thesis of the movement of the earth comes spontaneously from Bruno’s own mouth. In defending his work, The Ash Wednesday Supper (La cena de le ceneri), Bruno says that he intended it to ridicule the pre-Copernican standpoint of some doctors: “... in questo libro la mia intenzione è stata solamente di burlarmi di quei medici e dell’opinione loro intorno queste materie” [In this book my intention was only to ridicule some doctors and their opinion on this subject]. The tribunal does not respond with a single word to this ‘offer’ of the Copernican theme, which gives the impression of an attempted diversion; instead it moves immediately to the question, aimed in an entirely different direction, whether Bruno had praised heretical princes. Also the doctrine of the infinite plurality of worlds, which has to be regarded as a consequence of Copernicanism, is not something that
the tribunal charges him with but is put into words by Bruno himself, and without any perceptible reaction, in fact, on the part of those who are examining him. Neither in the patriarch’s request for extradition nor in the representation of the nuncio to the Senate of Venice in this connection are there indications of blame directed at Bruno’s Copernicanism. Still, in interpreting the Venetian records, the possibility would still have to be considered that the tribunal in the republic wanted or had to avoid creating the impression that it had not remained within its purely ecclesiastical and theological competence. The fact that the Roman announcements in connection with Bruno’s burning at the stake also betray no Copernican ‘impact’ speaks against this interpretation.

However, it will become evident that the post-Copernican cosmology, with its superabundant consequence of the infiniti mondi [infinite worlds], represents the background against which the denial of the Incarnation, of the saving event that is centered on man and that draws the universe into cosuffering and coredemption with him, attains intuitive evidence. The post-Copernican universe no longer holds ready any designated location or distinct substratum for the divine deed of salvation. In this universe, the Divinity had already fully spent Himself in the Creation. Since He did not and could not hold anything back, vis-à-vis the infinity of worlds, He was left with nothing to make up in relation to any creature in this world. Nothing ‘supernatural’ is possible. Only the infinite cosmos itself can be the phenomenality, can be such a thing as the ‘embodiment’ [Verleiblichung] of the Divinity, to think of which as a person—that is, as bound to a definite creature in the world, made actual by a temporal position—is something that the Nolan is no longer able to do. In his thought, the conflicts that were painstakingly concealed or were still ‘adjusted’ in the Cusan’s system are fully carried through; alternatives are posed in the triad of theology, cosmology, and anthropology and are decided.

Nevertheless the Nolan’s opposition to the historical Incarnation of the Divinity is not an anticipatory bit of ‘Enlightenment.’ That could perhaps be most impressively verified if one were to investigate in this context the Nolan’s use of metaphors of light, that is, the metaphors that are most closely associated with the self-consciousness of the Enlightenment. Copernicus, then, would have been defined as the dawn light, which preceded the sunrise, which itself was accomplished through him, the Nolan. But this sunrise is no more a first occurrence
than it is final in history; for what is rising is the sun of the old, true philosophy ("l'uscita di questo sole de l'antiqua vera filosofia"), which makes its new, not its first and only, day break.\(^5\) The metaphor of the coming of daylight is associated with the idea of a cyclical periodization of history, in which the absence of light—that is, the night of the Middle Ages—is just as 'natural' an event as its return.

How the image of the cyclical operation of history as a natural process can be combined with the heroizing of Copernicus and of his own accomplishments is only one of the many problems of consistency that arise with this thinker. If truth and error alternate with the same regularity as daylight and nocturnal darkness—and this was how Bruno explicitly formulated it in the *Exuvius* that he placed before his Paris theses of 1586\(^6\)—then it is difficult to comprehend the reality of the liberation, as a 'deed' on behalf of the human reason so long suppressed, that Bruno ascribes to himself. Such a real liberation would presuppose that reason itself can be led astray, that is, that its light, when it had already once dawned, could be extinguished and robbed of its power. The pagan fundamental idea of the recurrence of the same in history—that is, of a regularity of history dominating the realization of reason rather than arising from it—blocks off the possibility of a relation of adequacy between the Nolan's self-consciousness and the new constitution of the epochal self-understanding of the modern age. One can see how Bruno takes over from Lucretius the figure of a bringer of salvation, which in Lucretius is the figure of Epicurus. But he does this with a clear aversion to the solitariness and uniqueness of the event that would make of it something like a central point of history, and thus would place in *time* something that cannot be allowed in *space* in Bruno's acentric universe. The elimination of the illusion of a central point from time—from history— as well, is a piece of logical consistency with Copernicus, though it goes beyond Copernicus and radicalizes him.

But it is not carried out with complete consistency. Like Epicurus in Lucretius, Bruno also breaks through the walls of the singular cosmos, the limits of a finite world,\(^7\) and gains a homogeneous immeasurability of the cosmic space that is equivalent in all of its points. But he does not accomplish the same thing for time, which retains a closed structure of repeating cycles and thus preserves a lawfulness that prevents an escape from the dogmatic bonds of the Middle Ages into a period of unrestricted forward progress. The metaphors of the periodic return
of light encroach upon and relativize the idea, which was later constitutive for the Enlightenment, that reason not only is the dawning light of a new day but also brings itself to this dawn and maintains itself in this day, so that it is the guarantee that after this ‘day’ (in a sense no longer literal because no longer periodic!), it will not become night again. Of course that presupposes that the new epoch for its part is not the repetition of a past epoch, that it is not the ‘renaissance’ of, for instance, the ancient world and its philosophy. The modern age was to repeat, purely formally, in its self-understanding the Christian conception of a unique turning point and epochal new beginning of history. In this process, it was not, of course, to accept or ‘secularize’ the transcendent contingency of the origin of this singular event, since by asserting the definitive progressive form of rational self-realization, it had conceived itself precisely against the theological view of history. Just this is not possible for the Nolan because with his rejection of the singular historical act of the Incarnation, he had deprived himself of even the point of reference for a counterconception.

While the rationality of the modern age does philosophize on the whole in opposition to the theological concept of history, it obtains its counterpoint from the formal remainder of faith in the possibility of an absolute epochal threshold. It considers itself capable of stepping out of the sequence of finite formations of history, typical in themselves, that the ‘ancient world’ and the ‘Middle Ages’—as surpassable realizations delivered over to rational critique—are supposed to have been. For Giordano Bruno, reason is an intraworldly magnitude, having a place among more general process laws of nature, and is therefore something that cannot be stabilized. Bruno remains standing in the entryway to the historical self-consciousness of the modern age—in fact precisely because he is unable, on account of his negation of the Christian understanding of history, to accept the formal structure of the change of epoch itself as it had been developed by the Middle Ages. Thus he is forced back to a concept of history whose implications put in question the pathos of the new beginning and its rationality.

The fact that while Giordano Bruno already stands outside the Middle Ages he has not yet found the fundamental formulas of the modern age is apparent in not only his idea of the structure of the course of history but also his concept of historical time. In discussing the importance of the time factor for astronomical knowledge, Bruno at first follows a remark made by Copernicus in the forward to the
first book of the *Revolutiones*. There Copernicus had seen one of the principal difficulties of his discipline in the fact that the paths of the heavenly bodies, and especially of the planets, could be reliably calculated and completely known only ‘with time’ and given many previous observations handed down to later generations. The deceptive appearance of completion in Ptolemy’s system and its so long uncontested acceptance had arisen precisely because the available astronomical tradition had been too brief and consequently had not yet allowed certain motions in the heavens to become noticeable. The present, in which Copernicus speaks, possesses better preconditions for its theory building because the interval since the founding of astronomical science has grown longer, and thus the distance for the comparison of observations is greater. Here, for the first time, the role of the time factor is seen in the fact that a ‘progress’ of knowledge is accomplished not so much *in time*—as the continual increase of a mass of knowledge, on the basis of the stock achieved at any given time—as by means of time itself, that is, on the condition of purely temporal distances between observations of identical objects.

The required intervals are not to be thought of as quantities of an abstract cosmic time, however, but rather as historical times filled with human life, times in which a will and concern for tradition receive and preserve knowledge once it has been collected. Only thus does elapsed time become the ‘base line’ that makes possible the accuracy necessary for the determination of very small changes and differences from given predictions. Copernicus mentions, in addition to the problem of the length of the year, the displacement of the points of the equinoxes as a magnitude that had moved into the realm of quantitative determinability since the time of Ptolemy. Historical time, then, is not the dimension of the self-development of rationality and the accumulation of empirical data but rather the condition of the possible objectivity of certain empirical magnitudes themselves, inasmuch as they achieve observability and measurability by means of time. But this is accomplished only if man also, in his theoretical interest, lives beyond himself and the finite duration of his existence and, by creating and securing tradition, makes humanity itself into the bearer of an effort that surpasses the capacity and the actual possessions of the individual, an effort that is internally homogeneous by virtue of ‘method.’

Giordano Bruno included this idea, which drives directly toward the modern idea of method, in his organic overall conception in a
very characteristic way. Copernicus was able, he says, to see more than the ancient astronomers because 1,849 years had elapsed between Eudoxus and him. It is true that wisdom, as Prudencio says in the dialogue The Ash Wednesday Supper, lies in antiquity, but, so Teofilo replies, intelligence lies in the number of years. And now there follows that reversal of the familiar schema of the age and youth of the epochs, with the help of which the self-understanding of the modern age was to formulate itself: An appropriate way of dealing with talk of 'antiquity' leads to the opposite of what is thought by one who appeals to 'the ancients' as binding authority, namely, to carrying over the sequence of phases of the individual life to the history of humanity, so that the relation between youth and age becomes relative to the amount of time that has been traversed.

But then one would have to say that we, who are contemporaries at a given moment, are older and have more time behind us than our ancestors did.9 “The judgement of Eudoxus, who, although astronomy did not first find its rebirth in him, still did not yet find a lengthy astronomical tradition ready at hand, could not be as mature as that of Callipus, who lived 30 years after the death of Alexander the Great and could already, with the advance of time, compare observation with observation. For just this reason, Hipparchus had to have more knowledge than Callipus because he observed change up to a point 196 years after the death of Alexander. The Roman geometer Menelaus possessed the prerequisite to comprehend more than Hipparchus because he had before him the change of motion (la differenza de moto) up to 462 years after Alexander's death. Mohammed Aracensis [Al-Battānî] had to observe still more, 1,202 years after that. But Copernicus, as good as our contemporary, had seen yet more after 1,849 years. But some of those who came after him have not after all been wiser than those who were before him, and the multitude of our contemporaries have learned nothing more; this is because the former have not lived the years of the others and the latter do not live them, and—the latter as well as the former—even experience the years of their own lives like lifeless ones.10 Thus time cannot merely take its course and pass by as an objective datum; it must be lived as history, as conscious tradition, by the later ones in relation to the earlier, just as both must consciously 'live' their own present if the integration of a humanity-wide continuity of experience is to succeed.11
The organic model of an individual life from birth to death supplies the leading metaphor; but in contrast to older parallels between the individual life and the history of humanity, the genuinely ‘organic’ aspect, the conception of the form of the overall passage of history, begins to drop out of the metaphor here. The schema is relativized, in that those who are present at a given time can be both the old and the young at once: the former in relation to their predecessors, the latter in relation to their successors. What is more, the organic element of the high point of maturity and the aging and deterioration that then set in is left out—and once again no doubt because the Nolan shrinks from centering, because he avoids the possibility of questions regarding the high point, the axis of historical symmetry, just as painstakingly as he avoids those regarding the center of the world. The localization of the present in history is a question not of relation to a center, to an axial event, but only of whether it is day or night. For it is from this stipulation that the answer to the question of what one may expect of one’s own judgment, or in what suspicion one must hold the dominant opinion or the impression nearest at hand, depends.

The importance of such self-localization results from a course of history that is regulated by a supposedly higher lawfulness; it can also imply unnerving self-association with downfall, with the ‘decline of the West,’ for example. But related to the situation and the self-consciousness of the Nolan, which knows itself to be at the dawning and sunrise of the epoch, this fatefulness is encouraging, promoting a summoning up of effort and the prospect of still unsuspected possibilities. “Aristotle remarked that the changeability that is the rule with other things determines opinions and their various effects no less. If one were to evaluate philosophies according to their age, then that would be like wanting to decide whether day or night came first. What we must direct our attention to is whether we find ourselves in day or night and whether the light of the truth is above our horizon or whether this light shines in the horizon of our antipodes—whether, that is, we or they are in darkness and consequently whether we, who have begun the renewal of the old philosophy, stand in the morning, so as to make an end of the night, or have arrived therewith at evening, so as to end the day. And that is certainly not difficult to decide. . . .”

It becomes clear what is of importance in this self-localization in history: the encouragement of consciousness to begin absolutely anew. Together with this there is the certainty that one does not stand, in relation to
the transmission of the ancient stock, in the resignation of the evening, but rather that, proceeding from that stock, one can win new achievements, which are not absent from the tradition as a result of mere accident or failure but simply could not be present in it.

Here, however, the apparently rigid principle of repetition, of the cyclical periodicity of world history, changes; because these cycles are bound together by a tradition that reaches across them, as though bridging the nights between the days, novelty, gain in truth, becomes possible. And that does not relate, perhaps, only to supplementary, nonessential material, but rather essentially new possibilities are opened up.

In the fifth book of The Ash Wednesday Supper, the talk is of the fact that the illusion of the eighth sphere of the fixed stars, which encloses the cosmos on the outside, could only be effectively destroyed by very long term comparisons of observations from which movements of the fixed stars with respect to one another could result—but nothing had been done toward handing down the necessary data because no one believed even in the mere possibility of such displacements. The point of departure of inquiry is the knowledge not only that a certain thing exists but also that something is possible and compatible with other known facts, and what can be inferred from that.\textsuperscript{15} Man’s impotence consists essentially in his reckoning with, and seeking to behave appropriately toward, only \textit{those} realities that he knows of or thinks he knows of. An index of the beginning of the modern age is the fact that the suspicion of an obscure field of possibilities, a preponderance of terra incognita round about the known, arises and determines the directions of thrust of curiosity and needs.

It is evident that ‘imaginative’ spirits of the speculative type of the Nolan could play a role in the articulation of the consciousness of the incompleteness of the familiar reality. But it is also evident how the methodical idea of widening what is suddenly perceived as the narrow province of the familiar is formed. What comes into play here is not only the pedantry of the intelligence that sets up rules and maxims, as with Bacon and Descartes, but also an imagination that is always pressing toward total conceptions, exhaustive schemes, like that of Giordano Bruno. He posited as a criterion of the best philosophy, besides its working toward the perfection of the human spirit and besides its truth content, the requirement that it must be “cooperatrice di natura” \[a\ cooperator with nature]\textsuperscript{14}. This is still meant in a way
that is distant from any technical utilization of nature. Rather it concerns man's capacity to 'measure up to' the standard of nature by means of the technique of his cognitive methods, as when, in the long-term comparison of astronomical data, he rescues even the motionless prospect of the heaven of the fixed stars from its apparent unchangeability.

Time enters the theory of nature as the natural baseline. Time is seen as not only the continuum in which the stock of facts is progressively enriched but also the distance between theoretical points of view, the space in which parallactic changes in the field of what was hitherto supposed to be eternal and unchangeable are to be expected. This requires the constitution of a subject that is permanent in time. It presupposes that the concrete subject in history learns consciously and methodically to transcend itself as an individual and knows how to dispose over the time that is beyond its existential capacity, just as, in spite of being fixed to the earth as its standpoint, it begins to project its extrapolations out into space. That in the process each step will be the presupposition of the next one, that each basis arrived at leads to new ventures, that each step in Copernican consistency will consider itself as still insufficiently Copernican, that the universe of suns and earths will provoke ever newer superposed systematic constructions like the Copernican solar system—here, before the threshold of the seventeenth century, all of this cannot yet be anticipated. That is why Giordano Bruno, in spite of the consequence of acentricity that he drew from Copernicanism, still remained so distant from the rationality of the Enlightenment and from the principle by which to master the infinity he gave to the universe.

This distance from the Enlightenment also holds for the Nolan's relation to Christianity and his critique of the dogmatic core of Christian theology. If it is correct that the model of the universe that Giordano Bruno imagined was not yet equipped to serve as a guide for a new rationality, then this statement would have to hold equally for his critique of theology, insofar as cosmology was also supposed to have provided the pattern for that critique. An indication of the possibility, indeed the probability, of such a foundational relation was already given us in the concept of time and history, specifically, in the rejection of any centering, any symmetry construction, any assumption of an absolute point of view. On that account, what F. J. Clemens writes about Bruno's relation to Christianity and his dependence on the Cusan can scarcely be correct: "For his opposition to Christianity,
although it... turns out to be unconditional and a matter of principle, simply cannot have been such originally because the Nolan took his departure from Cusa, and the initial agreement in principle is still evident; and consequently the opposition in principles must have been introduced by another, more subjective one; so we are left as the deciding factor for the development only the... opposition that was grounded in Bruno's personality and his natural predispositions, which attacks Christianity first of all in its moral teachings. In its method, this approach relinquishes the possibility of using precisely the reception of the Cusan in Bruno, which is so palpable on the level of means of expression and representation, so as to exhibit in the continuity of the medium the discontinuity of systematic function and logic.

Common to Bruno and Nicholas is the Platonizing attempt—which with Bruno in fact reaches all the way back to Parmenides—not only to take up the problem of unity and plurality, of unity in the manifold, as a metaphysical and cosmological problem but to apply it to overcoming the pluralism of the tradition. For the Cusan, the escape from the forced unitary form of Scholasticism, leveled off on the plane of Aristotelianism, meant that even the disreputable names of a Protagoras and an Epicurus could have their share in the complex substance of the truth. Even the multiplicity of religions could be brought into an almost perspectival schema of concordance. With Giordano Bruno we are nearer to the age of criticism. In place of the great reconciliation that hovered before the Renaissance of the fifteenth century and seemed possible as an overcoming of the Scholasticism that continually pressed toward the magisterial determination of sic et non [thus and not (otherwise)], we have the literary form of a mythical self-criticism such as is imagined in the Expulsion of the Triumphant Beast as the ancient pantheon sitting in judgment on itself. Bruno's paganism here becomes neither the return nor the renaissance of the ancient myth of the gods but rather the transparent medium through which the moral basis of the formation of shapes of the divine is supposed to be made visible. The great revision of the constellations that is put in the mouth of Jupiter in this mythical dialogue is an allegory for the tracing of what is historical back to its supposed universally valid ground, a tracing that the new age was to set for itself as its task. One theology is not decided against and described as overcome from the point of view of another, nor is an eclectic concordance of theologies held to be still attainable; rather the critique of theology is begun from
the point of view of the principle of its possible binding force. The standpoint to which the aging Jupiter is ‘converted’ is that of a morality as the criterion of every theology.

The satire on the gods, which looks like the clothing of a moral treatise in Renaissance garments, thus becomes the literary form for implicit criticism of the fundamental theological ideas of Christianity as well. It opposes the voluntaristic foundation of ‘justification,’ that is, the doctrine, shared by the late Middle Ages and the Reformation, of the unfathomable dualism of election and damnation. What it is for man to be well-pleasing to the Divinity should be left neither to concealment nor to a rationally inaccessible revelation. The trees that grow in the gardens of the law are intended by the gods to bear fruit, and in fact fruits by which men can nourish and preserve themselves and in which the gods have no other interest and satisfaction than this—a statement that is clearly directed against a paradise in which there grow forbidden fruits or fruits reserved to divinity alone. Love and fear of the gods should secure men’s socialization and hold them back from everything that can harm them.

So far that is quite ‘enlightened’ and has the unspecific generality that was not to avoid the reproach of triviality. But Bruno also aims more accurately; he makes Jupiter not even spare his favorite bastard son, Hercules, in clearing up the starry heavens and then puts in the mouth of Momus the praise of the highest god, that he did not allow his fatherly love to lead him to restrict his principle of justice in the reformation of the catalog of constellations. The apostrophising of Christianity and its central theme of the Son of God as the Son of Man, and the transition from the metaphorical fatherhood of God—the Creator to the mystical fatherhood of God the Savior, is palpable. A less disguised statement is the infamous passage toward the end of the Spaccio [Expulsion], where the story is told of the banishment of the centaur Cheiron, whose double nature is mockingly defined in the theological language of the hypostatic union: “in cui una persona è fatta di due nature, e due sustanze concorreno in una ipostatica unione” [in which one person is made of two natures, and two substances concur in one hypostatic union].

For understanding Bruno, everything depends on grasping what is compelling in this rejection of the theological idea of the union of two natures, of the identity of the divine person in its union with humanity, in connection with his new concept of the world; for him, this central
Christian event becomes the symbol of a theological 'model.' The concept of predestination is representative of a system of extraordinary actions and conditions, preferences and acts of grace, which is superimposed on a reality that seems to be established as 'order,' as 'nature,' solely in order to make the extraordinary, the supernatural, definable. Bruno, on the other hand, sees forms and natures as equivalent possibilities, over time, of successive participations in an eternal redistribution of roles, by which the ability of anything to become anything is accomplished. Both theocentrism and anthropocentrism are the abandoned counterpositions of this new metaphysical model, in which the Divinity bears innumerable names for a transcendent substance that stands behind everything, and is no longer the 'person' who could choose one nature from the abundance of the forms of his creation for his Incarnation, but is rather the divinitá [divinity] that 'appears' in all forms, without simply becoming one of them and definitively entering into it. That Bruno's God, too, can only be defined by a negation, in this case the negation of personality, is no longer the logical means of mystical transcendence but rather of precisely the opposite, of asserting the impossibility of such transcendence.

The problem with which the Cusan had struggled and with which every attempt to come to terms with the late medieval crisis had to deal—stabilizing the world in the face of its being put in question by theological absolutism—now is no longer dealt with by means of a relation of image to original, but rather by means of a congruence between divinity and worldliness. One runs no risk in designating this as "naturalization," because it reoccupies the position of the sovereignty of the divine will with the necessity of the self-transfer of the divine into the worldly—and thus with the necessity of the identification of possibility and reality, of potentia absoluta and potentia ordinata [absolute power and ordained (regulated) power] (to continue to formulate this in Scholastic language). Because the world as the Creation absolutely 'exhausts' the potential of the ground of being, it becomes a contradiction to think that the Divinity could still have realized a new and supremely special possibility, after the Creation and into it, indeed against it. If the world as such already credibly represents God's self-extravagance, then He cannot have made Himself once again into the historical fact of an Incarnation in it.

Bruno directs everything against the one premise that fascinated Scholasticism and continually drove it to new deductions, that Bon-
aventure paraphrased with the metaphor that while God had given away much of His treasure when He created the world, He had not given away everything: *Multa de suis thesauris profert, non omnia.* and to which William of Ockham gave the sharper inverted formulation that He is able to create much that He does not want to create: *Multa potest facere quae non vult facere.* In another passage, while discussing the question whether God could create something that He neither has created nor will create, Ockham gave his affirmative answer the justification, which is significant in our context, that the exhaustion of the totality of what is possible would qualify the Creator as a mere natural cause. The Nolan does just this, and he does it in opposition to the consequences that the principle of personality, as voluntarism, had produced. This is the very point upon which (on the one hand) Copernicanism—insofar as it had prepared the way for the metaphysical consequence of infinity with the cosmologically necessary assumption of an immeasurably great world radius—and (on the other hand) the epoch’s interest in self-assertion, in opposition to nominalism, converge. Copernicus offered the point of departure from which to introduce the infinity of the universe, not as a mere speculative extravagance, but rather by letting the consequence of a scientific insight, as it were, ‘unfold’ on the basis of a metaphysical need that had become historically pressing. Bruno shows the age that the new perspective of the (optically unexpected) immeasurability of the heavens, which followed from the surrender of geocentrism, did not need to be translated into disappointment, into the diminution and annihilation of man with respect to the world. Instead, this could be the price paid for overcoming the distressing consciousness of contingency that man had experienced in himself and the world and that now was removed by a newly characterized world. Hence Leonardo Olschki is mistaken when he says of Bruno that he “thought that he had got rid of the Cusan’s theological conclusions by transferring the latter’s doctrine of the infinity of God to the universe.”

One should rather say that at a point at which the Cusan stood still with an arbitrary and questionable construction, Bruno took, and was able to take, the decisive step, because in the meantime there had been Copernicus. The transfer of infinity from the divinity to the universe is not a taking over and transformation of a historically pre-given doctrine, but rather a resolute contradiction of one consequence of the conception of the *potentia absoluta* [absolute power] that was
developed and thought through more and more radically by the Middle Ages—a conception in which the world was represented as absolute power's self-restriction to an arbitrary particle of what was possible for it, and thus drew upon itself the rationally intolerable imputation of unfathomable facticity and contingency. The point at which the Nolan goes beyond the Cusan's position can be precisely indicated: In the second chapter of the second book of the Docta ignorantia, the Cusan says that the infinite form is only taken up in a finite manner, so that everything created is, so to speak, a finite infinity or a created God (quasi infinitas finita aut deus creatus), and consequently could be more perfect than it is, and that with the "Let there be!" of the Creation, it was only because a God could not come into being (quia deus fieri non potuit) that something came into being that could become ever more similar to God. This sentence designates the limit that is set to the penetration of the omnipotence speculations of theistic religions and their scholasticisms. That limit is in the rejection, which cannot be based on a logical contradiction, of the possibility that omnipotence could become absolute precisely by being able to posit its equivalent, by reproducing itself. Of course, the God Who is jealous of His uniqueness compels one to exclude this idea. But is that an element that a metaphysical theology must accept without inspection?

Perhaps Bruno's theological sensitivities, which came together in the syndrome of the 'Incarnation trauma' and made him become a heretic—not a sectarian of arbitrary wilfulness, but the significant 'heretic' of the beginning of the modern age—can now be systematized in terms of their central impetus. The seemingly quite diffuse accusations and admissions of the records of the Inquisition gain consistency in the process. In particular, it no longer seems a mere evasion when Bruno insists that his point of departure in these questions was purely philosophical and without regard for what faith commands one to believe, so that his intention consisted not in opposition to religion but rather in the exaltation of philosophy. Consequently his theses had not directly offended against the teaching of the Church, though perhaps they had done so indirectly. With respect to his specific philosophical views, he mentions the infinity of the universe as the effect of infinite divine power ("un infinito universo, cioè effetto della infinita divina potentia"), and in fact with the explicit reason that he would have regarded a finite world as unworthy to be the product of the divine goodness and power. This infinity, he says, relates to both
the magnitude of the universe and the number of worlds. Further, he holds that the earth is a heavenly body like the other heavenly bodies and that there is a universal providence, as an omnipresent world soul or nature, but also explicitly as God's essential omnipresence "in modo inexplicabile" [in an inexplicable manner].

In mentioning the doubled infinity, Bruno spontaneously and explicitly admits that the truth according to faith could be affected by this indirectly: "... onde indirettamente s'intende essere repugnata la verità secondo la fede." This shows sufficient candor for us to be able to believe him also when he says that he adhered to the origin of the world from Creation and to the complete dependence of the creatures on this cause. Bruno does not help his inquisitors to understand the inner connection between this position and his theological offenses, although he goes on immediately and without renewed questioning to the problem of the Trinity and Christology. He was not able to comprehend the Incarnation with the concepts of philosophy; he doubted and faltered in his faith: "Io stando nelli termini della filosofia, non l'ho inteso ma dubitato, e con incostante fede tenuto...."

Could it be that Bruno himself did not know how to make explicit the decisive connection between his infinite cosmology, his concept of creation, and his perplexity about the Trinity and Christology—namely, that his infinite universe occupied the very position that the intratrinitarian generation of the second Person occupied in theology?

A God who must actualize what He can necessarily produces Himself once more. Generation and creation coincide. Where the Creation exhausts God's productive power, there cannot be any more room for the trinitarian process. But if, and that is the next step, the absolute self-realization of divine omnipotence is the 'world' and not a 'person,' then the character of personhood must also be denied to the ground that reproduces itself. Accordingly Bruno rejects the concept of a 'person' as a new introduction of Augustine, which he finds incomprehensible. In a later hearing, he repeats that the predicate 'person' seemed to him to be incompatible with divinity.

It seems to me that the analysis cannot advance beyond this point. But the result pulls together what we see as the motley, scattered world of the Nolan's ideas, imaginings, and inherited ideas into an intelligible structure. Bruno could after all be the "metaphysician of Copernicanism"—a description that Max Scheler wanted to see kept within quotation marks.
Chapter 3

Systems of ideas—whether explicitly formulated as such in relations of substantiation between propositions and correlations between regional groups of propositions or only potentially formulable as abstracts of the explanatory accomplishments of a historical mental formation or an individual mind—systems of ideas stand to one another in certain relations of equivalence of their elements. This is the more true, the nearer they are to one another in history, so that the later one must transform the assertions of the earlier into questions that it now claims to answer itself. It is not only when the canon of questions, as such, and thus the formal structure of positions, is decisively altered—that is, expanded or reduced—that we have to do with what we call the epochal threshold.

This model conception can be verified in connection with the confrontation of the Nolan and the Cusan. To begin with, it is the case that one can only understand the Nolan’s metaphysical cosmology if one sees it in relation to the systematic ‘volume’ of the Cusan’s metaphysics. Giordano Bruno’s universe, as the necessary and unreserved discharge of the potentia absoluta [absolute power] of God the Creator, occupies the systematic position space that for the Cusan had been occupied by the intratrinitarian generation of a divine Person, the creation of the world, and the clamping together of both in the Incarnation of the Son of God. One can verify this once again in the critical point of differentiation of the two systems, in their attitudes to the Incarnation.

For the Cusan, the Incarnation of the Word was the supplementation and perfection of the Creation, complementum et quies, as he says in the sermon Dies sanctificatus. Only in this divine self-insertion into the Creation does God’s power fully actualize itself (quiescit potentia in seipsa). The duality of generation and creation is closed at this juncture and integrated into the unity of God’s self-expression. But this presupposes that time, by which an interval is laid between the Creation and the Incarnation in the midst of history, is a purely human measure of successiveness, which is imposed on the inner and essential unity of the divine action. The Cusan’s theory of time as a category produced from the human spirit accords with this.

Only in the temporal form of human speech is it admissible and necessary to say that the Creation was incomplete and imperfect and contained a reserve of something that was possible for the Divinity before it received its Christological complement. But still more: The
Cusan also interpreted this connection teleologically and used it to prove the singularity of the created world, since the uniqueness of the Son of God presupposed the uniqueness of the world into which he could enter and to which he could bring perfection ("Et ipse quia unus, est unus mundus ... "). And still another step: The essential constitution of this world was defined and relieved of contingency by the complement that was provided for it, in that what remained in reserve for perfection determined just what would be capable of this perfection: "Et propter ipsum omnia, quae in mundo sunt, id sunt quod sunt" [And on account of this, everything that is in the world is what it is]. Just this framework of positions now yields the condition that was to be fulfilled by the Nolan’s cosmological speculation. Since for him creation and generation lose their differentiation, since the Creation is already the whole of what could and had to ‘come forth’ from the discharge of the \textit{potentia absoluta}, not only the Christological complement but also its teleology, which required the singularity of the world, falls away. The \textit{infiniti mondi} [infinite worlds] fill the scope that had been left open by discontinuing the restricting teleological intention of the Cusan’s speculation, a scope in which the unreserved logic of absolute omnipotence’s complete self-exhaustion could now be discharged as the double infinity of the created world.

The universe of Nicholas of Cusa was the outcome of the \textit{potentia absoluta} only insofar as that power imposed on itself the ritual of action of a \textit{potentia ordinata}. Only this makes it comprehensible that that power posed conditions, in turn, for man’s salvation, which made up an agenda separate from that of rational morality. In spite of his effort to eliminate the voluntaristic element from his metaphysics, the Cusan had only, as it were, shifted it further back, made it less easily recognizable in the obscurity of the speculative prehistory of the Creation. “The world,” so he had written in the first book of \textit{On the Globe Game}, “is not made so perfectly that in its Creation God made everything that He could make, though, on the other hand, it was made as perfect as it could become... But the ‘ability to become’ of that which was made is not the absolute ‘ability to make’ of almighty God.” One can understand that this is a desperate attempt to remove the contingency of the world as a scandal to rationality without abandoning God’s personhood. The strained character of this attempt indicates the path that leads—instead of to the solution of the problem, which appears impossible—to its elimination.
That the purpose is to take the edge off of the problem rather than to solve it is shown by yet another comparison with Descartes, who did not move, as far as the formulation of the problem is concerned, beyond the point where the Cusan intervened—except that he brings the radical insecurity of voluntarism, as a merely methodical preliminary stage, into a processual relation to the guaranteeing operation of the *ens perfectissimum* [most perfect being]. God is reduced, for the benefit of His auxiliary function in theory, to the single attribute of His goodness. That is not indeed the denial of His personhood, but it is its purposeful amputation and reduction to the metaphysical functional God, Who has only to supply the "maître et possesseur de la nature" [master and possessor of nature] with His license. Seen in such historical surroundings, Bruno is not an outsider, not the "knight-errant of a fantastic nature wisdom," but rather a magnitude that can be precisely classified historically and that clearly indicates the gradient of the problem.

But it is not enough to say that the Nolan philosophized further within the horizon of the given questions and only sought to give new answers. On the contrary, he pressed forward far enough to put the questions themselves in question, that is, at least as far as the possibility of their delegitimation. The firmest evidence of this is his inference, which sounds entirely naive, from the statement that the concept of a person had been invented by Augustine and had no authentic legitimation in the first daytime phase of our history, from which Bruno takes his models of thought, in the ancient world; from which he infers that it should be possible to extirpate from philosophical theology the questions that arose when ‘personhood’ was introduced.

For Bruno’s concept of God, the passage in the *Spaccio* [Expulsion] is essential in which *Semplicità* [Simplicity] is placed among the constellations, specifically on account of its similarity to God’s countenance, which consists in the fact that simplicity absolutely cannot go beyond itself; add to itself, or pretend anything, that it is its own immediate self-realization; but it has that self-realization as neither consciousness nor a concept. To think oneself and to have only oneself as the object of this thought was the distinguishing quality, found by Aristotle and through him convincingly offered to the tradition, of the pure and highest being; but the Aristotelian god needed only to move the first sphere of the heavens, by allowing himself to be loved by it, without for his part turning to it or even wanting this—he had an effect without
acting, in that his noetic reflection was translated into the physical metaphor of eternal circular motion. High Scholasticism made use of the pattern of theoretical self-reference and associated with it the element of will, which as the divine will now could only have itself as its goal. If this will wanted a world and a man in the world, it could want this only as the counterpoint of a movement that returns into itself: as means to and mediator of the *gloria divina* [glory of God].

The enormity of this conception of the God Who serves Himself and nevertheless so evidently manifests Himself, in the world, in His dissatisfaction with Himself has always been perceived in its consequences only, and scarcely ever in the premise. It is personhood—as the imputation of biblical ideas to ancient metaphysics—that first brings out the enormity in this amalgam. Bruno opposes to it the primeval element of the divine, which was given privileged status, alongside immortality, by ancient thought: the self-sufficiency of divinity. Its autarky means that it intends to be neither more nor anything else, and thus excludes not only the will, as a predicate, but also ‘becoming objective to itself,’ self-consciousness. Self-consciousness as the self’s becoming noteworthy and obtrusive to itself is seen here as resulting from a basis of dissatisfaction with oneself, as the decomposition of unity and simplicity into the duality of object and subject, of knowing and known, and thus for the first time as the origin of the will. Here Bruno is taking aim at the connection—which Augustine and Scholasticism had set up—between self-consciousness, as God’s personhood, and the trinitarian process of generation, in which God necessarily, that is as person, loses His simplicity [*Einfalt*: literally, onefoldness] and only recovers His self-reference and closes the circle of reflexiveness in threefoldness. Against this theory of the divine self-consciousness, Bruno sets his concept of the “semplicissima intelligenza” [simplest intelligence], which finds its realization in the metaphor of light. With this mode of expression, Bruno gives the Neoplatonic tradition a critical applicability, against the concept of a personal God, which it did not originally have: light as excluding the circular process of reference to the world, light as absolute unconcealedness and radiating openness, of which it can only be said negatively that it cannot be hiddenness even from itself: “absolutissimo e semplicissimo lume, solo dunque se dice intendersi negativamente, per quanto non si può essere occulta.”

Here at the same time something is said about the manner in which the ‘world’ is founded in and results from the Divinity, namely, as
the self-manifesting unconcealedness of a principle that by its nature cannot withhold itself. The fact that there is a world is grounded in the nature of the Divinity, not in His will. The world is the correlate of God's impersonality, and consequently it is manifestation, but not revelation. Revelation presupposes the possibility of God's being able to conceal and reserve things for Himself. The world is not a communication of the Divinity, and consequently it is not the 'book of nature.' It is not accentuated like a mode of expression, it is not 'order' in the sense of a 'documented' authority originating in the will and its positing and to be made binding for another will. The Nolan's nature does not provoke the hermeneutics of a *lex naturalis* [natural law]. It is acentric, indifferent in each of its forms with respect to every other and in each of its positions with respect to all others. Consequently it is filled with movement and the metamorphosis of forms; consequently—and this is its most radical opposition to Leibniz's universe, which it anticipates in so many ways—it is ruled by the *princicpium rationis insufficientis* [principle of insufficient reason], insofar as one poses any other question than that of the right of the whole to existence.

"Plurality of worlds" here is not only rhetorical hyperbole but rather the necessary expression of the principle of unreservedness in the origin of what is real. If one world deserves to exist, all other possible worlds cannot be excluded from this. Put still more briefly: If anything at all exists, everything that is possible exists. That everything that is possible is equal before existence—this overcoming of the ontological comparatives that had proliferated since Plato, and of their legitimation of predestinations behind which thought could not penetrate—is Bruno's positivization of the nominalistic destruction of the traditional *ordo* [order] of reality. The pathos of the plurality of worlds—which was taken up so emphatically by the subsequent period—is based on the metaphysical assurance that the Divinity gave up everything and turned it over to the world, in which therefore anything can become of anything. Though this may not yet be formulable as an appeal to man's effective will, it still implies something like an original metaphysical command. Bruno put such a command in the mouth of the metamorphoser Circe in the preface to the *Eroici Furori* [Heroic Frenzies]: to traverse the world from form to form and to appropriate reality after reality in the succession of forms.

If the world is therefore nothing but the essential undisguisedness of divinity itself, the concrete contradiction of the *deus absconditus* [hidden
God] of theology, then there can be no special moments in its temporal subsistence either. Then it makes no sense to speak of a beginning, in which the constitution of the world was posited as an eidi
tically fixed and self-preserving or again and again self-regenerating substance, so that everything further would depend only on this 'beginning.' Instead, time itself becomes the real dimension of the self-reproduction of God, which is continuous, but of equal value in every one of its moments. For the Cusan, time was the instrument of the measuring spirit, mensurantis animae instrumentum; it was only the human aspect of a process that was at bottom simultaneous, operating out of eternity. For Bruno, time is just as much the correlate of the potentia absoluta as is infinite space and the infinite number of worlds in it, since this power must expend itself in every possible dimension. We could 'invent' no concept with which such a dimension could be constructed without contradiction, without its having to receive immediately the predicate of existence—this looks like the application of Anselm's 'ontological proof' to the reality of the world. At the moment, we need not concern ourselves with the deficiencies of the argumentation but only with its productivity in exhibiting the consistency of the speculative system: in this case, the sharpening of the differentiation between Bruno and the Cusan in regard to the systematic position and function of the concept of time.

The reality of time is based for Bruno on the fact that it alone admits the identity of possibility and reality as 'world,' whereas the Cusan was concerned to distinguish the possibility of the world in the sense of the Aristotelian doctrine of potentiality from the possibility of God in the sense of the theological potentia absoluta, so that while the world does fully actualize its possibility in its reality, it does not actualize His possibility [potentia], in relation to which it retains precisely the character of 'imprecision,' of the 'could be more' that always remains open. In the third book of the dialogue On the Cause, the Principle, and the One, this contrast to the Cusan's speculation on possibility is clearly discernible. For Bruno, the posse fieri, the world's ability to 'become,' is not a self-determination of the divine will as potentia absoluta but rather the symmetrical correlate to omnipotence, just another aspect of the same magnitude, so that the eternity of the creative capacity is necessarily accompanied by the eternity of the world's existence.
But this deductive anticipation is contradicted by the consciousness of contingency that man has with respect to himself and the world, his suffering of finitude in the presence of the idea of infinity. His penetrating experience of himself is that while he is what he can be, he is not *everything* that can be; while he is the actualization of his *eidos* [form, Idea], he is at the same time the exclusion of every other eidetically definable thing. Here finite time excludes the individual entity from the abundance of possibilities because it holds the concrete being closed within the limits of its nature as a member of a species and leaves it only a coming into being and a disappearance within this outline.

Time as an infinite dimension tears open this limit. If the totality of possibilities can be played through in it, there is no coming to terms with the contingency of what happens only once, what exists now; instead the substratum enters into the great process of variation, into the everlasting metamorphosis, which is how ‘nature’ is to be conceived here. Movement, therefore, is necessarily the fundamental character of what exists, and the distinction, which was essential for the Aristotelian cosmology, between the central body at rest and the bodies in motion on peripheral paths has lost its meaning for Bruno. Here Bruno presses beyond Copernicus, who had still only replaced one central body at rest with another.

But the whole, the world, does not take part in this dissatisfaction of the individual and thus in its movement; it is not only the summation of its individual members and the epitome of their ontological characterization but also their essential surpassing. It is this attempt to place the whole on a different level from its parts that motivates Bruno’s so characteristic reference back to Parmenides, which becomes extremely clear in the Paris disputation theses of 1588 on the Aristotelian physics and cosmology, especially in article 17. In Aristotle, he says, the movement of the heaven of the fixed stars, that is, of the outermost sphere, is not an arbitrary physical determination but rather belongs to the heaven by virtue of its essential definition. But this first heaven is not, of course, a world body among the others that are in motion within the world and can be discovered to be moving by their relation to the first heaven. Movement of the first heaven meant, then, something new in regard to the reality of movement, namely, that with it, the empirical confirmability of *one* movement was in principle no longer given. A movement of the whole becomes
a nonsensical assertion, and such a paradox practically demands that one bring up the Eleatic metaphysics.

To Bruno it seems equally nonsensical that there should be both moved and unmoved world bodies. All individual heavenly bodies, he says, are moved individually, and thus act upon one another; they are all alike in that respect; but as soon as a movement of the whole appears, this must turn out to be an illusion. Hence, still independently of astronomical verifiability, it is philosophically necessary that apparent total movements of the universe, like the daily motion of the heavens and the annual movement, are purely phenomenal, that is, that they must result from change in the observer's standpoint. By the detour via Parmenides, Copernicus is justified in having pronounced the movement of the heavens as a whole, contrary to the tradition since Aristotle, to be an illusion and the movement of the individual world body on which we find ourselves to be the cause of this illusion.

Bruno attempts at the same time to interpret Aristotle better than the latter had understood himself when he said that circular motion is essentially appropriate and natural to heaven. Here he should have used the plural and said that circular motion is proper to all heavenly bodies by nature, but that the turning around the earth of the supposedly rigid vault of the heavens is only an illusion. It had to be such in the systematics of Aristotelian physics if only because the distinction of rest—as the goal of all movement and the state of achieved perfection—could not possibly belong precisely and uniquely to the earth. This perfect and therefore resting thing is, for Bruno, only the whole, in which the movements of all individual members are integrated into the result of the self-exhibition of the *potentia absoluta*. Thus rest and infinity become identical because only infinity is without the dissatisfaction of what is finite.

Bruno had already referred back to Parmenides earlier, in the fourth of the Paris theses. According to Parmenides, Bruno says, that which exists is spherical, absolutely one and absolutely homogeneous. From this the correctness of Melissus's view is inferred that it must then also be infinite. That infinity and the form of a sphere do not exclude one another is substantiated with the pseudo-Hermetic doctrine, familiar from the Cusan, of the infinite sphere whose limits are nowhere and center everywhere. A totality of being that was conceived as finite and spherical could not, he says, fulfill the requirement of absolute homogeneity, since it would be uniform in every direction only from
its center: "Quod est finitum non est ubique aequale, sed a centro
duntaxat...." In a world satisfying Parmenides's demand—as it is
understood by Bruno—every point, paradoxically, would have to be
the center of a sphere. Thus Bruno's principle of indifference surfaces
again. For the universe of sense perception, it implies that no star, no
world body, and no standpoint can lie on the periphery for another
one, without itself being a possible center, so that from it also a full
horizon and the equivalent illusion of a vault of the heavens would
be given.30

If we return from here to the text in De la causa, it turns out that
the reception of Parmenides, whom Aristotle treated so badly ("igno­
nobilmente trattato da Aristotele"), and that of the mystical doctrine
of the infinite sphere explicate the concept of a universe that realizes
in its unity the identity of possibility and reality. The meaning of this
universe for the description of the difference between the epochs
results from the fact that it not only draws to itself theological an­
thropology's unique predicate of the "image and likeness" but also
reabsorbs the trinitarian theology's predicate of the "only-begotten."
Thus it draws the triad of the Cusan's metaphysics together into one
point: "Lo universo, che è il grande simulacro, la grande imagine e
l'unigenita natura...." [The universe, which is the great likeness, the
great image and the only-begotten nature....]. But this holds only if
one coordinates time—as the dimension of movement and of running
through possibilities but also of the unity of the many that are scattered
in individualities and constellations—with the concept of space, so as
to remove from the identical substratum of unceasing change of form
the metaphysical odium of the mere negation of definiteness, which
it had borne since antiquity.41

As has become evident, in Bruno a Copernicanism drawn out to
its consequences and a reception of the "old, true philosophy" are
mutually illuminating. We cannot expect any unambiguous result of
the analysis to indicate that one of these elements had temporal or
logical precedence and that the inclusion of the other was founded
only in it. Thus it becomes understandable that the question of the
truth of Copernicanism—which had only secondary importance for
the purely astronomical calculus, and the exclusion of which, since
Osiander's foreword to the Revolutiones, had been meant to blunt the
Copernican controversy and to neutralize the theological and meta­
physical vulnerability of the system—receives its full weight for Bruno.
In the third dialogue of the Cena [The Ash Wednesday Supper], he makes his Teofilo cite this foreword of Osiander’s in detail and ridicules it as the work of an “ignorant and presumptuous ass” (“Epistola super-liminare attaccata non so da chi asino ignorante e presuntuoso”), who, as a questionable doorkeeper, serves the master of the house and his venerable knowledge, without whose acknowledgment the whole art of astronomical reckoning is only an ingenious pastime. Copernicus, Bruno says, was not only the mathematician (to which, in Bruno’s eyes, he had been demoted) but also the natural philosopher who had proved, not merely introduced as an assumption, that the earth moved. The extent of his insights could very well compare with everything that Aristotle and his school had accomplished in the investigation of nature. The conception of a revolution of the heavens as a whole is “falsissima, contra natura e impossibile” [most false, contrary to nature, and impossible], indeed the whole of nature cries out against the assertion that the earth is unmoved. But precisely in connection with the Copernican certainty that he asserts, Bruno insists on his claim to have been the first to bring the full light of day after the twilight of sunrise. Here Copernicus steps back into the great series of supposed forerunners, from the Pythagoreans to the Cusan. They had all, he says, been timid and uncertain in asserting the new and had spoken more out of the conviction of faith than from that of knowledge. He himself was the first—with his authentic and firmer principles, and without any appeal to authorities, but by means of living perception and reason—to make the new system as certain as anything at all.

However great the pathos with which Bruno emphasizes that he procured certainty for the truth of the Copernican system, he did not die for this truth itself. Seen in the broadest perspective, it did indeed have a crucial function in the genesis of his thinking; but in relation to the consequences Bruno thought he could draw from it, it sinks back into the status of a preliminary phase and had only the importance of a key that had opened access to a speculative space. Infinity, with its characterization as the coincidentia oppositorum [coincidence of opposites], swallows up finite realities and problems whether their determinate qualities are of one kind or another. One would simply have to declare a contradiction in Bruno’s evaluations and accents—especially in connection with statements between which there is, biographically, no space for such a thing as ‘development,’ for example, between the
Cena [The Ash Wednesday Supper] and the dialogue De la causa, both of which appeared in 1584—if one did not introduce into the analysis this distinction between genetic function and systematic position.

While the entire Ash Wednesday Supper is devoted to establishing the truth of Copernicanism, the dialogue On the Cause terminates by again divesting the Ptolemaic/Copernican antithesis of its relevance vis-à-vis the infinite universe: “Even if an individual world moves in relation to and around another, as the earth does in relation to and around the sun, yet nevertheless no world moves in relation to the universe itself or around it, but only within it.” Thus the Copernican truth is lost in the higher-level truth that it itself first made possible. This sublime indifference of systems embraces all finite beings and their proportions to one another, their places in the ‘Scholastic’ order, and also touches man and with him the doctrine of a God Who was supposed to have irrevocably involved Himself in human nature as His privileged creature.

During his trial, and specifically during the hearing of June 3, 1592, in Venice, Bruno will appeal to the principle of the indifference of the finite vis-à-vis the infiniti (finiti ad infinitum nulla proportio) [there is no proportion between the finite and the infinite]. Without naming him, he summons up the Cusan, who had used this principle to prove the necessity of the Incarnation for salvation in a world that by itself and by virtue of its nature can have no relevance for an absolute and infinite being. Only by God Himself wanting to make Himself into a piece of this world could it acquire the quality that assures it of the divine interest. “Verbum non propter carnem factum est caro, sed propter seipsum” [the Word did not become flesh for the sake of flesh, but for its own sake], says the fundamental formula on the basis of which Christology transforms the divine self-interest into an interest in the world.

Bruno argues in the reverse direction. For him the infinity of the divine nature and the finitude of worldly/human nature exclude a real relation, and still more a union of both natures such as was familiar to Christology. The impossibility of a particular being in the world having a privileged status leaves only a choice between, on the one hand, the reformation of the Cusan’s theory of mediation into the pure principle of transcendence, according to which an involvement in the world could neither be credited nor imputed to the Divinity, and, on the other hand, the principle of consistent immanence, ac-
cording to which the Divinity is already all in all in the same manner forever and by nature. The decision between these alternatives was prescribed for Bruno by the fact that, as a result of thinking absolute power rigorously through to the end, he understood the world as the self-reproduction of the Divinity. The development of the principle of omnipotence that results from this presupposition is neither pantheistic nor polytheistic. Neither designation hits upon Bruno's authentic train of thought, specifically because the Creation occupies exactly the systematic position that belonged to the “only-begotten Son” in the theological tradition. But neither is Bruno's immanence that of the “God who is coming to be” [des “werdenden Gottes”: Max Scheler], whose becoming self-conscious, which is identical with the world process, presupposes the possibility of equating process and progress, from which Bruno is still remote.

Once more it is necessary to follow the orientation that the Copernican turning of cosmology had offered Bruno for his metaphysical speculation. The movement of the earth had been excluded in Aristotelianism with the argument that the constituent parts of the terrestrial body, being composed of the primeval element, earth, were by nature “heavy” and hence disposed to a position of rest, so that a movement could only be conceived as violent, and thus not as continuous. But the systematic basis of the earth's cosmocentric position of rest was not yet exhausted with this doctrine of the “natural places” of the four elements. In the Aristotelian philosophy, in the form in which it had become the scaffolding of medieval High Scholasticism, physics and metaphysics were connected in such a way that an unambiguous ‘direction’ was laid down, in which all cosmic processes took their causal course—and this direction was centripetal, traversing the cosmos from above to below, from outside to inside along the radii of the sphere. In this way all natural processes could have their ultimate cause in an extraworldly unmoved mover. In this absolute entity, Scholasticism found the philosophical equivalent of its God. Only the first moving thing, the outermost sphere, which is the heaven of the fixed stars, was directly set in motion by this unmoved mover; the spheres of the planets, the sun and the moon, in the order of their arrangement, were moved indirectly by way of the outermost sphere. At the very last, this causal chain—in a weakened form, far distant, as it were, ‘debased,’ from the regularity of its origin—reached the terrestrial body and determined the coming into being and ceasing
to be of the natural beings on its surface. The center of this cosmos was thus at once its weakest position and the one most distant from the divine origin of all movement. Hence the orientation from above to below in this system is at the same time the scale of value and of the dignity of physical objects, and this orientation is defined by the Aristotelian principle received by Scholasticism: *Sursum est unde motus* [Movement is from above].

Scholasticism's interest in carrying out the cosmological proof of God's existence gave this identification of the unmoved mover with the Christian God its sanction and would, by itself alone, have made the Copernican reform impossible as an intra-Scholastic event. For if the question of its physical possibility is posed, Copernicanism must actually reverse the 'direction' of the causality of movement in the Aristotelian system because it makes the majority of movements, especially the daily movement of the heaven of the fixed stars and the annual movement of the sun, really originate in the center of the cosmos, that is—in Aristotelian terms—from below to above; the cosmic movements, as phenomena, now have their 'cause' in the earth's own complex movement. The intolerability of this reversal for Scholasticism, with its interest in the cosmological proof, is obvious. The system of the transcendent derivation of all intracosmic movements necessarily collapses. This clarifies how it was that the modern age could see in the Copernican reform such a palpable break with the presuppositions of the Middle Ages. By concentrating the real movements in the cosmos in its central region, Copernicus created the diagram in relation to which the idea of cosmic immanence could orient itself.

This exemplary function of the Copernican reform becomes still clearer when we remember that the Aristotelian physics, under the conditions set by its concept of movement, understood the cosmos as a system of 'energy supplementation.' This physics knew no assertions about the conservation of states except for the position of rest of the terrestrial body and the natural places of the elements. Movement was not conceived as a state but rather required an operative causal factor at every moment; the principal axiom of Aristotelian mechanics, which was so important metaphysically for the Middle Ages, read, *Omne quod movetur, ab aliquo movetur* [Everything that is moved is moved by something]. Thus the contingency of the world, around which the thought of the Middle Ages circled with complete speculative devotion, lay not only in the origin of everything extant from creation but also
and above all in the fact that every state of this reality, at every moment, required a transcendent causality. Seen from the point of view of the medieval system, then, the really offensive element of the Copernican reform was not the exchange of places between the earth and the sun and the exchange of the predicates of rest and motion between them; rather it was the implication of the real standstill of the heaven of the fixed stars and the real movement of the terrestrial body. This is not the place to discuss how far the radicalness of this reform already had to presuppose a new system of basic views in natural philosophy or only had to draw a new formulation of physics after itself as a consequence. We may rely on what Giordano Bruno actually found available.

Bruno does indeed hold to the Aristotelian doctrine of the natural places of the four elements, but he relates this localization only to their relation to one another in the structure of any arbitrarily chosen world body and not to their position in the universe, which as an infinite space can no longer offer that sort of structural order. With this carrying over of the elementary structure of the sublunar region of Aristotelian theory to all world bodies, Bruno again takes up a piece of the Cusan’s cosmological speculation. But his interest is different from the Cusan’s; it is now directed above all at the consequence that results for the problem of weight. The constituent parts of the terrestrial body, like those of any other world body, are ‘heavy’ only insofar as when they are forcibly separated from connection with this body, they strive to return to it as their “loco della conservazione” [place of conservation] and no longer in that they belong in a certain absolute place in the universe. The original membership of a part-body in a body that constitutes a whole [that is, in a ‘world body’] indicates its ‘natural place’ and thus the direction of its movement, which is always a movement of ‘return.’ If one may define the original body as the greater mass, one arrives at an idea that at least stands closer to the gravitation theorem than does the original Aristotelian conception because the only straight-line motions that occur in the universe are no longer related to a particular place but rather to a particular body, which always represents the greater mass.

Of course one should not let oneself be deceived, in regard to the material ‘step forward’ that could be realized here, by this approximation to Newton; the transformation of the Aristotelian theory of natural movements is only its adaptation to the general assertion of
the "infiniti mondi" [infinite worlds] and is effected at the price of additional speculative assumptions—some of which remain in the background while some become explicit—which are reducible to an organic metaphor. All world bodies have become totalistic/individual, animated, self-preserving, and self-reintegrating substances.

Such organic ideas do not, indeed, solve the problems that they pose for themselves; but in the early history of modern science, they have an important transitional function between the initial Aristotelian position and a new universal mechanics that is initiated precisely by regarding organisms also as capable of mechanical explanation, as will be the case with Descartes. This transitional function shows itself here in the relativization of the predicate of weight. In thesis 101 of the Paris disputation articles, on the fourth book of the De caelo, it is said that "heavy" and "light" cannot be asserted as predicates of natural bodies in their natural constitution. In the argument for this thesis, Bruno repeats the Aristotelian thought experiment of the earth and the moon changing places, with, in fact, a completely opposite result; whereas Aristotle assumed that if this were done, from then on all heavy (that is to say, 'earthy') objects would fall in their previous direction—that is, toward their natural place—indipendently of whether the terrestrial body was still there, Bruno concludes that all the parts belonging to the terrestrial body would then also move toward its new location, that is, would no longer 'fall' but rather 'go upward.' And then it is explicitly said that the parts of a world body could not have the tendency to incorporate themselves in another world body any more than is the case with the parts of a living being.

Even with Bruno, in spite of the infinity of his universe, straight-line movements remain in principle finite movements, which always take place 'in the neighborhood' of the bodies they relate to. They must be conceived as corrections of irregularities that can arise from the violence of intrabodily organic processes. Such falling movements are, then, aspects of the circulation processes of the world bodies and are in agreement with the organic guiding image. This explanation of weight takes up again a Stoic theory according to which every part of the world presses toward the world's center and a circular flow process arises from the displacement of the parts that have reached there at any time, so that the same tendency of everything earthly toward rest at the world's center that Aristotle had assumed produces the effect of an uninterrupted pushing and displacing movement.
Since no particle has the special prerogative of occupying the midpoint of the whole body, the indifference principle holds here too as the guarantor of continual movement, of the passage of all parts through a point. With this conception of the inner circulation of all world bodies, the idea of movement as the universal law of the participation of everything in everything, which determines the movement of the world bodies on their paths, is realized for the internal structure of these world bodies as well. In the process, the movements of return that appear in our experience as ‘free fall’ become processes of the “self-preservation” of the organic whole. From this point of view, the Aristotelian theory of “natural location,” and thus also of the movement of falling, proves to be a description of regularities that it does indeed pretend to explain, but which it cannot comprehend in their purposefulness. Universal participation is the dynamic principle and constancy of the individual body the conservative principle in this picture of the universe; the possibility of autarkic immanence depends on the balance of the two tendencies.

Bruno criticizes the Aristotelian definition of movement as actus existentis in potentia [actualization of an entity as potential]. It seems to him to be too general, since it explicates not only movement but also such concepts as those of “rest,” “life,” and “soul.” This lack of specificity in the definition is said to be due to the fact that Aristotle assumes a relation between possibility and reality, between potentia and actus [potentiality and actuality], which runs in only one direction. Every movement, then, would have to be exhausted with achievement of the transition from possibility to reality. It is clear that that does not fit Bruno’s conception of the relation between possibility and reality, in which no concrete realization ever carries satisfaction with itself but rather precisely as present reality is exclusive and obstructive for that which was also possible. Whatever has in fact realized itself at any given time strives to depotentiate itself again into possibility, by means of the indifference of matter to form, so that the purposefulness of movement is directed both from possibility toward reality and from reality toward possibility. This stipulation is satisfied only by the circular motion in which each point arrived at is at once the goal and the beginning of the total motion.

For Bruno, circular motion is the pattern that dominates all natural processes, but not as a result of merely adopting the Platonic rule
according to which astronomy had to reduce all phenomena of motion to regular circular motions, where the ideality of the circle could only be realized in the highest precision of its eternal repetition—that is, in the rotation of the outermost sphere. Bruno is not concerned with this precision, that is, with the geometric idealization that is active in the Platonic tradition. For him, the motivation of all cosmic movements consists in the principle of infinite participation, in the variation of situations and aspects, in traversing the total potentiality. The fundamental form of the circle may and must therefore be modified by the utmost complexity of its constructive elements, must be softened in its geometrical purity. In spite of its unmistakable reference to the Cusan’s “imprecision,” this is nevertheless no longer the mere index of the infinite difference from the transcendent absolute, no longer the infinitely futile approximation to the unattainable “precision” of an original, but rather in its insistence on the circular form, it is the figure, immanently realizable in time, of the absolute itself: What was the stigma of difference has become the retraction of transcendence into immanence, the dissolution of the former in the latter.

What for Copernicus was still the annoying concession of the complexity of the movements added to the primary, diurnal rotation—a concession to the cosmic shortcomings of the earth—is reinterpreted as the most suitable fulfillment of the original metaphysical commandment of exhaustive participation. The fact that nature does not follow geometry, that it nowhere realizes purely circular movements, is now an expression of the immanent sense of its form of movement as such. To estimate what was sacrificed with Bruno’s turning, and what was gained, it is necessary to digress by looking back at the gain in order that had been achieved by the traditional solutions. For Plato and Aristotle, the fact that the world is a cosmos had been, through the idea of real spheres as bearers of the moving heavenly bodies alone, a direct spatial observation, an objective datum independent of time. One can understand the Platonic and Aristotelian cosmology as a counterconstruction to Democritus’s attempt to base an atomistic account of nature on the straight line as the primary geometrical element, and accordingly to see the initial state in the parallel paths of the atoms through the limitless void, and thus to exclude the formlessness, which was terrifying to the Greeks, of the apeiron [the boundless, infinite]. Accordingly the circular form of the paths of the heavenly bodies on their spheres was the manner of movement that united
endlessness in time with rational uniformity, without requiring Democritus’s unlimited space. But time, then, is finitely periodic, all the way up to the Platonic “great year.” Thus it has no overall sense extending beyond the closed cycles. Just as Plato had appealed to the binding force of ideal rationality for the demiurge in the *Timaeus*, so Aristotle deduced the necessary absolute regularity of the circular movement of the heaven of the fixed stars from the logical analysis of the concept of time. The homogeneity of time required a cosmic movement as an ultimate measure that could not be measured again against an overarching standard of measurement. This requirement was satisfied by the unmoved mover as the factor guaranteeing insurpassable uniformity. As a result, there could be a cosmic universal time as the measure of a movement that in turn made it possible to measure all intracosmic movements temporally.

If, since Copernicus, this movement was an illusion produced by the rotation of the terrestrial body, and the spherical form of the heavens also turned out to be a perspectival illusion that would have to appear in the same manner in all world bodies, then it followed—and Bruno recognized this—that with the interchange of the real bearers of motion, the unity of time for the whole cosmos, as a verifiable standard of measure, had disappeared. From now on each world body, in accordance with its own rotation, possessed a different apparent movement of the apparent sphere of fixed stars, and thus also a different time, specific to itself. But since, like the earth, none of these heavenly bodies could any longer have an absolutely uniform movement of its own, even the rotations of the heavens apparent on each of them did not satisfy the time concept’s logical requirement of an absolutely homogeneous standard of measure. The plurality of worlds had brought with it not only the plurality of times, and thus the problematic—which was not yet perceived as aggravating—of simultaneity, but also the contingency of all cosmic clocks, which now could be nothing but the phenomenal projections of the disturbed rotations of one’s own standpoint.60

It has already emerged in another context, however, that the reality of time is an unalterable presupposition of Bruno’s system. It is just as clear that this real time could no longer be *eo ipso* identical with measurable or already measured time. The movements that occur in the world and that seem regular could not serve as a chronometer for that real world time. The distinction between the real world time
and the phenomenal times in the various worlds, which Bruno did not carry through systematically, should have resulted from the metaphysical partiality of movement alone, which, as we have seen, is always only movement of the worlds, not movement of the world as a whole. But the unmoved totality of the world also has its time as duration (duratio), which as such is not measurable and represents only the reoccupation of theological eternity: “Tempus universale aeternitatem dicimus” [We call universal time eternity]. World time is the genus of duration, whose specifications represent the concrete times of the particular worlds on the basis of their specific movements. Movement, then, is the specifying principle of the genus, time: “Esse igitur temporis iuxta suas species pendet a motu” [Therefore the being of time, like its species, depends on movement].61 Thus there would have to be time even if no motion existed; but then there could be no measurement of time, and Aristotle should have connected not time but knowledge of time to movement.62

Thus logically the Aristotelian definition of time is reversed: Time is not the measure of motion; rather motion is the measure of time.63 The relation between the universal world time and the partial times of particular worlds is interpreted on the analogy of the relation between infinite space and finite spatial positions and measures: Just as the location of world bodies cannot be given immediately by reference to infinite space, but only by the system of the relations of the bodies to one another, and as the different spatial measures possess no specifiable relation to the immeasurable universal space, so also the times of particular worlds have no proportion to world time; indeed they coincide in it according to the principle of the coincidentia oppositorum [coincidence of opposites].64

Here again the characteristic features of the Cusan’s theological metaphysics are fully reabsorbed into immanence. For the problem of time, this has the consequence that the transcendent character of world time deprives physical standardization of application and that technical procedures of time measurement then move alongside and are equivalent to the purely phenomenal measures of time that present themselves in the individual worlds.65 The principle of indifference, which comes into play here too, isolates each of the infinite worlds, with its time, and man as the fabricator of clocks, with their time, from one another; the unity of the world in space and time is strictly metaphysical and lacks any verifiable theoretical/technical relevance.
Here it immediately becomes clear how distant Bruno's speculative theory of space and time is from Newton's concepts of absolute space and absolute time, which, while they do still perform the service of answering metaphysical questions, above all fulfill an assignable function in the definition of physical propositions.

Giordano Bruno was thus the first to see the reformulation of the traditional concept of movement as a consequence of Copernicanism. Admittedly he did not avail himself here of the license that the nominalistic critique of Aristotelian physics had already procured and without which Copernicus himself could hardly have insisted on the cosmological truth content of his reform. Bruno's use of the organic metaphor of the immanent origin of movement is indeed, viewed formally, a step back into a mode of assertion that verges on the mythological; but as insistence on the exclusion of transcendent factors and supplementary assumptions, it has a transitional function in which the logic of Copernicanism is kept alive. The Copernican destruction of the reality of the primary heaven and primary movement also excludes Aristotle's prime unmoved mover and Scholasticism's cosmological proof of God's existence, as well as the assumption, which is dependent upon them, of subordinate spheres and sphere movers. All world bodies, as living beings, have their principle of motion in themselves, by which they carry out the complex circling movements in which they are brought to the optimal exhaustion of universal participation. The assumption of external movers now would force one to classify their movements as "violent."\textsuperscript{66} The difficulties for carrying through the Copernican idea that arose from the absence of the principle of inertia are bracketed out with the help of the idea of the organic wholeness of world bodies and their self-preservation. Natural movement is no longer the effect of an 'accompanying causality' of the world cause, though it is certainly an expression of perfection deriving from the primary constitution of the object and from the "communicated causality" (\textit{virtú impressa}) contained in that. Thus the energetic autarky of immanence is precisely the correlate of the transcendence expended on it.\textsuperscript{67}

The talk of "immanence" in which we have engaged so far needs to be made more precise. Strictly speaking, it is incorrect to talk, in connection with Bruno's theory of movement, of what is immanent in \textit{the} world. For as a whole, \textit{the} world carries all the 'classical' marks of transcendence, as a clear result, in fact, of Bruno’s derivation of
ideas from Parmenides and of his formal transposition of the Cusan’s coincidentia oppositorum. “Immanence” is now the designation of each of the infiniti mondi [infinite worlds], between which there is no causal nexus. Thus the moon cannot be the cause of the tides; for them the moon is not causa but segno [not cause but sign]. The connection between an earthly natural phenomenon and a particular astronomical constellation is not due to dependency but rather to the ‘synchronization’ of immanently elapsing processes and the congruences of the regularities that govern them.68 The unity of the ancient and medieval, and even of the Copernican world as a causally governed structure of order, is exploded, and the new possibility of representing this unity physically as a system of interdependence of masses in space is not yet even dreamed of.

Giordano Bruno and Leibniz are close to one another in the comparability of their accomplishment—in terms of function, not success—of filling the historical space between the two world concepts of the Scholastic and the Newtonian physics. This interim solution is distinguished by the basic idea of the immediacy of the monadic units of reality to an origin that communicates itself as regularity. This is the source of the guarantee of a “preestablished harmony” as the equivalent of the causal nexus. It is only because of this that cosmic constellations can become ‘signs’ of the course of events within any individual world. This principle of immediacy preserves the possibility of theoretical knowledge across the hiatus between two completely heterogeneous ideas of science.

The naturalness of the orbital movements of the world bodies is no longer due to the special nature of stellar matter but rather to a transfer of the theory of “natural locations” to the relation of the heavenly bodies to their orbital positions. Hence the position of the terrestrial body in space indicates the “natural location” of its constituent parts at any given time, and thus the direction of the straight-line return motion of member bodies that have been expelled. But every point on the orbit that the whole body describes is equally its “natural location.” This indifference of all points on the orbit, of which none can be distinguished from the others, is the source of the ‘naturalness’ of movement on this orbit. Thus Aristotelian physics, with its doctrine of elements, is held to insofar as the fundamental state of the star that is in motion in its orbit corresponds precisely to that which Aristotle’s elements are in when they are at rest in the region of their
natural location. If therefore rest and motion are equivalent in regard to their 'easiness' for all situations of a rotating world body and for all points on its orbit, then talk of "rest" now has only the sense of a limiting case derived from the traditional system but no longer realized in the new system. Here all world bodies are regarded as homogeneous; the Aristotelian theory according to which the behavior of bodies composed of a mixture of elements is determined by the predominant element is given up: "Interea pessime asserit Aristoteles eo ferri totum quo pars fertur . . . " [However, Aristotle maintains, very wrongly, that the whole is carried in the direction in which the part is carried]. Thus the mode of movement becomes a characteristic of bodies rather than of the elements of which they are composed—in the limiting case, a characteristic given to the smaller partial mass by the total mass.

Circular motion is the general presumption of the system. To continue to assert that a world body like the earth is at rest implies a burden of proof that is contrary to all probability in this system: "Ma chi a trovato questo? qui l'a provato? La commone ignoranza, il difetto di senso e di ragione." [But who has discovered this? Who has proved it? Common ignorance, the lack of sense and of reason.] In the same way, at the beginning of the dialogue De l'infinito the burden of proof in relation to the antithesis between the finitude and the infinity of the universe fell to him who wanted to defend its finitude. It could be assumed from the outset that—just as in the Copernican model of the transfer of the movement of one's standpoint to the movement of the heavens—such a person projected the limitations of our sense perception onto reality without noticing what he was doing.

The principle of indifference is joined by something like an "optimistic principle of completeness," whose application yields the optimal filling of space by motion as well as the postulate of the infinite plurality of worlds: If it is good that this world in which we live exists and that it can only exist by filling a position in space, then it is also good that space in general is filled, since each position in space is equivalent to every other. In the same manner, it is argued that if there is a reason for the existence of a finite world, such as appears to us, then there is also a reason for the existence of an infinite world, such as we cannot experience. Similarly, from the indifference of a body's situation in relation to other bodies and light, the rotational
movement of this body about itself is inferred, which makes it take up all possible attitudes to other bodies and light. And this in turn is only a special case of the indifference of matter to all of its form realizations, which yields the world principle of the metamorphosis of matter.

In spite of the Nolan's proximity to Leibniz, a crucial difference becomes visible, which corresponds to the difference between the impersonal and the personal concept of God; the same ingredients of argumentation will cause Leibniz in his exchange of letters with Samuel Clarke to deny the reality of space and time precisely on account of the indifference of their parts and to elevate the principle of sufficient reason into the premise of the personal world cause because only it could choose one of the infinitely many possible worlds for realization. It becomes evident when we examine this difference that Leibniz falls back to a position behind the very position of the Nolan that had become compelling for the latter as a result of his attempt at overcoming the nominalistic antinomies. It turns out, from this comparison, that Leibniz stood closer to his voluntaristic opponent, Samuel Clarke, in terms of his central stock of presuppositions than to the Nolan, who seems so similar to him in his speculative language. Chronological sequence does not provide an adequate criterion of the direction of relation to the epochal threshold.

The application of the principle of indifference to matter compels one to reinterpret the Aristotelian account of the relation of matter to form. Matter is not desirous of form, but neither is form 'imprinted' on it as an undefined substratum; rather it produces form, after the analogy of organic growth, from its womb ("dal suo seno"). But the particular concrete form into which matter enters cannot be its perfected definition, since forms change unceasingly on the surface of matter ("nel suo dorso"), while matter is eternal, and thus is something divine in the things themselves ("uno esser divino nelle cose"). It is not form that conserves matter, because what is transitory cannot conserve what is eternal; instead, matter brings form into existence and maintains it therein ("la materia conserva la forma"). Hence matter is not "as good as nothing," is not a naked and impotent lack of definition; instead, it is the substantial core of the world, its constants. Form arrives at realization by participation in this being that belongs to matter, but no definite form 'fills up' its volume of being. This is the source of the change of forms in the world, of the 'impatience'
of matter with which it continually disengages itself from one form in favor of another ("ma più tosto che la materia rigetta quella forma per prender l'altra"). It is the intraworldly correlate of the *potentia absoluta* of the world ground, the 'image' of the latter's insistence on the carrying out of omnipotence. Bruno even goes so far as to say that matter is more averse to form than desirous of it—giving metaphorical expression to the 'facticity' of every particular form, to the blockage of universal participation by each of its concrete phases.\(^7^4\)

Once again Bruno's affinity to Copernicanism is confirmed in connection with a state of affairs that had caused so much disappointment to Copernicus himself with the advance of his reform since the early sketch in the *Commentariolus*: the increasingly evident lack of simplicity on account of the necessary inclusion of individual motions that are combined in the motion of the earth. Bruno sees this instance as a confirmation of his thesis rejecting the clarity and identity of form in nature. He discusses this Copernican dilemma toward the end of the fifth dialogue of the *Cena* and sees in it a verification of the fact that in spite of its eternal circular movements, nature has a teleology going beyond the repetition of the identical: "Che nella natura non è cosa senza providenza e senza causa finale" [That there is nothing in nature that is without providence and without a final cause]. This teleology is comprehended in two basic concepts: renewal ("rinovazione e rinascenza") and participation ("participar tutti gli aspetti e relazioni"). The complexity of the earth's movement prevents constellations from being able to repeat themselves within the period of a year; only thus does the earth take part in the 'program' of the processual overtaking of possibility by reality and the drive of the world stuff toward ever new realization.\(^7^5\)

The idea of metabolism as the way in which organisms preserve themselves through change is clearly present in the background. But the identity of form that is preserved in that process is only the foreground, phenomenal aspect of the turnover of matter that is possible and taking place in it. The fact that the individual enjoys and seeks to preserve himself in his existence, which, however, is always conditional on the disappearance of other individuals, is only a symptom of the fulfillment of his function within the universal metamorphosis.\(^7^6\)

In the context of this reinterpretation of the relation of matter to form, we are also able to understand why Bruno, who says of himself that he had earlier been a partisan of the atomism that derives from
Democritus and Epicurus, had given up this position again to draw near to the schema of the Aristotelian matter/form relation—at bottom, to conserve a piece of Scholasticism: The atomistic conception unites materiality and specific forms in the ultimate elementary units to which all characteristics of the phenomenal world are reducible. The change of forms in the visible world is then only the sense-perceptible aspect of the real configurations that are taking place in the underground of the invisible. If the analysis of the Nolan’s basic ideas that has been given here is correct, his dissociation from atomism follows as a compelling consequence. The metamorphosis of homogeneous matter that takes place in infinite space and infinite time was an idea that was bound to fascinate Bruno and that for the first time made possible the adequate expression of his conception of unity and multiplicity, of the identity of the world principle of the *potentia absoluta* and the highest inclusiveness of its realization. But in spite of this approach to Aristotelianism, his concept of form is not that of the orthodox *forma substantialis* [substantial form] of Scholasticism; on the contrary, it is the sum of the accidental determinations that are brought by local movement, as the elementary factor, into ever new constellations. On these assumptions, the complexity of the earth’s movement—Bruno mentions only daily and annual motion, precession and nutation—fits in effortlessly. A consequence of this complexity is that in the course of time, all parts of the earth participate in all configurations and attitudes to the sun and are thus made subject to all the corresponding influences and conditions. Bruno says that the long-term alterations in the appearance of the earth’s surface, with which Aristotle was perfectly familiar, were nevertheless something that he could not explain, since he knew only the daily and annual motion of the sun as possible factors in these alterations—in other words, he did not know the subtler “imprecisions.”

Bruno’s sympathy with the pagan metamorphosis of the gods—even with the animal multiformity of the Egyptian pantheon—arises from and corresponds to his idea of the condition, as regards form, of matter in the universe, which at no time is content with itself and yet has no need of a transcendent supplement. That is not simply mythology—above all, it is not myth once again, neither a renaissance of the ancient world nor a ‘secularization’ of the Middle Ages; to assume that it is would be to infer what is meant to be expressed from the means of expression. In the syndrome we have described,
of matter and movement, conservation and participation, drive for 
form and denial of form, what awaits formulation—speculative, fanciful, 
poetic, cosmological, and any other type of formulation—is the changed 
overall state of substance. What was called “substance,” following 
Aristotle, has long been on the point of passing from the eidetic 
firmness of the unchangeable and metaphysically guaranteed ‘essence’ 
[‘Wesen’] into the abstract constants to which the modern age will be 
pledged—into the magnitudes, no longer referable to intuition, of mass, inertial motion, the speed of light, gravitation, power, energy. 
It tends, then, to be conceived as an unfolding process, and, given the 
merely ‘foreground’ character of apparent formations and species, to 
be only a cross section, halted at an arbitrary point and capable of 
morphological inventory, of a process of those abstract factors that is 
ever terminable in a result. Here also nominalism, with its critique 
of the realistic theory of concepts, had begun to destroy the substantial 
core constituents of reality, to dissolve their eidetic contours; but on 
account of its voluntaristic dogmatics, it had not been able to bring 
about any antithesis but that of divine abundance and human economy, 
and thus had not carried the problem beyond the level of logic. Thus 
man was supposed to continue to be directed to isolate and to assert 
himself against the world and to seek his salvation outside it. 

It is clear that the Nolan has no independent anthropology; for him, 
man is not a subject sui generis. Man retracts himself, as one of the 
endless phases through which nature’s self-realization passes, into the 
universal process, which in his way and with his own means he ‘pushes 
forward.’ Talk about man is an incidental subject in cosmology. If 
man rises above the other beings, then that is not to be understood 
as a central and unique position in the world, but rather as raising to 
a higher power the universal tendency towards transformation of 
whatever is given, as a translation of the process into ‘work.’ 

In the first section of the third dialogue of the Spaccio, Zeus replies 
to the application of Idleness (Ocio) and Sleep (Sogno) for a place among 
the constellations with a rejection of idleness in favor of work. The 
gods had given man intellect and hands, he says, so that he should 
be able not only to be active according to nature and its order (“secondo 
la natura e ordinario”), but to go beyond the laws of nature (“ma, e 
oltre, fuor le leggi di quella”) in order to produce another nature, 
other courses of events, other orders (“acciò, formando o possendo 
formar altre nature, altri corsi, altri ordini con l’ingegno”). In this
freedom from being bound by what exists, there lies, according to
the words of Zeus, the possibility of man's attaining the likeness of
God, as "dio de la terra" [god of the earth]. Going beyond nature, as
what already exists, becomes the existential sense provided for man
by nature.

With a reversal of Lucretius's culture criticism, Bruno rejects, through
the mouth of Zeus, the idea of a golden age of an animal-like, idle
mode of life of men who depend on and submit themselves to nature.
It is true that here also the necessities and difficulties of existence
have led to the adaptation of abilities to the exigencies of the sur­
rounding world; but the achievement of autonomy by the inventions
and discoveries that were made in this way, as the process of culture,
is legitimized as the imitation of divine action. Self-empowerment over
against nature is reinterpreted as empowerment by nature. Since now
the infinity of omnipotence is imitated as progress from day to day
through new inventions and through exertion that continually fits it­
self for new undertakings, 'Godlikeness' is no longer the signature of his
origin imprinted on each individual but rather the ideality, to be
realized by the species, of its future. Here the metaphorical inter­
pretation of history as the organic maturation and aging process of a
species-being appears to break through into the idea of progress.

The difference from the Cusan is clear; no individual can fulfill the
existential sense of the species, and consequently mankind cannot
experience its final union with the Divinity in any historical member
of the species. The hypostatic union would not be the center and
turning point of history but rather the breach of its sense, and its end.

This differentiation is essential in defining relations to the epochal
threshold. For the Cusan, man's Godlikeness [Gottebenbildlichkeit, the
term that is used to imply being "made in God's image"] is an eidetic
characteristic, an essentially definitive predicate, which is capable of
a uniquely highest actualization and maximal "precision." For the
Nolan, Godlikeness is an ideal that gives a direction to man's distance
from his origin in bestiality, but a direction that promises no rest in
the attainment of a goal.80 Here again time is the real condition of
the possibility of the ideal; the figure of the substantial form is lost
as something present and is projected into the dimension of time. The
interpretation of man as a self-developing being who raises himself
to higher powers only anticipates the continuum of evolution that, for
the fauna of the extrahuman realm, must still provisionally be seen
as metamorphosis, as the change of forms each of which has its own established character. Man in this universe is only the transition from one condition of transformation to another, the continuation of the one great process by new means. He is not a microcosm, not the central dynamis [power, ability] that is able to be every entity over again.

In order to bring the difference between the configurations [with respect to the epochal threshold] fully into focus, one must reread once more what the Cusan had written about man: The unity of what is human, realized in the concrete human existence (humaniter contracta), seems to include the universe in itself, in the manner suitable to it. The power of this unity is a match for the universe and forces it into man's power, so that nothing escapes his ability (ut nihil omnium eius aufugiat potentiam). For he trusts himself to comprehend everything with the senses or reason or intellect. These faculties lying in him lead to a self-assessment that believes itself capable of approaching everything according to the measure of the human. Man is the world, even though he cannot be everything concretely, just because he is man; therefore he is a microcosm or a human world (humanus mundus). The realm of humanity embraces God and the universe in human power. Thus man can be a human God and can be God in a human manner; he can be a human angel, a human beast, a human lion or bear or anything else, since it lies within man's power to be everything in his own way.81

Despite the ease with which one could mistake the language for his, the Nolan could not have written that. With him, the indefinable potential of the human is encircled by the figures of its possible failure. What man can become, without ever being it—the image and likeness of the Divinity—repeats itself, on a different level, in animals, which, like the ape and the night owl, can figure "ad imagine e similitudine de l'uomo" [as the image and likeness of man] or can be found as the hidden reality in the apparent form of the human, "sub imagine et similitudine hominum" [under the image and likeness of man].82 Metamorphosis and mask game, the reality of an essence and its pretense, real men and those "che son fatti ad imagine e similitudine di quelli" [who are made after their image and likeness] become confusable for the perception that relies on itself.83 The great biblical formulation of anthropology becomes the formula of a docetism, in which truth and illusion belong to one world and assurance can no longer be obtained
from the presence of the eidos [form, Idea]. In this indifference of essences, in which the figure is no longer an index of the substance, the “Asino Cilenico” [Cyllenean ass] is supposed to have had Aristotle as one of its reincarnations, and in his address to the ass, Mercury parodies Pico della Mirandola's Oratio de hominis dignitate [Oration on the Dignity of Man].

The wisdom of the docta ignorantia [learned ignorance] appears in the form of “Asinità” (Asinity). It oscillates between satire on the sacrificium intellectus [sacrifice of the intellect] and parody of a “knowing ignorance” that is no longer the index of the incomprehensibility of a transcendent truth but rather the suspension of a supposed knowledge that blocks the possibility of a new insight and whose surrender sets free movement that can lead to knowledge.84 The docta ignorantia is turned back from transcendence to time; it is the wise ignorance that does not through self-satisfaction and certainty of salvation disguise from itself the new beginning and the gain in truth. The “santi dottori e Rabini illuminati” [holy doctors and enlightened Rabbis] are personified in “Asinità,” whose ass's hoof is the hand, now impotent, of Adam/Prometheus, a hand that can no longer reach out for the forbidden fruit of knowledge, while its pointed ears are adjusted for credulous listening.

The Nolan's turning away, immediately before the pyre burst into flames, from the image of the God who became man and was crucified—this was not, or was not only, the defiant finale of the escaped monk; it was also, or especially, the gesture that maintains consistency with the vision of a new universe. What had made this vision compelling for the heretic was a unity of reality in which everything was indeed self-reproducing, self-manifesting God, and man also was a being who becomes God, a unity, however, in which the universality of the transformation that embraces all realities did not admit the singularity of a God who forces His way into human history, of an act of salvation that identifies itself as the kenosis of isolation from God, but instead had to reevaluate this as the scandal and provocation of a counter-symbol. The great symmetry of man becoming God and God becoming man, which the Cusan had set up against the conflict that was breaking out between the medieval consciousness of God and the new consciousness of self, had been destroyed by the third element of the system, the no longer limited world, which Nicholas himself had introduced, still with caution, to balance the transcendent infinity.
Between the Cusan and the Nolan an ambivalence in the concept of reality is decided that had seemed to be decided and brought to a close in the early history of Christian dogmatics, in the elimination of the Gnostic phenomenalistic Christologies, but had come to light again. The radical separation between the God of the Creation and the God of the tidings of salvation that was advocated by the Gnostic Marcion made Christ's corporeality function as a merely episodic adaptation to the conditions of man's imprisonment in the world, as a means of deceiving the demons who guard the universe and mankind within it.

That is no obscure specialized topic in the history of dogma. To see what has become self-evident as something that was not originally self-evident is the task of all historical reflection. The idea of the Incarnation is ultimately the result of a fundamental difference between biblical and pagan theology, which can be reduced to the simple fact that the word “God” left the tongue of the Jews with as much difficulty as it left the tongue of the Greeks with ease. Whether that was connected with the fact that the God of the Old Testament was the protective power allied with one people, withdrawn from and to be concealed from the rest of the world, while the Greek gods were of the world and enjoyers of the world, were receivable and transportable, need not be decided here. In the area of the Old Testament, a whole gallery of functionaries of salvation had been developed that were not gods and could not become gods; whereas for the Greeks and Romans, that sort of thing easily developed into a god, even into a disguised god capable of many metamorphoses. Thus when the ‘Son of Man’ was offered to the Hellenistic world as the bringer of salvation, it was natural for this world to understand him as the metamorphosis of a god—of the God, if there was only to be this one. But the Hellenistic world had also developed the philosophical critique of the myth of the gods and their ‘stories,’ and for this critique the metamorphoses of myth were in essence a lie, deceitful deception, misuse of the power of a god. He who was supposed to have brought the final truth could not get involved in a dimension of such ambiguity. The idea of the Incarnation as the union of two natures draws the consequence from this situation; it protects a process of dogmatic formation that increasingly justifies and formulates itself philosophically in such a way as to combat the suspicion that it is yet another myth.
The reconstruction of the term “person,” to which Giordano Bruno was to take exception, is the best evidence of this intention. The original meaning of the word is directed precisely not at the core of the real subject but rather at the roles in which it presents and veils itself. The term resists a construction that wants to integrate two “natures” into one “person,” and this in a sense that conforms only to our concept of a person, already stamped and established by the subsequent history of its meaning. This conceptual history indicates that problems arise that had not only been unknown to the ancient world but also would have been incomprehensible to it. They were suppressed, rather than resolved, by the device of a change of meaning. This is the origin of the efforts, so rich in controversy, of the early centuries, with their allergic sensitiveness to the slightest appearance of a theological illusionism. The idea of the Incarnation—despite the fact that this could not have been the intention—was an infinite fortification of human self-respect. Because of it, the form that God adopts ceased to be arbitrary and provisional, since this form becomes His special and lasting fate. This finality of the pact was the important thing for theology. It contained the irrevocable guaranty of the ‘eternal covenant,’ whereas metamorphosis had an episodic character and included the implication that anything can become anything. To renew the mythical category of metamorphosis, to raise it to the level of a cosmic ritual, could only be an assurance on behalf of the universe and the absence of privilege among its fullness of forms, not on behalf of man. Late medieval nominalism had raised this problematic again, without realizing it, by placing the Incarnation under the condition of absolute divine freedom and leaving man with no claim to be the essentially privileged creature in nature, who alone could become the medium of the self-communication of the hidden God.

The Nolan only accepted a challenge that was already historically posed. He gave it an answer that went to the root of the formation of the age that had come to an end. What was received as ‘joyful tidings’ and in the toil of centuries had finally become ‘Scholasticism,’ he experienced as trauma. Even if he believed that he sought the new point of departure in what had been the basis of the “old true phi-
losophy,” that was a self-deception. History knows no repetitions of the same; ‘renaissances’ are its contradiction.

Translator’s Note

Notes

Part I

Chapter 1


Chapter 2

1. Feuerbach, Nachgelassene Aphorismen, Werke, ed. Bolin and Jodl (Stuttgart: Frommann-Holzboog, 1960–1964), vol. 10, p. 318. Incidentally, the term “mediated” in this aphorism is undoubtedly a metaphorical reference to a political state of affairs that is a close neighbor of ‘secularization’: the suspension of the ‘immediate’ membership in the Reich of both secular and ecclesiastical principalities by the Rhine Confederation Act of 1806.


9. The supplement to his investigation which Zabel provides in *Archiv für Begriffsgeschichte* 14 (1970): 69-85, reinforces the finding of the adaptability of the terms "secularization" and "becoming/being made worldly." Paul Yorck von Wartenburg uses them to designate the false embracing of the church by the state (op. cit., pp. 77-78). Richard Roth takes them to mean a transitive 'release' from ecclesiastical guardianship into worldly autonomy—itself a sacral act, by which the church 'desecularizes' the state (op. cit., pp. 82-83).

10. This distinction is intended to render more precise my initial thesis, as it was first presented at the Seventh German Philosophy Congress in 1962: *Die Philosophie und die Frage nach dem Fortschritt*, ed. Helmut Kuhn and Franz Wiedmann (Munich: A. Pustet, 1964), pp. 240-265.


16. F. Delekat, op. cit., p. 60.


Chapter 3

formerly a theologian, now a philosopher." To which Zunz responded: "A former theologian is always a philosopher"—"Philosophie der Vernunft und Religion der Offenbarung in Hermann Cohens Religionsphilosophie," Sitzungsberichte der Heidelberger Akademie, Phil.-Hist. Kl. 7 (1968):9. Löwith adds, with an eye to Cohen, that the proposition can also be reversed; but that is precisely not the case.


4. Karl Löwith, review of part one of Hans Blumenberg, Die Legitimität der Neuzeit (Frankfurt: Suhrkamp, 1966), in Philosophische Rundschau 15 (1968):195-201. An example of the "vehemence" referred to: The reviewer makes of my sentence that in the second generation Löwith’s thesis "can already be described simply as ‘well known’" the assertion that he "‘simply’ presupposes the derivation of the idea of progress, and of the philosophy of history which it supports, from theological eschatology" (op. cit., p. 196).

5. Karl Löwith, op. cit. (note 4), p. 197: "Since the author's historical consciousness rejects any substantial tradition or constant basic features, but at the same time makes these into criteria for the demonstration of secularization, he charges his opponent with a burden of proof that he himself considers incapable of accomplishment."


12. Werner Krauss, Studien zur deutschen und französischen Aufklärung (Berlin: Rütten and Loening, 1963), p. 195, for his part describes the "humanization of the historical" as a "secularization of the religious plan of salvation," although he had earlier characterized the turning against Bossuet that took place between Turgot and Condorcet as a "refutation of the plan of salvation in world history" (op. cit., p. 187). Of course a refutation is also dependent on what it is intended to refute, but if this already counted as "secularization," there would not be much point in discussing it further.

13. Kant, Der Streit der Fakultäten, II, 2.

Chapter 4

1. To cite only one example of the innumerable vestigial formulations of an unspecific pious respect for providence, a letter of Anna Louise Karsch (Karschim) to Goethe (September 4, 1776): "... but I am not despondent; I think the Father of the Whole will deal well with me, the individual part, too, right up to the end." Was even one line of the Bible, one Christian theologian, necessary before this could be written? What is more, would it not have had to be written differently post Christum natum?


6. Compare K. G. Kuhn’s article, "maranathà," in Theologisches Wörterbuch zum Neuen Testament, vol. 4 (Stuttgart: 1942), pp. 470-475 (on I Corinthians 16: 22). Prayer for deferment of the terrors of the end is already recommended at Mark 13: 18 and Matthew 24: 20, but really only as a request for mitigation of circumstances: that it should not occur in the winter or on the Sabbath. In Tertullian, prayer has become state- and world-preserving; he counts among the negotia Christianae fociamnis the fact that it presses God pro statu saeculi, pro rerum quiete, pro mora finis (Apologeticum 39, 2). The self-interest of the Christians and the public interest of the Roman empire coincide, he assures us, because the interval before the sufferings and terrors of the clausula saeculi coincides with the duration of the imperium; he who does not want to suffer the former must be concerned about the latter: "Itaque nolamus experiri et, dum precamur differri, Romanae diuturnitati favemus" (Apologeticum 52, 1). On the process by which acute eschatology was reformed, see Martin Werner, The Formation of Christian Dogma: An Historical Study of Its Problem, trans. S. G. F. Brandon (New York: Harper and Bros., 1957); original edition: Die Entstehung des christlichen Dogmas, problemgeschichtlich dargestellt (Bern: F. Haupt, 1941; 2nd ed. Tübingen: n.d.).

7. Tertullian, Apologeticum 41, 3.


9. Karl Holl, Gesammelte Aufsätze zur Kirchengeschichte III. Der Westen (Tübingen: J. C. B. Mohr, 1928), p. 11, ed. note. Even when the expectation (or fear) of the end presents itself as short term, this is often only literary assimilation; when Lactantius assures us that lapsum ruinamque rerum brevi fore, or even venisse iam finem rebus humanis orbique terrarum, but at the same time says that the latitude amounts to 200 years (Divinae Institutiones VII 25, 5–7), then contrary to the wording, this is still a distant myth because it does not affect those who are alive at the time.
10. Oeverbeckiana. Ubersicht ühcr den Franz-Oeverbeck-Nachlass der Universitätsbibliothek Basel, part 2: Der wissenschaflliche Nachlass, ed. M. Tetz (Basel: 1962), p. 133. In order to allow the inner openness to the parousia to persist long enough and to lead into the phase of political victory, as required by his thesis of the repression of eschatology by worldly success, Oeverbeck distinguishes between exoteric and esoteric modes of speech: It is only externally that the Christians present themselves as the ones who hold the world together (he cites the letter of Diognetus; Justin, Apologia II 7; Clement of Alexandria, Quis duas salvaturs 86)—Franz Oeverbeck, Studien zur Geschichte der alten Kirche (Schloss-Chemnitz: 1875), pp. 48–51.


13. C. F. von Weissäcker, The Relevance of Science (New York and Evanston: Harper and Row, 1964), p. 171. The author continues (p. 172): "Were I to return to the philosophical problems, I would at this point have to investigate the Christian and the modern concepts of time. I hope I might be able to make it probable that our concept of history is not less, but to a still greater degree, a legacy of Christianity to the modern world than is our concept of the law of nature."


Chapter 5


7. O. Marquard, Schwierigkeiten, pp. 16ff: "No doubt it was the cunning of Blumenberg's reason that caused him, with his very attack on Löwith's and Taubes's continuity theses, to provide the sole opportunity for their real defense: his functional model of history.... There Blumenberg comes, willy-nilly, to their aid..."

8. O. Marquard, Skeptische Methode im Blick auf Kant (Freiburg: Karl Alber, 1958), pp. 78ff. See also pp. 82–83: "But what is reason? Once it was theological. But in modern times it presupposes reason's renunciation—admittedly only a partial renunciation—of its theological definition. This renunciation was provoked by theology. It is not without theological legitimation that it stresses God's freedom.... So reason escapes the judgment of theology through emancipation. It becomes self-willed reason, control reason. But it has to give up its theological vocation. This
resignation is a resignation from its totality mission. Its relation to this resignation is one of uneasiness. Hence we have attempts at reestablishing its theological vocation. Self-willed reason is joined by appended reason. The latter must interpret the divine as the rational; it is forced to engage in theodicy."

Chapter 6


8. Nietzsche, Genealogy of Morals II, 1, trans. W. Kaufmann, Basic Writings of Nietzsche (New York: Random House, 1966), p. 493; original: Gesammelte Werke (Munich: Musarion, 1920-), vol. 15, p. 319. The theme of "forgetting" in Nietzsche is primarily part of his resistance to Platonism, a resistance that relates to anamnesis as the mode by which the contents of the background world of the Ideas is conveyed, but it also belongs in the complex under the rubric "detriment of history to life." The late notation, "The art of forgetting is divine!" (Werke, Musarion ed., vol. 20, p. 235), reflects the early "Perhaps man cannot forget anything" (Werke, vol. 6, p. 27), and the doubt "whether there is such a thing as forgetting" (Werke, vol. 10, p. 118).


10. Augustine, De doctrina christiana II 39-40 and 60.

11. Tertullian, De anima I 6. On the context of this argumentation, see part III, chapter 4.

12. Compare Karl Holl, Gesammelte Aufsätze zur Kirchengeschichte, vol. 3: Der Westen (Tübingen: J. C. B. Mohr, 1928), p. 6: "He himself has betrayed to us, by the openness with which he lets his devices be seen, what his purpose is: he who allows himself to become involved in objective argument has already lost half the battle by putting himself on a footing of equality with his opponent and so bringing his convictions into the light of mere opinion. (See De praes. haer. 18.)" Accordingly the choice of a type of metaphor is already revealing: There is no question of appealing to 'sources,' in the manner of modern philology, because metaphors of 'source' are designed to imply openness to use by anyone—"He who appropriates a property right... does not act disinterestedly [lauter: literally, clearly or purely]," Richard Harder said—"Quelle oder Tradition?" in Les Sources de Plotin (Vandoeuvres-Geneva: 1960, Entretiens Fondation Hardt 5), p. 327—criticizing metaphors of 'source' and commenting on the "idea of infringement of an original intellectual property right." Irenaeus of Lyon chooses a different typical image
of legitimacy in *Adversus haereses* 9, 4—*Patrologia cursus completus. Series graeca*, ed. J. P. Migne (Paris: 1857-1894) (henceforth: *PG*), vol. 7, p. 1147—Christ died so as to set free his servants and put his testament into effect, which makes those who were set free the rightful possessors of what they inherit from him.


Chapter 7

1. See part IV, chapter 3, text to notes 18 to 29.


10. Thómas Hobbes, *De homine* XII 4: "ad spem sufficiunt ... levissima argumenta. Imo res, quae ne animo quidem concipi potest, sperari tamen potest, si dici potest."

Chapter 8


3. Carl Schmitt, Politische Theologie. Vier Kapitel zur Lehre von der Souveränität, 2nd ed. (Munich: Duncker and Humblot, 1934) (henceforth: Politische Theologie); pp. 49ff. [The quotations in this paragraph and the next one are from p. 49.] The first edition of this book was published in 1922.


6. C. Schmitt, Politische Theologie, preface to 2nd ed. (dated 1933): “I have dealt with the great problem of the separate stages of the process of secularization—from the theological, by way of the metaphysical, to the moral and human, and to the economic—in my talk ‘The Age of Neutralizations and Depoliticizations’ (October 1929 in Barcelona) ... Meanwhile we have recognized the political as the total . . .”


12. Hegel, Grundlinien der Philosophie des Rechts, section 280 (Hegel’s Philosophy of Right, p. 184): “In the so-called ‘ontological’ proof of the existence of God, we have the same conversion of the absolute concept into existence. This conversion has constituted the depth of the Idea in the modern world. . . .”


14. T. Campanella, Universals Philosopha I 1, prooemium, ed. L. Firpo (Turin: 1960, Monumenta Politica et Philosophica Rariora, series I, no. 3), par. 5: “... et hinc ortus est Machiavellismus, perversus generis humani.” In the Dubitationes IV (1 1, cap. 1 a 4; par. 14) an opinion is cited according to which animals too would have to have religion: “Neque enim posset politica absque religione existere.” Hitler, according to Speer’s recollection, observed that “... it has been our misfortune to have the wrong religion.” Inside the Third Reich. Memoirs by Albert Speer (New York: Macmillan, 1970), p. 96; German paperback edition: Erinnerungen (Frankfurt: Ullstein, 1969), p. 110.

Chapter 9


Notes to Pages 105-109


15. Marcel Proust, *Le Temps Retrouvé*: "... les excuses ne figurent point dans l'art, les intentions n'y sont pas comitées, à tout moment l'artiste doit écouter son instinct, ce qui fait que l'art est ce qu'il y a de plus réel, la plus austère école de la vie, et le vrai jugement dernier." On the context of this doctrine in Proust's *art poétique* compare H. R. Jauss, *Zeit und Erinnerung in Marcel Prousts 'À la recherche du temps perdu.' Ein Beitrag zur Theorie des Romans* (Heidelberg: Carl Winter, 1955), pp. 176-183.


20. Jean Paul, *Vorschule II 9*, section 49; I 1, section 3; and I 7, section 33; *School for Aesthetics*, pp. 130-131, 21, 92 (translations slightly revised).


23. Jean Paul, *Vorschule I 7*, section 85; II 9, section 54; *School for Aesthetics*, pp. 99, 144.


**Part II**

**Introduction**

Chapter 1

1. Plato, *Timaeus* 47 E-48 A.

2. Equally characteristic is Epicurus's explicit contradiction of this element of the Platonic myth (Diogones Laertius X 133–134): Necessity cannot be overcome by persuasion. This view is expressed by a 'theology' that does indeed endow the gods with language but does not allow their eternal conversations to have any consequences for the world.


7. *Passio S. Pauli, Acta Apostolorum Apocrypha*, ed. Lipsius and Bonnet (1891; photomechanical reprint Hildesheim: Georg Olms Verlagsbuchhandlung, 1959), vol. 1, p. 30: "Haec audiens Nero et ira succensus, quia mundi figuram Paulus dixerat resolvendam, iussit orones Christi milites igne cremari, Paulum autem ... capite ... truncari...." The Stoic *Ekpyrosis* [world conflagration] was not a 'preparation' for eschatology but itself a cosmic process, which was supposed to precede new world cycles.

8. Augustine, *Sermo* 241.7 : "Tu qui dicis 'corpus est omne fugiendum,' occide mundum." The Platonist forgets that Plato allowed his demiurge to guarantee unperishableness to the stars (241.8).

9. Augustine, *De libero arbitrio* I 1: "Non enim iustae vindicarentur (sc. malefacta), nisi fienter voluntate." The same line of thought appears once again in the second book (II, 3), which was produced only in 395. In the *Confessiones* (X 4, 5), Augustine offers the formula "bona mea instituta tua: mala mea delicta mea sunt et iudicia tua: ..." .

10. *De libero arbitrio* II 49: "... et dubitare de libera voluntate, sine qua recte vivi non posse concedunt, etiam qui pessime vivunt? Et certe nunc responde, queso, quid tibi melius esse videatur in nobis, sine quo recte vivi potest, an sine quo recte vivi non potest."

11. *De libero arbitrio* II 25: "Quid enim tam in voluntate quam ipsa voluntas sita est?” I 26: "... cum sit tam magnum bonum, velle solum opus est, ut habeatur." II 51: "Noli ergo mirari si ceteris per libera voluntatem utimur, etiam ipsa libera voluntate per eam ipsam uti nos posse; ut quodammodo se ipsa utatur voluntas quae utitur ceteris, sicut seipsum cognoscit ratio, quae cognoscit et cetera." III 7: "Quapropter nihil tam in nostra potestate, quam ipsa voluntas est."

Chapter 2


4. "Vorarbeiten . . .", Musarion ed., vol. 6, p. 14: "Historical thinking and the natural sciences were needed against the Middle Ages: knowledge against faith. We now direct art against knowledge . . ." P. 108: "People became more clever during the Middle Ages . . . This sharpening of the spirit by the pressure of a hierarchy and theology was absent in the ancient world."


Chapter 3


Notes to Pages 149-158

4. Clarke's second rejoinder (Leibniz, Philosophische Schriften, ed. C. J. Gerhardt, vol. 7, p. 361): "In reality, and with regard to God, the present frame, and the consequent disorder, and the following renovation, are all equally parts of the design framed in God's original perfect idea."


6. Loc. cit., pp. 371ff: "Une simple volonté sans aucun motif (a mere will) est une fiction non seulement contraire à la perfection de Dieu, mais encore chimerique et contradictoire, incompatible avec la définition de la volonté. . . ." Thus already in the Discours de Metaphysique of 1686: "... il ne faut pas aussi s'imaginer des decrets absous, qui n'alent aucun motif rais- sardonable. . . ." (section 31). And still earlier, 1680, in a letter to Philipp in Hamburg, in the form of an argument against Descartes: "On voit bien que la volonté de Dieu même ne sera qu'une fiction mise en jeu pour éblouir ceux qui ne s'attachent pas assez à approfondir ces choses. Car quelle volonté (bon Dieu) qui n'a pas le bien pour object ou motif? qui plus est, ce Dieu n'aura pas même d'entendement. . . . Mais de dire qu'un tel Dieu a fait les choses, ou de dire qu'elles sont esté produites par une nécessite aveugle, l'un vaut à l'autre, ce me semble" (Philosophische Schriften, vol. 4, p. 285). W. Kabitz, Die Philosophie des jungen Leibniz. Untersuchungen zur Entwick- lungsgeschichte seines Systems (Heidelberg: 1909), p. 122, quotes from a letter to Wedderkopf, the jurist in Kič, this sentence: "It is not in the power of any being to will whatever it likes [zu wollen, was es will]."


8. William of Ockham, Commentary on the Sentences I 43, 1 M: "Utrum deus possit facere aliqua quae non fecit nec feciet . . . si esset causa naturalis, vel omnia produceret simul vel nulla." Quodlibeta VI 1: "Deus multa potest facere quae non vult facere."

9. William of Ockham, Commentary on the Sentences I d. 2, q. 4, D: "... creatio est simpliciter de nilio, ita quod nihil essentiale vel intrinsecum rei simpliciter praecedet in esse reali, ergo nulla res non variata praexistens in quocumque individuo est de essentia istius individui de novo creati, quia si sic, aliqua existentia isti rei praexcederet et per consequens non crearetur, ergo non est aliqua res universalis de essentia istorum individuarum, quia si sic, illa praexisteret omni individuo post primum productum et per consequens omnibus productis post primum
productum non crearentur, quia non essent de nihilo." I d. 35, q. 5, E-P: "ipsa creatura est idea primo; ipsae ideae sunt ipsae met res a deo producibiles; ideae oriuntur et intereunt, quia ideae sunt ipsae met creaturae quae oriantur et intereunt."

10. William of Ockham, Commentary on the Sentences I d. 14, q. 2, G: "ex hoc ipso quod vult, convenienter vult, et non frustra." It is especially true of the way of salvation that God often does things mediantibus pluribus, which He could also have done mediantibus paucirioribus (Commentary on the Sentences I d. 17, q. 3, Df). The 'circumstantiality' of even the potentia ordinata is related to the principle of unthinking submission; the central, if not the sole, 'object' of the faith that guarantees salvation thus becomes God's credibility itself.

11. William of Ockham, Quodlibeta VI q. 1: "Haec distinctio ... est sic intelligenda, quod posse deum aliquid quandoque accipitur secundum leges ordinatas et institutas a deo et illa dicitur deus posse facere de potentia ordinata. Aliquando accipitur posse pro posse omne illud quod non includit contradictionem fieri, sive deus ordinavit se hoc facturum sive non, quia multum potest deus facere quae non vult facere."

12. This formula was applied to the Hellenistic philosophies by Karl Marx in the preparatory work for his dissertation (Frühe Schriften, vol. 1, p. 104): "Thus, for example, the Epicurean and Stoic philosophies were the happiness of their age; when the universal sun has gone down, the moths seek the lamplight of the private man."


16. Lucretius II 1052-1057: "nullo iam pacto veri simile esse putandumst ... nil agere illa foris tot corpora material." It becomes clear to what a great extent this thought still lies within the horizon of the Greek cosmos when one sets beside it Kant's comparison between the improbability of the fundamental metaphysical concepts' producing anything positive and the improbability of the construction of a world in Epicurus's atomism: "... It seems more likely that Epicurus's atoms, after falling eternally, should suddenly for no reason run into one another, so as to construct a world, than that the most general and abstract concepts should do so in order to explain it" ("Träume eines Geistersehers" II 2: Akademie ed., vol. II, p. 358).


18. Diogenes Laertius X 42: Lucretius II 513-514: "... fateare necesses matieriem quoque finitis differe figuris." See also Marx's dissertation, trans. Livergood, part two, chapter 2, p. 89 (Frühe Schriften, vol. 1, pp. 49-50): "The statement of Leibniz, that no two things are the same, is therefore turned about, and there are infinitely many atoms of the same form..."

19. Lucretius II 308.

20. Cicero, De natura deorum I 20, 53 (= fragment 350 in H. Usener's Epicurea, Leipzig, 1887), formulated this central point of Epicurean 'metaphysics' thus: "Docuit enim nos idem quicetera, natura effectum esse mundum: nihil opus suisse fabrica, tamque eam rem esse facilem, quam vos effici negotia sine divina posse tollerd, ut innumeralbilis natura mundos effectura sit, efficat, effecerit."

21. For the purpose of presenting the doctrine of his school, the Epicurean Velleius carefully uses the passage just cited from Cicero with natura in the ablative, that is, as a definition of
the mode of the world’s coming into existence, whereas in his attacks on the Platonic and Stoic cosmology, he uses *natura* in the nominative, in order to exhibit the hypostatizing of nature as a metaphysical power. Admittedly, the later Epicureans did not keep up this caution in the use of the concept of nature; even Lucretius (V 233ff) rendered nature independent as *daedala verum* and thus began to efface the difference between Epicureanism and metaphysics.


23. Lucretius II 300–302: “et quae consuerint gigni gignentur eadem/condicione et erunt et crescent vique valebunt,/quantum cuique datum est per foedera naturali.” A conspicuous example of the 'productivity' of assumptions of constancy is his consideration of the extreme hypothesis for explaining the phases of the moon, according to which these phases could be understood as a process of continuous perishing and coming back into existence of the body of the moon (Lucretius V 731–736); this would require the assumption of a very exact repetition of the same process of atomic formation—which, however, would not be unusual: “ordinem cum (videas) tam certo multa creari.” See also Lucretius I 204: “constat quid possit oriri”; I 586–588, II 709: “eadem ratio res terminat omnis”; III 787: “certum ac dispositum ubi quicquid crescat et insit” (=V 131). Here also belongs the discussion of the question of the possibility of monstrous beings in nature, like the centaurs (*portenta*); Lucretius denies it with the argument that atomistic nature in particular does not allow one thing to couple with anything else it likes: “sed res quaeque suo ritu procedit et omnes/foedera naturae certo discrimina servantium” (V 923–924). See also VI 906–907, where an attempt is made to explain magnetic stones.


25. Grant McColley, “The Seventeenth Century Doctrine of a Plurality of Worlds,” *Annals of Science* 1 (1986):39ff: “... There occurred in 1277 one of the most interesting events recorded in history... the power of God definitely overshadows the physics of Aristotle.”

26. *Chartularium Universitatis Parisiensis*, vol. 1, p. 545, n. 26: *Quod prima causa posset producere effectum sibi aequalem nisi temperaret potentiam suam.* In this connection, with the liquidation of the ancient cosmos metaphysics, belong also the sentences nos. 48 and 58: *Quod deus non potest esse causa noni facti, nec potest aliquis de novo producere; Quod deum esse necesse est facere, quicquid immediate fit ab ipso.*

27. William of Ockham, *Commentary on the Sentences* I d. 17, q. 1, L: “quacumque forma posita in anima potest deus velle animam annihiolare antequam det sibi viram aesternam, et velle numquam eam recreare... potest contingenter annihiolare illud quandocumque placet sibi: sed istam animam contingenter creavint, ergo ipsum potest annihiolare.” Loc. cit., q. 1, M: “ego autem ponio quod nulla forma nec naturalis nec supernaturalis potest deum sic necessitate.”

28. William of Ockham, *Commentary on the Sentences* I d. 17, q. 3, F: “... frequenter facit deus mediantibus pluribus quod posset facere mediantibus paucioribus.”

29. William of Ockham, *Commentary on the Sentences* I d. 17, q. 8, G: “... omnipotens non potest efficerre omne illud quod non includit contradictionem, quia non potest efficiere deum.” This holds also for the initial question of the doctrine of grace: “... quoniam deus non possit facere tantem caritatem quin facere maiorem, non sequitur eam posse facere infinitum” (q. 8, G); “... patet quod auctoritas philosophi (sc. Aristotelis) non est recipienda in hac parte... quia possit deus facere unum alium mundum; immo credo quod non posset facere tot mundos finitos quin posset facere plures” (q. 8 Y). God as Creator is not “causa naturalis; si esset causa naturalis; vel omnia produceret simul vel nulla” (I d. 43, q. 1, M). The created world could be the best of the possible worlds only at the cost of this principle: “... proboabile autem
reputo quod deus posset facere alium Mundum meliorem istum distinctum specie ab isto, et
maxime quod ab aliquas res distinctas specie, et quod pluralitatem specierum.”

University of Michigan Press, 1969), part I, p. 64 (Akademie ed., vol. 1, p. 255); *Critique of
Judgement* II, section 86 (Akademie ed., vol. 5, p. 442). Giordano Bruno’s distinction between
the ‘world’ as the one universe and “world” as a term for individual cosmic bodies already
tends in this direction (Theses de magia V; Opera latina, ed. F. Fiorentino et al. (Naples: 1879-1891),
vol. 3, pp. 457ff). Telescope and microscope induced as a popular thought experiment the
idea of ‘worlds’ nested within one another, best worked out perhaps in the letter from Johann
Bernoulli to Leibniz dated November 8, 1698 (Leibniz, *Mathematische Schriften*, ed. Gerhardt,
vol. 3, part 2, pp. 548ff): “The creatures that we observe under the microscope have not only
their own ‘world,’ with sun, moon and stars, but also their own microscopes, with which they
in their turn observe creatures of whose ‘world’ they know nothing; but this is still not the
whole story—aren’t we ourselves perhaps only microscopic objects for beings who don’t
imagine that we have a ‘world’ like theirs? *Est enim utroque par ratio.*” Bernoulli may have
developed his ‘conjectures’ from a suggestion in the Port-Royal logic: *L’art de penser* (1622) IV
1.

31. Lucretius II 180–181: “… nequaquam nobis divinitus esse creatam/naturam mundi: tanta
stat praedita culpa.”

32. Lucretius VI 9–11: “nam cum vidit hic ad victum quae flagitat usus/ omnia iam ferme
mortalis esse parata/ et, proquam possent, vitam consistere tutam.”

33. Usener’s fragment 469 (= Diano’s fragment 56); see W. Schmid, article “Epikur” in

34. Cicero, *De finibus* I 18, 45–46: “Quarum (ac. cupiditatum) ea ratio est, ut necessarie nec
opera multa nec impensa expleantur; ne naturales quidem multa desiderant, propter quod
ipsa natura dividias, quibus contenta sit, et parabiles et terminatas habeat; innatum autem
 cupiditatum nec modus ullus nec finis inventi potest.”


p. 794). With the exception of immortality, man is capable of the full eudemonia of the gods
(Usener’s fragment 602). On provisos with respect to the interpretation of Epicurean theology
in terms of its systematic function, see Schmid’s article, p. 799; and also on the authenticity
of Lucretius in connection with this question, p. 762.

38. Lucretius V 82–90; see also V 1204–1240: Gazing at the heavens awakes concern (cura)
about the powers (immensa potestas), to which man can only surrender (judicia sibi habere videtur).
The weakness of reason (rationis egestas) makes it constitutionally liable to such concern.

68).

1, pp. 65–66) [translation altered].


42. Epicurus as quoted by Seneca, *Ad Lucilium* 9, 20 (= Usener’s fragment 474): “Si cui sua
non videntur amplissima, licet totius mundi dominus sit, tamen miser est.”
48. Cicero, De finibus I 6, 19: "declinare dixit atomum perpaulum quo nihil posset fieri minus; ita effici complexiones et copulationes et adhaesiones atomorum inter se, ex quo efficeretur mundus. . . ."

44. Lucretius II 251-260.


46. Marx’s dissertation, trans. Livergood, part two, chapter 1, p. 82 (Frühe Schriften, vol. 1, p. 42): “Thus as the atom frees itself from its relative existence, the straight line, by making an abstraction of it, by turning aside from it, so the whole Epicurean philosophy turns aside from the restrictive mode of being whenever the concept of abstract individuality, the autonomy and negation of all relation to other things, is to be represented in its existence.”

47. This idea also penetrated into popular literature; thus in the French Roman de Sidrac of the thirteenth century, which links it to the preeminence of man over all creatures: “Quelle est la plus belle chose que Dieu ait faite en ce monde? L’homme”—cited in Ch.-V. Langlois, La Connaissance de la Nature et du Monde d’après des écrits français à l’usage des laïcs (Paris: 1927), pp. 288, 247.


49. Albertus Magnus, Summa Theologiae II tract. 1, q. 5, a. 1: “Creator creando demonstrat suum posse . . .” Duns Scotus, Commentary on the Sentences I d. 8, q. 5: “... quare voluntas voluit hoc, nulla est causa, nisi quia voluntas est voluntas.”

50. J. Lappe, Nicolaus von Autrecoun. Sein Leben, seine Philosophie, seine Schriften (Münster: 1908, Beiträge zur Geschichte der Philosophie des Mittelalters 6, 2), p. 85*: “... non potest evidenter ostendi nobilitas unius rei super aliam.” This holds logically even for God, whose omnipotence does not enable one to deduce His precedence in regard to nobilitas: “... quacunque re demonstrata nullus scit evidenter, quin excedat nobilitate omnes alias . . . nullus scit evidenter, quin ipsa (sc. res demonstrata) sit deus, si per deum intelligimus ens nobilissimum . . . aliquid nescit evidenter, quod una res sit finis alterius.”

51. Duns Scotus, Utrum Christus sit praedestinatus esse Filius Dei, ed. E. Longpré, in Wissenschaft und Weisheit 2 (1935):90-93. The text is governed by the precedence of gloria over gratia: “... prius fuit praedestinatio Christi ad gloriam quam ad unionem illam . . . sumnum opus divimum non videtur solum esse occasionatum; sed si solum esset facta incarnatio Verbi divini, quae sumnum opus est inter omni opera Dei, propter lapsum hominis, esset solum occasionata.”


54. The “Maximal God” is found in Nietzsche, The Genealogy of Morals, III 20; here the correlate of theological maximalism is the “maximum of the feeling of guilt,” whose transformation into a sort of “second innocence” has atheism as its precondition. The historical nexus of
theological absolutism and human self-assertion is here seen in the narrow form of moral relief.
Talk of the theological maximum and minimum is also found in Kant, Vorlesungen über die philosophische Religionslehre, ed. K. Beyer (Halle: Akademischer Verlag, 1987), p. 13, who wants to know what "minimum of theology" is required for 'religion' in the practical sense, and contrasts with this minimum the maximum "which is not necessary for religion in general and is also too strong for healthy reason"; "The maximum of theology would be the knowledge that God exists" (marginal notation in the Danzig lecture-transcript)—so radically had the range of the antithesis been narrowed, and indeed for Kant, too, through exclusive reference to the possibility of morality.


Chapter 4

1. W. Heisenberg, Physics and Philosophy, The Revolution in Modern Science (New York: Harper and Row, 1958), p. 74. Francis Bacon saw the new 'seriousness' in the turning of interest from the extraordinary aspects of nature to its lawful regularities, from the curiosa industria that amuses itself with the lusus naturae, to seria utilitas. Special magical intervention must give way to thoroughgoing mastery of reality as soon as one can no longer rely on reality's teleology. The extravagantia et quasi abrupta in nature are not to be written off, but rather to be investigated as particularly instructive instances of universal lawfulness, the miracula naturae being analyzed as cases of the concursus rarus of forma and lex (Novum Organum II 27–28; Works, ed. Spedding, Ellis, and Heath, vol. 1, pp. 280–282).


3. As Schopenhauer observed—Parerga I; Sämtliche Werke, ed. W. von Löhneysen (Stuttgart: Cotta, 1960–1965), vol. 4, p. 13—the function of the proof of God's existence in the Third Meditation is only superficially a continuation of the medieval tradition of proofs, and in its real function it inverts that tradition: Descartes "assumed the reality of the external world on the strength of God's guarantee when, on reverse, he proved the existence of the world only from the existence and veracity of God: it is the reverse of the cosmological proof."

4. Descartes, Meditationes I par. 2; Oeuvres, ed. Adam and Tannery, vol. 7, p. 17: "... non minus accurate ab is quae non plane certa sunt atque indubitata, quam ab aperire falsis assensionem esse cohendam. . . ."

5. Descartes, Principia philosophiae, part I, principle 6: "Sed interm a quocunque tandem simus, et quantumvis ille (sc. originis nostrae author) sit potens, quantumvis fallax; hanc nihilominus in nobis libertatem esse experimur, ut semper ab ilis credendus, quae non plane certa sunt et explorata, possimus abstinere; atque ita cavere, ne unquam erroremus." In the contradiction between mens finita and potentia infinita, the evidence of freedom has precedence over all other ideas: "... libertatis autem et indifferentera, quae in nobis est, nos ita conscius esse, ut nihil sit, quod evidentius et perfectius comprehendamus" (part I, principle 41).
6. W. Kamlah, “Der Anfang der Vernunft bei Descartes—autobiographisch und historisch,” Archiv für Geschichte der Philosophie 43 (1961):76: According to Kamlah, Descartes gained from this encounter an acquaintance with the ‘Leonardo tradition’ of deplatonized mathematics, and his pretended break with tradition was actually a change of traditions. The result would be that the systematic sequence is the reverse of the biographical sequence: that Descartes only assimilated his conception of the res cogitans to his understanding of the res extensa secondarily and that the turning (stylized as ‘illumination’) that occurred in the overheated room in the Bavarian winter quarters at Neuberg is only the transition (elevated to the status of a ‘beginning’) from a dialogical stimulus to an act of authenticity that is intended to be exemplary: “That in principle any man ‘could’ find, prepare, and traverse the whole path of science does not mean that anyone really could do that—but it seduces one into this stylization that Descartes undertakes, and what is more, it achieves this seduction by means of an enormous egocentric prejudice” (loc. cit., p. 84).


8. Descartes, Meditationes I par. 9; Oeuvres, ed. Adam and Tannery, vol. 7, p. 20: “Verumtamen infixa quaedam est meae menti vetus opinio, Deum esse qui potest omnia . . . .” The position of Descartes’ proof of God’s existence in his overall argument becomes clearer when one observes that it is not this God whose existence needs to be proved; the ontological argument from the concept of God is indispensable because what is at stake there is more than mere existence; it is a specific attribute.

9. This pretended spontaneity is taken at its word when one charges Descartes with having “made man independent through the power of ratio, having torn him out of the links that, in the totality of his spiritual [geistlichen] relations, gave him peace in the Being that was more powerful than him,” L. Landgrebe, “Descartes,” in G. W. Leibniz: Vorträge der aus Anlass seines 300. Geburtstages in Hamburg abgehaltenen wissenschaftlichen Tagung (Hamburg: Hansischer Gilden-Verlag, 1946), p. 229. Or M. Heidegger, “The Age of the World Picture,” in The Question Concerning Technology, trans. William Lovitt (New York and London: 1977), pp. 139-140—original edition: Holzwege (Frankfurt am Main: Klostermann, 1950), pp. 91-92—“Descartes’ interpretation of what it is to be and of truth first creates the presupposition underlying the possibility of a theory of knowledge or a metaphysics of knowledge . . . . With the interpretation of man as subjectum, Descartes creates the metaphysical precondition of the anthropology to come. . . . Descartes can be overcome only through the overcoming of that which he himself founded . . . .”


11. William of Ockham, Commentary on the Sentences II d. 19, H: “deus autem nulli tenetur nec obligatur tanquam debitor: et ideo non potest facere quod non debet facere: nec potest non facere quod debet facere.”

12. Thomas Aquinas, Summa theologica I q. 76; a. 5: “Utrum anima intellectiva convenienter tali corpori unitur.” The special concern here is with the objection that it necessarily follows from the materiality of the body that the instrument of the soul is mortal: “Si quis vero dicit, quod deus potuit hanc necessitatem vitare; dicendum est quod in constitutione rerum naturalium non consideratur quid deus facere possit; sed quid naturalia rerum conveniunt. . . .” But the lack of viability of the argument of conformity [conuentitia] in the Christian context can be seen in the way in which in paradise, according to theology, the body that is mortal ‘by nature’ immediately had restored to it—non per naturam, sed per gratiam divinam donum—the immortality that it had just lost.
13. William of Ockham, Commentary on the Sentences, Prologus I 1, DD-HH. The notitia intuitiva, which naturaliter does not come about without the existence of its object, is here assimilated to the notitia abstractiva that continues to exist when its object no longer exists (re simpliciter destructa). The same argumentation is given in Quadribeta VI q. 6: "Utrum cognitio intuitiva posset esse de objecto non-existentes." The principle of the eliminability of secondary causes, which renders the cosmic 'agenda' contingent, signifies for the theory of knowledge the possible indifference of the objects that in fact exist, and thus of what is actual compared to what is possible: "Omnem effectum quern mediate causat cum causa secunda potest immediate per se causare. Sed in notitiam intuitivam corporalem potest mediante objecto. Ergo potest in eam immediate per se." 

14. A. Maier, "Das Problem der Evidenz in der Philosophie des 14. Jahrhunderts," Scholastik 38 (1963) (henceforth: "Das Problem der Evidenz"): 186-187 for Peter Aureoli and p. 194 for Francis of Meyronnes. This last, the magister abstractionum, answers the question regarding the realitas praesentialitate non existente in the negative because knowledge is not a mere quality in the subject but a real relation, which essentially presupposes both termini relationis, so that this is something that even God cannot alter: "dico et credo quod illa regula, quae est committer a theologis concessa (that is, the principle of immediacy), est vera in absolutis et tamen non in relativis..." (cited after A. Maier, "Das Problem der Evidenz," p. 194n26).

15. A. Feder, "Les 51 articles de Guillaume Occam censurés, en Avignon, en 1326," Revue d'Histoire Ecclesiastique 18 (1922): 240-270. In the catalog of incriminated propositions, the thesis that is our present subject is represented in its most cautious formulation by no. 10: "notitia intuitiva secundum se et necessario non plus est existentius quam non-existentius nec plus respicit existentiam quam non-existentiam." It is the formulation from the prologue of the Commentary on the Sentences I 1, BB, which limits itself to the question of the persistence of an idea that was once derived from a real object, after the annihilation of that object.

16. William of Ockham, Quadribeta VI q. 6: "non tamen potest (sc. deus) aliquem effectum facere sine causa prima. Unde sicut non est possibile quod color causet effective visionem suam in oculo nisi sit actualiter praezens, ita non est possible, quod deus causet visionem in intellectu nisi exhibita sua actuali praesentia." See A. Maier, "Das Problem der Evidenz," p. 194.

17. Peter of Ailly, Commentary on the Sentences I q. 1 a. 1, concl. 3 (cited after A. Maier, "Das Problem der Evidenz," p. 219): "...loquendo de evidentia secundum quid seu conditionata vel ex suppositione scilicet stante dei influentia generali et cursu naturae solito nulloque facto miraculo talia (sc. extrinsicum sensibilia) possunt esse nobis sufficienter evidentia, sic quod de ipsis non habemus rationabiliter dubitare... Probatur hoc quia stante dei influentia etc. non stat talia nobis apparere et non sic esse, unde quamvis talis apparentia posset esse ipsis obieciis non existentibus per potentiam dei absolutam, tamen proper hoc non habemus rationabiliter dubitare. Nam ex hoc multa inconvenientia et absurba sequentur... Secundo sequitur quod non potest sufficienter inferri ex una re alia nec ex cause posset concludi effectus nec e contra, et sic periret omnes demonstrationes naturales."


19. Gregor of Rimini (d. 1358), Commentary on the Sentences I d. 3, q. 1, a. 2. See A. Maier, "Das Problem der Evidenz," pp. 222ff. Peter of Ailly, in his Commentary on the Sentences of 1275 (I q. 1, a. 1: utrum possibile sit viatorem habere notitiam evidentem de aliqua veritate), gave a typically 'Scholastic,' that is, purely verbal solution of the problem: An evidentia absoluta simpliciter would be precisely an evidence, assent to which involves no risk whatever of deception, whereas an evidentia secundum quid can be relied upon only under the familiar conditions (stante dei influentia generali et nullo facto miraculo).
20. P. Bayle, Dictionnaire historique et critique, 2nd ed. (Amsterdam, 1702), III 2581: “Ne peut-il pas se comporter envers nous comme un médecin envers les malades et comme un père envers ses enfants? Ce sont des personnes que l'on trompe très-souvent et avec sagesse, et pour leur profit. Aurions-nous bien la force de contempler la vérité si Dieu nous la présentait toute nue?”


22. This thesis also stands on the ‘list of errors’ (article 28), though in a more cautious formulation: “Quod probabiliter potest sustineri cognitio non vel voluntatem non esse distinctam ab anima, immo quod est ipsa anima. Et sic sustinens non cogiteretur negare propositionem per se notam nec negare aliquid, auctoritate non admitting.”

23. Jean de Mirecourt, Apologia I (ed. F. Stegmüller), prop. 45: “Secundam tamen (sc. opinionem) libentius dicere si auderem. Elogiar studium quan voluerit.” In the Apologia II, prop. 14, he says he was not speaking of the potentia absoluta when he discussed this question: “alius sensus est, quod de potentia dei absoluta, et de hoc nihil dixi.” However, this is a defensive assertion that is entirely inconsistent with the argumentation that was given. Where, on the contrary, the consideration which I have described as pragmatic—that of the unfittingness inconvenientiae of the impossibility of certainty—appears, it necessarily amounts to the assumption of the potentia ordinata, that is, the assumption that God leaves it up to the things to take their own course: “si sensatio exterior causaretur objecto non causante vel non existente, perier omnis certitudo . . . . si sensatio exterior posset conservari naturaliter sine objecto, perier omnis certitudo de existentia sensibilis non facto miraculo imo deo permittente rest agere suos cursus; consequens est inconvenientia” (Jean de Mirecourt, Commentary on the Sentences I q. 1; cited after A. Maier, “Das Problem der Evidenz,” p. 218).

24. Jean Buridan, Quaestiones super libris quattuor de caelo et mundo I q. 17, ed. E. A. Moody (Cambridge, MA: Medieval Academy of America, 1942), par. 79: “Unde credo quod non sit possibile aliquem effectum proportionari potentiae divinae propeter infinitatem illius potentiae.” Buridan takes up the problem again in quaestio I 22: “Utum sit dare maximum in quod potentia potest.” In regard to the question whether God could move the heavens more rapidly than they actually move, Buridan considers what Aristotle would have said (par. 99). The answer: There is an ‘appropriate’ speed for the motions of the heavens, and this is exactly what is conferred on the spheres by the prime mover. This very accurately conjectured ancient answer conflicts with the nominalist principle of the insurmountable comparative, of which, to be sure, Buridan asserts that although it would not have been acknowledged by Aristotle, nevertheless it is logically suitable to his system (decidendum esse secundum Aristotelis). The distinction between what Aristotle would have said and what he would have had to say is instructive in what it shows us of the conscious distance of nominalism from the reception of antiquity, even if it is falsely made in this case.


destiae, quam audaciae, idest praesumptionis; si tamen ille qui huiusmodi dubitationes considerat, diligat etiam parvas sufficientias, idest parum sufficientes rationes, ad inveniendum de illis rebus, de quibus habemus maximas dubitationes; et hoc propter desiderium quod quis habet ad philosophiam, ut scilicet eius principia stent, idest firma permaneant. Illorum tamen suppositiones quas ad inveniendum de illis rebus. de quibus habemus maximas dubitationes; et hoc propter desiderium quod quis habet ad philosophiam, ut scilicet eius principia stent, idest firma permaneant.

27. Thomas Aquinas, Summa theologiae I q. 32, a. 1, reply to the second point. See In Boethium de trinitate IV q. 3, reply to the eighth point.

Chapter 5

1. Nicholas Copernicus, De revolutionibus orbium caelestium. Praefatio ad Paulum III.

2. Descartes, Principia philosophiae, part 1, no. 28.

3. Descartes, Principia philosophiae, part 3, no. 1.

4. Descartes, Principia philosophiae, part 3 no. 2. The premise of anthropocentrism is admissible, however, as a presupposition of practical philosophy: "Quamvis enim in Ethicis sit plenum dicere, omnin a Deo propter nos facia esse." That which for the Physica considerata has to be characterized as plane ridiculum et ineptum, has its place in the practical relation to the world, and indeed not only in the ethical sense but also as the principle of the universal right to the use of nature, the rebus omnibus uti poss. As the substrate of human intentions—that is, in its materialization—nature has a service function, which because of the unknowability of pregiven ends is freed of any obligatory restriction.

5. Descartes, Principia philosophiae, part 3, nos. 15–19: "... ipsamque (sc. hypothesin) tantum pro hypothesi, non pro rei veritate haberi velim" (no. 19).

6. Descartes, Principia philosophiae, part 3, no. 20.


8. Descartes, Principia philosophiae, part 3, nos. 44,45; part 4, nos. 204,205.

9. Descartes, Oeuvres, ed. Adam and Tannery, vol. 9, p. 128: "... car si cela se trouve, elle ne sera pas moins utile à la vie que si elle estoit vraie, pource qu'on se'en pourra servir en mesme façon pour disposer les causes naturelles à produire les effets qu'on desirera."

10. J. Chr. P. Erxleben, Anfangsgründe der Naturlehre 13, section 775. Lichtenberg, who edited and made additions to the work beginning with its third edition (Göttingen: 1784), left this section unchanged.

11. Robert Boyle (1626–1691), quoted in J. Meier, Robert Boyle's Naturphilosophie (Fulda, 1907), p. 12 [retranslated into English]. Compare Heinrich Oldenburg's letter to Spinoza of April 3, 1665, Correspondence of Spinoza, trans. A. Wolf (London: George Allen and Unwin, 1928), p. 113: "... that he has made use of the Epicurean principles, which will have it that motion is innate in the particles; for it was necessary to use some Hypothesis to explain the Phenomenon; ..."


19. Hobbes, *De cive* XV 5: "ius dominandi ab ipsa potentia derivatur."

20. Hobbes, *De cive* I 11: "Nam effectus eius iuris idem pene est, ac/si nullum omnino ius exstiterit."

21. Hobbes, *De corpore* XXV 1: "... ratiocinationis principia prima, nempe definitiones, vera esse facimus nosnet ipsi, per consensionem circa rerum appellationes... Principia igitur, unde pendent quae sequuntur, non facimus nos, nec pronunciamus universaliter ut definitiones, sed a naturae conditore in ipsis rebus positam observamus..."

22. Hobbes, *De corpore* XVIII 4: "Et scire veritatem istam, nihil est aliud, quam agnoscere esse eam a nobis ipsis factam."


24. Bacon, *Essays*, XV: "Of seditions and troubles": "Generally, it is to be foreseen that the population of a kingdom (especially if it be not mown down by wars) do not exceed the stock of the kingdom which should maintain them."

25. Montesquieu, *De l'esprit des lois* XXIII 19.


28. H. S. Reimarus, *Abhandlungen von den vornehmlichen Wahrheiten der natürlichen Religion* (Hamburg: 1754; cited after the 6th ed., 1791), vol. 1, p. 13: "And this observation leads us necessarily to the conclusion that we must finally reduce the human species to the smallest possible number and to its first origin and beginning. For it is not possible that the species should be eternal because otherwise there would have to have been already from time out of mind at least just as many men as there are now...." Reimarus reports the controversy between Hume and Wallace and finds himself in agreement with the skeptic: "He argues for the multitude in recent times, and makes dubious and laughable (not without probability) many testimonies of the old historians to the immense quantity of men in those days." But Wallace also gets credit for his learning and his political observations: "Perhaps by comparing the two authors, each of whom is anxious to populate only his world, one can achieve closer insight into the truth." Reimarus was the first to connect population growth with the turning to technology, in his application of his theory of animals' "mechanical instincts" ("Kunsttriebe") to human self-knowledge—Allgemeine Betrachtungen über die Triebe der Tiere, hauptsächlich über ihre Kunsttriebe (Hamburg: 1760; quoted from the 4th ed., 1798), p. 398: "But the more the numbers of a country increase, the more arts [Künste], as necessary means of subsistence, must be devised, perfected, and disseminated, indeed promoted to the point where complete convenience and pleasure are the results. And it is impossible for this to be done without the help of the sciences, particularly of mathematics, physics, chemistry and the like...."


30. Dolf Sternberger, *Panorama of the Nineteenth Century*, trans. Joachim Neugroschel (New York: Urizen Books, 1977), p. 84: "These immeasurable eras, never really subdivided and reckoned, which have nothing to do with any familiar time, whether finite or infinite, but are merely an indefinite, even astonishing expression of the 'gradualness' with which variation is piled upon variation until a new and always better species is produced—this vast time spreading tremendously everywhere, is needed to allay all differences, mediate all boundaries, and fill all gaps with countless transitions" (translation slightly revised). Original: *Panorama oder Ansichten vom 19. Jahrhundert* (Hamburg: 1988), p. 98.


Part III

Introduction


Notes to Pages 233–248


8. Montesquieu, Discours sur les motifs qui doivent nous encourager aux sciences, Oeuvres complètes (Paris: Didot), p. 579: “Le premier, c’est la satisfaction intérieure que l’on ressent lorsque l’on voit augmenter l’excellence de son être, et que l’on rend intelligent un être intelligent. Le second, c’est une certaine curiosité que tous les hommes ont, et qui n’a jamais été si raisonnable que dans ce siècle-ci. Nous entendons dire tous les jours que les bornes des connaissances des hommes viennent de être infiniment reculées, que les savants sont étonnés de se trouver si savants, et que la grandeur des succès les a fait quelquefois douter de la vérité des succès….”


10. Lactantius, Divinae Institutiones III 20, 10. Erasmus included the sentence in his Adagia I 6, 69, and interpreted it as follows: “Dictum Socraticum deterrens a curiosa investigatione rerum coelestium et arcarnorum naturae.” Characteristic of the attempt to trace the sentence back to its original context is Erasmus’s conclusion that one could also interpret it thus: “Quae infra nos, nihil ad nos, ubi significamus res leviusculas, quam ut nobis curae esse debant.”

Chapter 1


4. Plato, Theaetetus 174 A.

5. Diogenes Laertius II 52 reports the pertinent remark that one should only pursue geometry far enough to be able to undertake the measurements oneself when acquiring or relinquishing a piece of land.

6. Xenophon, Memorabilia I 1, 9; 12–13.

7. Xenophon, Memorabilia I 1, 15–16.

8. Diogenes Laertius II 92.

9. Diogenes Laertius VI 103.

10. The attempt to deny Anaxagoras credit for the ideal of pure theory of the cosmos and to label this a Peripatetic projection has rightly been rejected by G. Müller, “Probleme der
aristotelischen Eudaimonielehre," *Museum Helveticum* 17 (1960): 124-127. In fact, the unambiguous formula of the *Eudemian Ethics* (1216 a 11-14), that Anaxagoras had specified "observation of the heavens and of the order of the entire cosmos" as the value content of life, makes comprehensible for the first time what it was that Socrates sought to overcome as his philosophical inheritance, and for which Plato (from the *Phaedo* onward) went in search of a new justification and role. The charge of impiety brought against Anaxagoras may nevertheless have shown that it was not enough to ascribe absolute value to the theoretical form of life, under the circumstances of the polis; this is also suggested by the defense that Euripides allotted to his friend—see *Euripidis Perditarum Tragoediarum Fragmenta*, ed. A. Nauck (Leipzig: Teubner, 1892), #910—in which he protested that pure theory had immanent ethical returns, thus coming close to the Socratic solution of the problem as the identity of knowledge and virtue: "Blessed is he who won knowledge from inquiry, proceeding neither to offend his fellow citizens nor to act unjustly, but rather contemplating the ageless order of immortal reality, the configuration it possesses and how and in what manner it is so. Such men never aim at shameful deeds." W. Nestle, "Aparagmosyne," in *Griechische Studien* (Stuttgart: H. F. C. Hansmann, 1948), pp. 374-386 places the figure of Socrates in the wider context of the argument over the form of political life in Athens, an argument that had been induced by the penetration of Sophism and to which Thucydides had given expression (in Pericles's speech of 429 B.C.) with his polemic against political indifference and with his moral critique of Athenian power politics (in the editing of the second book in 404 B.C.).

11. Plato, *Apology* 19 BC.

12. Diogenes Laertius II 45.

13. Plato, *Phaedo* 96 AC.


15. Plato, *Phaedo* 107 C-108 C.


17. Plato, *Gorgias* 523 A.

18. Plato, *Gorgias* 527 A.

19. Plato, *Timaeus* 29 D.


21. Plato, *Timaeus* 41 E.


26. On account of the goal cited here of making oneself immortal, an accusation of asêbía (impiety) was to be made against Aristotle too, as we know from Athenaeus (fragment 645 R). It is presupposed here that it is only through a *homoiôsis* (assimilation) of the knower that he acquires knowledge of the object, that is, that not only do 'eternal objects'—in particular, the
stars—presuppose for their knowledge something divine in man (according to the Presocratic principle that like is known by like), but also, in the realization of this knowledge, that potentiality is actualized—to this extent the Aristotelian doctrine of potency and act gives the schema of knowledge a tendency toward metamorphosis [that is, divinization]. One must keep this in mind in order to understand the reproaches of an admixture of 'magic' in the cognitive will, especially in relation to the subject of cosmology.

27. Averroes, In de generatione animalium V 1: "Aristotelis doctrina est summa veritas, quoniam eius intellectus fuit finis humani intellecrus. Quare bene dicitur de ilIo, quod ipse fuit creatus et datus nobis divina providentia. ut non ignoremus possibilia sciri."

28. The origin of this maxim cited in Walter Burleigh (1275–ca. 1343), De vita et moribus philosophorum, ed. H. Knust (Tübingen: 1886), c. 121, cannot be established, but it is unlikely that the philosopher and writer of the Almagest was its author.

29. On the verbal history of curious and curiositas, see A. Labhardt, "Curiositas. Notes sur l'histoire d'un mot et d'une notion," Museum Helvericum 17 (1960):206-210; even if it hardly determined the Scholastic antithesis between curiositas and studiositas, the original analogy to studiosus, which induced the -i-, is interesting.


32. Sextus Empiricus, Adversus mathematicos VII 416.

33. Sextus Empiricus, Pyrrhonian Hypotyposes II 253.

34. SVF, vol. 2, #116: "Quodsi aliquid aliquando acturus est (sc. animus), necesse est id ei verum, quod occurrit, videri."

35. SVF, vol. 1, #66.


37. Seneca, De otio, c. 32; see Epistulae ad Lucilium 94, 56.

38. Seneca, Naturales quaestiones VII 25, 5.

39. Of the curious spectator, he could also say that he inquires after what concerns him: "quidni quaearet? scit illa ad se pertinere" (Naturales quaestiones I 12). Here the hiding places of nature and the secrets of the gods set no bounds to the courage of the inquiring spirit: "Magni animi res fuit, rerum naturae latebras dimovere, nec contentum exteriori eius conspectu, introspicere et in deorum secreta descendere. Plurimum ad inveniendum contulit, qui speravit posse reperiri."


Chapter 2

cogitantem et animadvententem et omnia ad se pertinentem, curiosum et plenum negotii deum?"


3. Epicurus, Ratae sententiae 18.

4. Lucretius, De rerum natura II 1033ff.


7. The primitive, preastronomical condition as a situation in which man must fear the presumed lawlessness of natural phenomena is also mobilized against Epicurus by the Stoic Manilius in his Astronomicon I 66–72:

Nam rudis ante illos (sc. sacerdotes), nullo discrimine, vita
In speciem conversa, operum ratione carcerat,
Et stupefacta novo pendebat lumine mundi,
Tum velut amissis maerens, tum laeta renatis
Sideribus, variosque dies, incertaque noctis
Tempora, nec similis umbras, iam sole regreso,
Iam propiore, suis poterat discernere causis.

Both justification and impeachment of astronomy can be found in the background of Stoic motives. Pliny, Historia naturalis II 95, tells of the cataloging of the fixed stars by Hipparchus (in the second century B.C.), who asked himself, at the appearance of a ‘new star,’ whether such a thing often happens and whether there are changes in the location and size of the fixed stars; he thereupon presumed (ausus rem etiam deo improbam) to carry out determinations of the location and size of the fixed stars with his own apparatus (organis excogitatis), so as to make it possible for posterity to observe changes on this basis (caelo in hereditate cunctis relieto). Pliny is full of praise for this long-term research undertaking (numquam satis laudatus), but he reveals how unusually far cosmological curiosity had gone in this case, how implausible were the motivating doubts regarding the traditional conception of the heavens (ad dubitationem est adductus), by painstakingly embedding this subject in a justification of astronomical knowledge through the essential kinship between souls and stars. Victor Hugo misunderstood the passage: “Parfois la science fait obstacle à la science. Les savants sont pris de scrupules devant l’étude. Pline se scandalise d’Hipparque; Hipparque, à l’aide d’un astrolabe informe, essaie de compter les étoiles et de les nommer. Chose mauvaise envers Dieu, dit Pline. Ausus rem Deo improbam. Compter les étoiles, c’est faire une méchanceté à Dieu. Ce réquisitoire, commencé par Pline contra Hipparque, est continué par l’inquisition contre Campanella. La science est l’asymptote de la vérité…” (William Shakespeare, part one, book 8, chapter 4).

Chapter 3


2. Augustine, Opus imperfectum contra secundum Juliani responsionem 6, 26: “Beati quippe omnes esse volumus, quod ipsi quoque philosophi huic saeculi, et Academici de rebus omnibus dubiantes, teste patrono suo Tullio, coacti sunt confiteri: idque unum esse dixerunt, quod disputacione non egeat…”

Notes to Pages 265–270
3. Plato, *Timaeus* 48 D; 72 D.


7. Sextus Empiricus I 7, 18; I 10, 19.


11. That an attitude of radical questioning derives unavowed support from the conservative disposition of a reality on which one thinks one can depend is more tangibly demonstrable in the field of political theory because it always or usually has its documented practice: “In practice the very person who theoretically puts everything in question depends on everything going on in the old way. Theoretical radicalism depends on its practical opposite...”—H. Lübbe, “Zur Theorie der Entscheidung,” in *Collegium Philosophicum. Studien Joachim Ritter zum 60. Geburtstag* (Basel: 1964), pp. 186ff. The practice of the Skeptic evades us; we can only imagine what it might be. The art of ignoring all questions and submitting oneself to present ‘conditions’ presupposes a trust (concealing itself from itself) in the way of the world that Nietzsche will entitle “absurd.”

Chapter 4

1. Cicero, *De finibus bonorum et malorum* IV 5, 11: Common to human modestia and cosmic-divine moderatio is the observation of measure, of which astronomy provides knowledge even when it remains purely phoronomic and mathematical.

2. Cicero, *De finibus* IV 5, 12: “Inest in eadem explicatione naturae insatiabilis quaedam e cognoscendis rebus voluptas, in qua una confectis rebus necessariis vacui negotiis honeste ac liberaliter possimus vivere.”


4. Cicero, *De officiis* I 6, 18: “Omnem enim trahimur et ducimur ad cognitionis et scientiae cupiditatem...”

5. Cicero, *De officiis* I 6, 18: “In hoc genere et naturali et honesto duo vita vitanda sunt, unum, ne incognita pro cognitis habeamus hisque temere assentiamur, quod vitium effugere qui volet—omnes autem velle debent—adhibebit ad considerandas res et tempus et diligentiam.”


7. Cicero, *De officiis* I 6, 19: “... quae omnes artes in veri investigatione versantur, cujus studio a rebus generidis abduci contra officium est. Virtutis enim laus omnis in actione consistit...”
8. Cicero, De finibus V 18, 48: "Tantus est igitur innatus in nobis cognitionis amor et scientiae, ut nemo dubitare possit, quin ad eas res hominum natura nullo emolumento invitata rapiatur."

9. Cicero, De finibus V 18, 49: "Vidit Homerus probari fabulam non posse. S1 cantiunculis tantus vir metitus teneretur; scientiam pollicentur, quam non erat mirum sapientiae cupido patria esse cariorem. Atque omnia quidem scire, quibuscumque modi sint, cupere curiosorum, duci vero maiorum rerum contemplatione ad cupiditatem scientiae summorum virorum est putandum."


11. Cicero, Tusculanae disputationes I 35; see also Exameron V 24, 86.


13. Ambrosius, De officiis ministrorum I 26–27; see also Exameron V 24, 86.


15. Philo, De migratione Abrahami 185.

16. Augustine, De moribus ecclesiae catholicae et de moribus Manichaeorum I 38. The passage is cited by, for instance, Thomas Aquinas, Summa theologica II 2, q. 167, a. 1.

17. Philo, De migratione Abrahami 187.


20. Philo, De migratione Abrahami 38.

21. Philo, De migratione Abrahami 40, 46. Thus even God's words are 'seen' (47–52), and God 'sees' men's thoughts, while among one another men depend on the deficient mode of hearing, having to 'translate' their thoughts into words (81). The ethos of the Migratio Abrahami is the steadfastness of properly oriented vision (222). On the transformation of the Old Testament language of hearing into the Greek language of seeing, see Hans Jonas, Gnosis und spästantiker Geist (Göttingen: Vandenhoeck and Ruprecht, 1934–44), vol. 2, part 1, pp. 95ff., and Hans Blumenberg, "Licht als Metapher der Wahrheit," Studium Generale 10 (1957):442.

22. Philo, De migratione Abrahami 40.

23. Philo, De somnitis I 21–32.

24. Chagigah tract II, 1, cited by Hans Jonas, op. cit. (note 21), p. 206. The references are to cosmology and demonology, cosmogony and eschatology, as the spatially and temporally extreme poles of reference of curiosity.

25. This is still the problematic of the Socratic maxims of self-knowledge and their Platonic retraction into cosmic metaphysics. In an anecdote handed down by Eusebius in Præparatio Evangelica XI 3, 6–8 (ed. K. Mras, Berlin: Akademie Verlag, 1954–56) from the life of Socrates by Aristoxenos—in Die Schule des Aristoteles, ed. Wehrli (Basel: B. Schwabe, 1944–59), vol. 1,
part 2, fragment 53—this is ascribed to Indian wisdom under the postulate of the unity of knowledge of the divine and of the human: Plato is said to have placed the treatment of the whole of nature before that of human matters and that of logic; as the doctor must have knowledge of the whole organism before he can treat a particular organ, so also man can only meaningfully be viewed as a member of the cosmos. This insight is supposed to have been transmitted to Socrates himself through association with Indians in Athens, when he was asked what he philosophized about, and answered that he investigated human life. At that, one of the Indians laughed at him and said that one could only fathom human affairs through knowledge of the divine. This etiological anecdote furnishes an origin for an entire tradition; see Plato, Phaedo 96 Aff; Aristotle, De part. anim. I 1; 642 a 28ff; Metaphysics I 6; 987 b 1ff; SVF, vol. 1, p. 486, vol. 3, p. 584; Cicero, Academ. post. I 4, 15ff; Tusc. disp. V 4, 10; De republ. I 10, 15.

26. Plotinus, Enneads IV 8, 2.
27. Plotinus, Enneads I 8, 4.
29. Plotinus, Enneads IV 8, 1.
31. Irenaeus, Adv. haer. II 1, 3: "... et in infinitum de his quae continentur, et de his quae continent, incidet sermo." Irenaeus recognizes dualism as the root of the unappeasable compulsion to continue 'and so on'; he makes cogitare into the (so characteristic of anti-Gnostic language) excogitare, the compulsion to arbitrary speculation: "et semper necessitas erit excogitare altera Plenomata, et alteros Bythos, et nunquam aliquando consistere, semper quarerentes alios, praeter dictos" (II 1, 4). Dualism, if it is to function, has to admit a presupposition that is incompatible with the nature of divinity, namely, that the one authority does not trouble himself with the other—the premise, that is, of the Epicurean theology of 'carefree' gods: "Et cum haec sic se beant, unusquisque deus suis contentus erit, et non curioso (!) et de alienis; sic quo minus, inustus erit et avarus, et cessans esse quod deus est" (II 1, 5). But if a god should choose not to assert his power over everything, he would contradict himself and lose an essential attribute: "... et solvetur omnipotens appellatio." Thus the readiness of faith to stop at a 'last resort' has its correlate in the nature of the divine itself, which includes the element (originally a reproach against the Stoics' god) of the curiosum.
32. Irenaeus, Adv. haer. II 1, 3: "... ut nunquam stet eorum excogitatio in uno deo, sed per occasionem plus quam est quaecendi, in id quod non sit excidat, et absistat a vero deo."
33. Irenaeus, Adv. haer. II 16, 1: "Rursum igitur si illorum imago conditio est, quid prohibet illa eorum, quae super ea sunt, imagines esse dicere, et quae super ea sunt, rursus aliorum; et in immensas imagines imaginum excidere?"
34. Irenaeus, Adv. haer. II 16, 3: "... ipse a semetipso exemplum et figuratioem eorum quae facta sunt, accipiens... cogi aliquando in aliquo uno statuere sensum, et ex eo figuratioem factorum confiteri."
35. Irenaeus, Adv. haer. II 25, 4: "Ordinem ergo serva tuae scientiae et ne ut bonorum ignarus supertranscendas ipsum deum; non enim transibilis est neque super demurum requiris quid sit; non enim invenies... Non enim excogitabis, sed contra naturam sentiens, eris insipiens; et si in hoc perseveraveris, incides in insaniam, sublimiorem te ipsum melioremque factore tuo existimas, et quod pertranses regna eius.
87. As an example, Irenaeus, Adv. haer. II 28, 7: "Nos autem adhuc in terra conversantes, nondum assidentes throno eius . . . ."


40. Irenaeus, Adv. haer. II 26, 1: "... per quaestionum subtilitates et minutiloquium in impietatem cadere."


42. Irenaeus, Adv. haer. II 27, 1.

43. Irenaeus, Adv. haer. II 27, 2: "Itaque secundum hanc rationem homo quidem semper inquirit, nunquam autem inveniet, eo quod ipsam inventionis abiecerit disciplinam."

44. Clement of Alexandria, Stromateis I 17, 81.

45. Clement, Stromateis V 1, 10.

46. Clement of Alexandria, Protreptikos IX 86, 2. The interpretation of Odysseus's wanderings is prepared for here by the biblical analogy of the desert wandering of the Hebrews after the exodus from Egypt (Protreptikos IX 85, 2).

47. Clement of Alexandria, Stromateis VI 11, 89.

48. Clement, Stromateis VI 10, 82.

49. Clement, Stromateis VI 10, 83 (compare I 9, 43).

50. Clement, Stromateis VI 11, 93.

51. Clement, Stromateis II 1, 2.

52. Clement, Stromateis I 10, 48.


55. Plutarch, De curiositate 516 DE.
Notes to Pages 298–303

56. Plutarch, De curiositate 519 C.

57. Plutarch, De curiositate 517 CE.

58. Apuleius, Metamorphoses I 2: "... non quidem curiosum, sed qui velim scire vel cuncta vel certe plurima."

59. Apuleius, Metamorphoses III 14, 1: familiaris curiositas (thus also IX 12, 2; IX 13, 4: ingenita curiositas; IX 15, 1: genuina curiositas.

60. Tertullian, De baptismo 12.

61. Tertullian, De anima III 4; II 6: "late quæruntur incerta, latius disputamur præsumpta. Quanta difficulatas probandi, tanta operositas suadendi." Operositas serves here, as it did already in Quintilian (Institutio Oratoria VII 8, 55), as the precise equivalent of the Greek terms περιεργία and πολυπραγμοσύνη. One can perhaps define the difference in meaning between operositas and curiositas by saying that the intellectual difficulty and complication produced by curiositas is converted into operositas, and manifests itself as curiositatis labor (De testimonio animae I 2).

62. Tertullian, De praescriptiones haereticorum (henceforth: De præscr. haer.) 9: "Unius ... et certi instituti infinita inquisitio non potest esse. Quaerendum est donec invenias, et credendum, ubi inveneris."

63. Tertullian, De præscr. haer. 7.

64. Tertullian, De resurrectione carnis 5: "ita nos rhetoricari quoque provocant haeretici, sicut etiam philosophari."

65. Tertullian, De præscr. haer. 7.

66. Tertullian, De testimonio animae 1: "Te simplicem et rudem et impolitam et idioticam compello qualem te habent qui te solam habent ..."

67. Tertullian, De testimonio animae 5: "Haec testimonia animae quanto vera tanto simplicia, quanto simplicia tanto vulgaria, quanto vulgaria tanto communia, quanto communia tanto naturalia, quanto naturalia tanto divina."

68. Tertullian, Adversus nationes II 4: Thales stands for the philosophers "qui stupidam exercent curiositatem naturae quam prius in artificem eius et præsidem."

69. Tertullian, De anima 10, 4–5. The anatomist Herophilus serves here to typify a curiositas that, in its pursuit of knowledge, despises man: "ille medicus ... qui hominem odis, ut nosset...." That the organic object might always have been altered by the anatomist's intervention was a consideration raised by Skepticism: "... quia possit fieri ut patefacta et detecta mutentur" (Cicero, Academica II 39, 122).

70. Tertullian, De anima 1, 6.

71. Tertullian, De anima 1, 4.

72. Tertullian, De præscr. haer. 14: "Adversus regulam (sc. fidei) nihil scire omnia scire est."

73. Tertullian, Apologeticum 47, 8–4; De anima 2, 4: "cum maxima iniuria veritatis."

74. Tertullian, Apologeticum 1, 8: "hic tantum curiositas humana torpescit: amant ignorare ... malunt nescire."
75. Tertullian, *Adversus Marcionem* 1, 2.

76. Tatian (*Oratio ad Graecos* 40, 2) and Clement of Alexandria (*Stromateis* I 17, 87), had made use of the metaphor of counterfeit coinage in order to characterize pagan *periergia*’s supposed drawing from biblical sources, and no doubt with the specific implication that by restamping the genuine coin, the marks of its origin were to be destroyed.


78. Lactantius, *Div. inst.* II 8, 64: “adeo nefas existimandum est ea scrutari, quae deus voluit esse celata.”

79. Lactantius, *Div. inst.* II 8, 70: “Denique cum aperiret hominum veritatem deus, ea sola scire nos voluit, quae interfuit hominem scire ad vitam consequendam: quae vero ad curiosam et profanam cupiditatem pertineant, reticuit, ut arcana essent.”


81. Lactantius, *Div. inst.* II 8, 68-69: “Opera ipsius videntur oculis: quomodo autem illa fecerit, ne mente quidem videtur... Hoc est enim modum conditionis suae transgredi nec intelligere, quoque hominum locat accurdere.”

82. Irenaeus, *Adv. haer.* II 3, 2 (against the Gnostics): “Quiescant igitur dicere, ab alio factum esse mundum: simul enim ac mentis cepit deus et factum est hoc, quod mente conceperat. N에게 enim possibile erat alium quidem mente conceperere, alium vero facere, quae ab illo mente concep-ita fuerant.” The distinction between Idea and appearance has been abandoned; if the possibility of creating the world is not an ‘objective’ one, potentially open to everyone, then neither can the possibility of apprehending its conceptual order be open to everyone. *Gnosis* becomes impossible when it is impossible for a ‘second party’ to insinuate himself into the mystery of the Creation.

83. Lactantius, *Div. inst.* II 8, 71.

84. Lactantius, *Div. inst.* III 20, 2: “Non infiroruisse illum paulo cordatiorem quam ceteros qui naturam rerum putaverunt ingenio posse comprehendiri. In quo illos non excorides tantum fruas arbitror, sed eiam impios: quod in secreta cælestis illius providentiae curiosos oculos voluerint immittere.”


86. Lactantius, *De ira dei* 7, 5: “Homo autem recto statu, ore sublimi ad contemplationem mundi excitantem confert cum deo vulnem et rationem ratio cognoscit.”


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89. Arnobius, *Adversus gentes* II 51.


92. Arnobius, *Adversus gentes* I 38; “(Christus) qui quo auctore, quo patre mundus iste sit constat et conditus, fecit benignissime sciri.”


Chapter 5

1. Augustine, *Confessiones* V 3, 4: “Mente enim sua quae sunt ista et ingenio, quod tu dedisti eis, et multa ineunte et praemuniae atque ante multos annos defectus luminarii solis et lunae quo die, qua hora, quanta ex parte futuri essent, et non eos sefellit numerus et ita factum est ut praemuniaeat.”

2. Augustine, *Confessiones* V 3, 4: “Et mirantur haec homines, et stupent qui nesciunt ea et exsultant et extolluntur qui sciunt; et per impiam superbiam recendentes et deficientes a lumine tuo, tanto ante solis defecimus futurum praevident et in praesentia suum non vident. Non enim religiose quaerunt, unde habeant ingenium, quo quae quaerunt.”


4. Augustine, *Confessiones*, V 6, 6: “Multa tamen ab eis (sc. philosophis) ex ipsa creatura vera dicta retinebant et occurrebat mihi ratio per numeros et ordinem temporum et visibles atestationes siderum. . . .”

5. Augustine, *Confessiones* X 35, 55: “Hinc etiam in ipsa religione deus tentatur, cum signa et prodigia flagitiantur, non ad aliquam salutem, sed ad solam experientiam desiderata.”


7. Augustine, *De doctrina christiana* I 20: “Nos itaque qui fruimur et utimur aliis rebus, res aliqae sumus. Magna enim quedam res est homo, facius ad imaginem et similitudinem dei. . . . Itaque magnae quaestio est utrum frui se homines deceat, an uti, an utrumque utrum propter se homo ab homine diligendus sit. . . .”

8. Augustine, *De doctrina christiana* I 21: “Sed nec seipsum quisquam frui debet, si liquido adversas quia nec seipsum debet propter seipsum diligere, sed propter illum quo fruendum est . . . sed ad seipsum conversus, non ad incommutabile aliquid convertitur.”
9. Augustine, De Genesi ad litteram IV 26: "... vitium est et infirmitas animae, ita sui operibus delectari, ut potius in eis, quam in se requiescat ab eis; cum procul dubio melius aliquid in illa sit quod ea facta sunt, quam ipsa quae facta sunt..." God must enjoy being able to create His Creation without this power being 'confirmed' by its actual exercise; this is due to His self-sufficiency. But the fact that for man self-enjoyment derives precisely from the confirmation of his power in his works is an implication of finitude that is not yet seen here, and that it would have been difficult for Augustine to comprehend with the means employed in the critique of curiositas.

10. Another catalog of the levels of curiositas is given by the commentary on the first Epistle of John 2:16 (the triad of vices), In epistolam Ioannis II 13: "Iam quam late patet-curiositas? Ipsa in spectaculis, in theatris, in sacramentis diaboli, in magicis artibus, in maleficiis ipsa est curiositas. Aliquando tentat etiam servos dei, ut velint quasi miraculum facere, tentare utrum exaudiat illos deus in miraculis, curiositas est..."


13. The Scholastic formula for this state of affairs was given very precisely by William of Ockham in his Commentary on the Sentences (I q. 27, a. 2 R): "(Augustinus) ponit quod talis notitia qua anima novit se antequam se cogitaret, est ipsamet substantia animae, quae est memoria, quia sc. nisi esse aliud impedimentum, ita posset anima cogitare virtute illius substantiae." One needs only to put curiositas in place of impedimentum to perceive Augustine's position: "... et omnia ista sunt intelligenda de anima si non esset impedimentum qualiter impeditur pro status isto." Augustine's Gnostic presuppositions—in which the schema is laid out, according to which awakening from forgetfulness already is deliverance—have such far-reaching reflex effects that the salutary knowledge is not received from outside as a revelatory 'teaching' but rather is 'set free' as self-consciousness as soon as the 'call' to remembrance is heard.


15. Augustine, De moribus ecclesiae et de moribus Manichaeorum I 38: "Quamobrem recte etiam curiosi esse prohibetur, quod magnum temperantiae munus est... philosophia est amor studiumque sapientiae..." From this passage, which he cites in Summa theologica II 2, q. 167, a. 1, Thomas Aquinas may have acquired the distinction between curiositas and studiositas, between presumption to and exertion toward knowledge.

16. Augustine, Confessiones V 5, 5: "Non noverunt hanc viam qua descendent ad illum a se et per eam ascendunt ad eum. Non noverunt hanc viam et putant se excelsos esse cum sideribus et lucidos; et ecce ruerunt in terram....." The metaphor of the stellarization of man points, on the one hand, to self-elevation, and, on the other hand, to the refusal, in starlike 'self-illumination,' to recognize the human spirit's need for illumination from outside.


18. Augustine, De Genesi ad litteram II 38.

19. Augustine, Retractiones II 24: "In quo operae plura quaesita quam inventa sunt: et eorum quae inventa sunt, pauciora firmata; cetera vero ita posita, velut adhuc requiranda sint."

20. Augustine, De Genesi ad litteram II 20: "... sed spiritum dei, qui per ipsos (sc. auctores nostros) loquebatur noluisse ista docere homines nulli saluti profutura."

22. Augustine, *De Genesi ad litteram* II 20: "Quid enim ad me pertinet, utrum coelem sicut sphæra undique concludat terram in media mundi male libratam, an cæm ex una parte desuper velut discus operiat?"

23. Augustine, *De Genesi ad litteram* II 34: "... nobis autem de intervallis et magnitudine siderum subtilius aliquid quaerere, talisque inquisitioni rebus gravioribus et melioribus necessarium tempus impendere, nec expedit, nec congruit," See II 20: "... et occupantes (sc. res), quod peius est, multum pretiosa et rebus sauberibus impendendia, temporum spatia." Further, *Epistola* 11 2: "Illa namque quae de hoc mundo quaeruntur, nec satis ad beatam vitam obtinendam mihi videntur pertinere; et si aliquid afferunt voluptatis, cum investigantur, metuendum est tamen ne occupent tempus rebus impendendium melioribus."

24. Augustine, *De Genesi ad litteram* II 28: "Et ab ipsis quippe qui haec curiosissime et otiosissime quaesierunt, inventum est, etiam coelo non moto, si sola sidera verterentur, fieri potuisse omnia quae in ipsis siderum conversionibus animadversa atque comprehensa sunt."


26. Augustine, *De cœtate dei* XXI 3, 1: "... et haec est eorum tota ratio, ut quod experti non sunt, nequaquam esse posse arbitrentur."

27. Augustine, *De cœtate dei* XXI 7, 1: "Brevis sane ister est ratio, fateor, sufficiensque respondio. Sed cum deus autor sit naturarum omnium, cur nonunt fortiorum nos reddere rationem, quando aliquid velut impossible nolunt credere, etc, quous redditionem rationis poscentibus respondemus, hanc esse voluntatem omnipotentis dei, qui certe non ob aliquid vocatur omnipotens, nisi quomiam quidquid vult potest; qui potuit creare tamen tam multa, quae nisi ostenderentur, aut a cœdenisis hodieque testibus dicerentur, profecto impossibilia putarentur, non solum quae ignotissima apud nos, verum etiam quae nootissima posuì."

28. Augustine, *De cœtate dei* XXI 7, 1: "Cur itaque facere non posset deus ... qui fecit mundum ... innumerabilibus miraculis plenum; cum sit omnibus quibus plenus est procul dubio maius et excellentissim etiam ipse mundus miraculum?"

29. Augustine, *De cœtate dei* XXI 8, 2: "Portentum ergo fit, non contra naturam sed contra quam est nota natura."

30. "Turbavit profecto tune, si ulla iam fuerunt canones astrologorum, quos velut inerrabili computatione de praeteritis ac futuris astrorum motibus conscriptos habent, quos canones sequendo ausi sunt dicere hoc quod de Lucifero contiguit, nec ante, nec postea contingisse;" translated by Marcus Dods, *The City of God* (New York: Hafner, 1948), vol. 2, p. 429. Augustine formulates very elliptically what he wants to say in accordance with the logic of his antithesis of miracle and science: namely, that the astronomers deny altogether any event, whether past or future, like that said to have befallen Venus.

31. Augustine, *De cœtate dei* XXI 8, 4: "... quo commoneantur, cum aliquid adverterint in aliqua institutione naturae, eamque sibi notissimam fecerint, non se inde deo debeere praescribere, quasi cam non posset in longe aliquid, quam eis cognita est, vertere atque mutare." See 8, 5: "Sicut ergo non fuit imposibile deo, quos voluit instituere; sic ei non est impossibile, in quidquid voluerit, quas instituit, mutare naturas."

32. Arnobius, *Adversus gentes* I 1: "... apud nos ... causas, per quas suis mundus aberravit ab legibus...

33. Augustine, *De cœtate dei* II 8.
Chapter 6


3. Gerhoch von Reichersberg (died 1169), Libellus de ordine donorum Sancti Spiritus: “... ipsae cursus suos tam certa tamque firma lege custodiant, constitutione dei et praeceto quod ille posuit, ut recte pierat. De divina omnipotentia), PL, se quaerentibus aperit, et sine spectaculis, aliquando tentat in illarum fortunis: nimirum. Est omnino ut pluat; ac per hoc prorsus impossibile est ut non divinae virtuti consectianl disserendi et consequentiam verborum...

4. Peter Damian, Epistola 28, PL, vol. 144, p. 419: “Tiam quam late patet curiositas ipsa; in spectaculis, in theatris, in sacramentis diabolicis, in magicis artibus, in maleficiis ipsa est curiositas; aliquando tenat servos dei, ut velint quasi miraculum facere, tentare utrum exaudiat eum deus. In miraculis curiositatem, hoc desiderium non est a Patre” (quoting Augustine; see note 10 to part III, chapter 5).

5. Peter Damian, De sancta simplicitate scientiæ infantii anteponendo, section 8, in PL, vol. 145, pp. 701ff: “... noli huiusmodi sapiendum quaerere, quae tibi simul cum rebus divinis et gentilibus valeat convenire. Quis enim accendit lucernam, ut videat solem? ... Ipsa quippe vera sapientia se quaerentibus aperit, et sine adulerinae lucis auxilio lucis inoccidiaue se fulgor ostendit.” The ‘pious’ position opposed to grammar is impressively formulated in section 1: “Ecce, frater, vis grammaticam discere? Disce deum pluraliter declinare.”


7. De divina omnipotentia 5: “Videat ergo imperite sapientium et vana quaerentium caca temeritas; quia si haec quae ad arte pertinient disserendi, ad deum praviter referant... Haec igitur quaestio, quoniam non ad discutendi malas statua divinae potentiam, sed potius ad artis dialecticae probatur pertinere peritam; et non ad virtutem vel materia rerum, sed ad modum et ordinem disserendi et consequentiam verborum...”

8. De divina omnipotentia 5: “Secundum naturalem namque varia vicissitudinis ordinem potest fieri, ut hodie pluat; potest et fieri, ut non pluat. Sed quantum ad consequentiam disserendi, si futurum est ut pluat, necesse est omnino ut pluat; ac per hoc prorsus impossibile est ut non pluat. Quod ergo dicunt de praeritiss horc consequitur nihilominus de rebus praesentibus et futuris: nimium, ut sicut omne quid fuit,uisse necesse est, ita et omne quod est, quamdiu est, necesse sit esse: et omne quod futurum est, necesse sit futurum esse.”

9. De divina omnipotentia 5: “Et quia inter rudimenta discentium vel artis humanae nullam apprehendere peritam, curiositas suae mubilo perturbant puritaties ecclesiasticas disciplinae... absit, ut sacræ legibus se pertinaciter inferior et divinae virtutis conclusionis suae necessitates opponant. Quae tamen artis humanae peritia... non debet ius magistrii sibimet arroganter arriperne, sed velut ancilla dominæ quodam faraulatus obsequio subservire...”

10. De divina omnipotentia 14: “Ipsa quippe rerum natura habet naturam suam, dei scilicet voluntatem, ut sicut illius leges quaelibet creatz conservant, sic illa cum ibetur sui iuris obvia, divinae voluntati reverenter obediat.”
11. *De divina omnipotentia* 12.


13. Albertus Magnus, loc. cit. (cited in note 12): “. . . curiositas est investigatio eorum quae ad rem et ad nos non pertinent. Prudentia autem tantum est de his quae ad rem et ad nos pertinent.”

14. Albertus Magnus, loc. cit. (note 12): “Et hoc vocatur vitium curiositatis et non est de operabilibus prudentialae, sed postiis est de scibiliis speculatiae, licet mala intentione scientia ipsorum quae raliter scintur, acquiratur.”


18. *Summa theologica* II 2, q. 167, a. 1: “Alter autem est indicandum de ipsa cognitione veritatis et alter de appetitu et studio veritatis cognoscendae.”

19. Significantly, Thomas cites for this idea not *Confessiones* V 5, but rather a ‘harmless’ passage from *De vera religione* 29 which fits the cosmological turning better. See *Summa theologica* II 2, q. 167, a. 1: “homo appetit cognoscere veritatem circa creaturas, non referendo ad debitum finem, scilicet ad cognitionem dei.”

20. *Summa theologica* II 2, q. 167, a. 1, reply to the first point: “bonum hominis consistit in cognitione veri; non tamen summum hominis bonum consistit in cognitione cuiuslibet veri, sed in perfecta cognitione summae veritatis. . . .”

21. *Summa theologica* II 2, q. 167, a. 1, reply to the third point.

22. Thomas Aquinas, *In Aristotelis librum de caelo exposition* II lect. 7, n. 4 (364), commenting on *De caelo* II 5; 287 b 28-288 a 2: “. . . homo non cognoscit mensuram suae facultatis circa inquisitionem veritatis.”

23. *Summa theologica* II 2, q. 35, a. 4.
24. Thomas Aquinas, De malo, q. 11, a. 4.

25. Siger of Brabant, Quaestiones in Metaphysicam, ed. Graff (Louvain: Institute Superior de la Philosophie, 1948) II 4: "Quae stir urum potestia hominis quam habet ad ascensionem vel ad sciendum possit compleri per actum, vel sit potestia ad infinitum... Dico quod potestia talis non est ad infinitum, sed ad actum qui compleverit poster... Sed scibilia non sunt infinita, cum nec species entis sint infinitae. Nec propter infinitatem quae sit in modo scendi clarius et clarius, quia perfectio scientiae dupliciter est: quaedam enim est per definitionem; quaedam per demonstrationem... possible est ut sciatur perfecte per demonstrationem... quando enim habetur definitio perfecta alicuius, tunc scitur perfecte et tunc scitur sicut homo potest scire."

26. Francis Bacon, Works, ed. Spedding, Ellis, and Heath (London: Longmans, 1889), vol. 1, p. 119. In the preface dedicating De dignitate et augmentis scientiarum II to the King (Works, vol. 1, p. 485), Bacon identifies the traditional literature with the Pillars of Hercules and the addressee of the dedication with the guiding star of the voyager of the new science who is unconcerned by the Nec plus ultra: "Quousque enim tandem pauculos aliquos scriptores stamenius nobis tanquam Columnas Hercules, ne plus ultra in doctrinis progrediamur; cum habeamus Majestatem quam instar lucidi et benigni syderis, quod nos inter navigandum conducat et fortunet?" The allegory is formulated yet more strongly in the preface of 1620 to the Instauratio magna (Works, vol. 1, p. 125), where man's false assessment of himself appears as embodied in the Pillars of Hercules: "Videntur nobis homines nec opes nec vires suas bene nosse. Quare sunt et suae scientiae columnae tanquam fatales; cum ad ulterius penetrandum homines nec desiderio nec spe existentur."

27. Joseph Glanvill, Plus ultra or the Progress and Advancement of Knowledge since the days of Aristotle (London: 1668; Gainsville, Scholar's Facsimiles and Reprints, 1958).

28. Petrarch, Epistolae de rebus familiaribus IV 1: "Altissimum regionis huius montem... hodierno die, sola videnti insignem loci altitudinem cupiditate ductus, ascendi."

29. For the ancient world, just as for the Middle Ages, there is an odd inhibition against viewing the world from above or thinking of it as viewed from above by man. Man's 'natural abode' is below, and his constitutive direction of gaze is upward from below, the gaze of the contemplator caeli. Jacob Burckhardt writes, "It is true that lovingly executed representations almost always relate to the neighborhood, indeed to what is narrowly enclosed, to forest glens, grottos etc. On the other hand, however many acropolises towered high above their cities, there is no representation of the view from the heights into the deep and the distance. Solon on the Acropolis of Athens sees only the roofs of the city round about and thinks of the great misery that sits there below." The view of the world from above is reserved for the gods, as already in the Iliad XVI 297, where Zeus has driven the clouds from the summit of the mountains and now the splendid view of the world lying below him opens up: Jacob Burckhardt, Griechische Kulturgeschichte (Berlin and Stuttgart: W. Spemann, 1898-1902), vol. 3, p. 2. Also, in the Nachträgen: "But especially the ascent of the highest and steepest summits, of which Greece has no lack, is not a matter of course. The earliest association of ideas, which suspected that the mountain summits were the seat of the gods, may have been due to the fact that at the time these heights were unclimbed. The sun illuminated them with its first rays; brooks and springs flowed down from them; storms gathered on them. A second stage was that one ascended them and doubtless immediately made sacrifices there..." The gaining of the view 'from above' in painting is one of the innovations of the beginning of the modern age, especially on the part of Leonardo but also in Altdorfer's Battle of Alexander; see J. Ganmer, Leonardo Visionen von der Siniflut und vom Untergang der Welt. Geschichte einer kulturlichen Idee (Bern: A. Francke, 1958), pp. 158, 143, 148-149.

30. Petrarch, Epistolae de rebus familiaribus IV 1: "Occupavit inde animum nova cogitatio atque a locis traduxit ad tempora."
31. Petrarch, loc. cit. (note 30): "Obstupui fateor... iratus mihimet quod nunc etiam terrestria mirarer, qui iampridem ab ipsis gentium philosophis discere debuissem nihil praetere animum esse mirabile, cui magno nihil est magnum. Tunc vero montem satis vidisse contentus, in me ipsum interiores oculos reflexi..."

Chapter 7

1. Petrarch, Epistolae de rebus familiaribus III 1.

2. Petrarch, Epistolae de rebus familiaribus V 7.


4. William of Ockham, Commentary on the Sentences, Prologus III 9 CC: 
   "... dico quod theologia nostra non est de omnibus nec complexis nec incomplexis: quia intellectus vix sufficit ad illa quae sunt necessaria ad salutem."


9. Robert Grosseteste, Notulæ ad Physicam IV, ed. A. Maier, Zwischen Philosophie und Mechanik (Rome: Edizioni di storia e letteratura, 1958), pp. 24ff: "sicut enim quae vere in se finita sunt, nobis sunt infinita, sic quae vere in se sunt infinita, illi (sc. deo) sunt finita, iste autem omnia creavit numero, pondere et mensura, et iste est mensurator primus et certissimus... Unde si nulli creato est infinitum finitum, nullum creatum sic mensurat."


11. Gerson, Contra vanam curiositatem I: "appetitus propriae excellendiae et subjectionis fuga et divinæ maiestatis quodam phantasticum..." (par. 90).

12. Gerson, Contra vanam curiositatem I: "curiositas est vitium quo dimissis utilioribus homo convertit studium suum ad minus utilia vel inatingebilia sibi vel noxia" (par. 91). "singularitas est vitium, quo dimissis utilioribus homo convertit studium sum ad doctrinas peregrinas et insolitas" (par. 91).

13. Gerson, Contra vanam curiositatem I: "Physica sine quidem perscrutatio ductum rationationis naturalis insequens nequit immensum progredi, certis enim limitibus coactetetur oportet, quos
limites dum praetergredi superba curiositate conatus, quid mirandum si praeceps et si absque
ductore et lumine caeca ambulans offendat ad lapidem erroris et impingens se conterat (par.
91), "... curiositas non contenta sui finibus felfit philosophos..." (par. 93).

14. Gerson, Contra vanam curiositatem I: "Quia certe ea quae in liberrima potestate dei posita
erant, dum attingere et ad quasdam necessitatis regulas adducere conatus sunt, ipsi evanuerunt
in cogitationibus suis et obscuratum est insipiens cor eorum." At the center of the rejection
stands inquiry about the origin and end of the world: "Qualiter et quando mundus incepit
aut si finitur sit, sciri nequit ex quibuscumque experientias quas philosophia sequitur, quoniam
hoc in liberrima conditoris voluntate situm est. Philosophi igitur dum hoc secretum diviniae
voluntatis penetrare, duce experentia, molientur, quidni deficiant? Quoniam sic divina voluntas
huius ratio est, ita solis illis scire concessum est, quibus ipsa voluerit revelare" (par. 92).

15. Gerson, Contra vanam curiositatem II: "Signum curiosae singularitatis est fastidire doctrinas
resolutas et plene discussas et ad ignotas vel non examinatas velle converti. ... Mavult enim
curiositas quaerere invenienda, quam inventa cum veneratione studiosi intelligere" (par. 97).
"Signum curiosae singularitatis est indebita doctorum et doctrinarum appropriatio" (par. 97).
"Providemus insuper novis theologis qui per tales materias magis ad admirationem
et de admiracione ad curiosam perscrutacionem quam ad acdificacionem solidam commoventur"
(par. 101). "Figuram huius considerationis praebet nobis aedificatio illa turris Babel..." (par.
105).

16. Thomas à Kempis, De imitatione Christi III 54: "Natura appetit scire secreta et nova audire,
vult exierius apparere et multa per sensum experiri... sed gratia non curat nova nec curiosa
percipere quia tumus hoc de venustate corruptionis est orturn." III 58: "Cave ergo, filii, de ipsis
curioso tractare quae tuam scientiam excendunt."

17. Nicholas of Cusa, De venatione sapientiae 1: "Sollicitamur appetitu naturae nostrae indito
ad non solum scientiam sed sapientiam seu sapidam scientiam habendum." See De docta
ignorantia I 1: "Quam ob rem sarum liberum intellectum verum, quod insatiabiliter indito
discursu cuncta perluadendo attingere cupit, apprehensum amoroso amplexu cognoscere
dicimus..." 

18. Nicholas of Cusa, De venatione sapientiae 12.


20. Nicholas of Cusa, De beryllo c. 32.

21. Nicholas of Cusa, De beryllo c. 32: "Nam si (sc. Plato) considerasset hoc, reperisset utique
mentem nostram, quae mathematicalia fabricat, ea quae sui sunt officii verius apud se habere
quam sint extra ipsa. Pute homo habet artem mechanicam et figurar artis verius habet in
su mentali conceptu quam ad extra sint figurabiles; ut dormus, quae ab arte fit, habet veriorem
figuram in mente quam in lignis... Sic de circulo, linea, triangulo atque de nostro numero
et omnibus talibus quae ex mentis conceptu ininitum habent et natura carent... Ideo Plato
non videtur bene considerasse, quando mathematicalia, quae a sensibilibus abstrahuntur, vidit
veriora in mente, quod propertea illa adhuc haberent alium esse verius supra intellectum... 
Et si sic considerassent Pythagorici et quicumque ali, clar pridiesse mathematicalia et numeros,
quae ex nostra mente procedunt et sunt modo quo nos concepimus non esse substantias aut
principia rerum sensibilium, sed tantum entium rationes, quorum nos sumus conditores."

22. Nicholas of Cusa, De docta ignorantia II 13: "Qui (sc. deus) eriam vult ut in admirationem
ex mundi machina tam mirabili ducamur; quam tamen nobis occultat eo plus, quo plus
admiramur, quoniam ipsa tantum est, qui vult omni corde et diligentia quaerit." 

23. Nicholas of Cusa, De docta ignorantia II 1: "Ars eriam naturam imitatur, quantum potest,
se numquam ad ipsius praecessionem poterit pervenire."
Notes to Pages 360–370


Chapter 8

1. Copernicus, *De revolutionibus orbium caelestium* I 4: “Quam ob causam ante omnia puto necessarium, ut diligenter animadvertamus, quae sit ad caelum terrae habitu, ne, dum excelsissima scrutari volumus, quae nobis proxima sint, ignoramus, ac eodem errore, quae telluris sunt, attribuamus caelestibus.”

2. Copernicus, *De revolutionibus orbium caelestium* I, proemium: “At cum omnium bonarum artium sit abstrahere a vitiis et hominis mente in ad meliora dirigere, haec praeter incredibilem animi voluptatem abundius id praestare potest.”


14. Thomas Digges, *Perfect Description* (note 12): "... even tyll our syghte being not able fardel' to reach or conceyve, the greatest part rest by reason of their wonderful! distance invisil'ble vnoo us. And this may well be thought of vs to be the gloriously court of ye great god, whose vnsearcheable works invisil'ble we may partly by these his visible comecrure, to whose infinit power and maesty such an infinite place surmountinge all other both in quantity and quality only is conueniente."


17. Galileo, *Dialogo dei massimi sistemi del mondo* III: "... all' etá nostra è piaciuto a Dio concedere all' umano ingegno tanto mirabil invenzion, di poter perfesxionar la nostra vista . . . ."

18. Kepler, *De macula in sole observata*: "O multisimum et quovis Sceptro pretiosius perspicilum! an qui te dextra tenet, ille non dominus constitatur operum Dei?"

19. Christoph Scheiner, *Rosa Ursae sal ex allure et aurum facundarum et macularum surorum phoenomeno varius nec non circa centrum suum et asem fixum . . . mobils ostensus* (1680), c. 1, par. 68.


Chapter 9


3. On “pedantry as the substitute attitude of a consciousness which is blocked from meeting its needs”: T. W. Adorno, introduction to Émile Durkheim, *Soziologie und Philosophie* (German trans., Frankfurt: Suhrkamp Verlag, 1967), p. 32n, commenting on the passage corresponding to this one in *Die Legitimität der Neuzeit* (Frankfurt: Suhrkamp, 1966), pp. 380-381.


5. Francis Bacon, *Novum organum* II 9. On the distinction between nature's *cursus consequent* and its *praeter-generations*, see his *De augmentis scientiarum* II 2.


8. Novum organum, praefatio: "Id tamen posteris gratum esse solet, propter usum operis expeditum et inquisitionis novae tueendum et impatientiam."

9. Novum organum, praefatio: "Nemo enim rei alicuius naturam in ipsa re recte aut feliciter perscrutatur; verum post laboriosam experimentorum variationem non acquisitis, sed inventit quod ulterius quaearet." Hence the importance of 'negative instances' in the cognitive process; man cannot know ab initio contemplationis, rather his path goes by the procedere primo per negatives... post omnimodam exclusionem (Novum organum II 15, 2).


11. Novum organum I 98: "... occulta naturae magis se produnt per vexationes artium... . " Here it is presupposed that the Aristotelian distinction between 'natural' and 'violent' movement is no longer made or should no longer be made; otherwise the latter could not provide information that can be carried over to the former. An indirect reference to its object defines the 'interpretation' of nature: "... omnis verior interpretatio naturae conficitur per instantias, et experimenta idonea et apposita; ubi sensus de experimento tantum, experimentum de natura et re ipsa judicat" (Novum organum I 50). In contrast to this 'translated' explanation of nature the instrumental strengthensings of the senses, the organa ad amplificandos sensus, lose importance for Bacon.

12. F. Schalk, "Zur Vorgeschichte der Diderotschen Enzyklopädie," Romanische Forschung 70 (1958):40ff: "The peculiar disdain, both of mathematics and of the mechanical aids to research, that Bacon exhibits and that brought on him the censure of his critics in the nineteenth (the 'technical') century becomes intelligible only when one turns one's gaze, with him, to the Adam who ruled the cosmos by giving names." But the typified nonviolent domination by means of the word is suspended on this side of paradise and becomes a utopian figure; where Bacon describes paths to knowledge in the present, his language is filled with expressions of toil and violence. The "idea of the regnum hominis as the dominion of the magicians over the cosmos and the management of this dominion in the service of humankind" (Schalk, loc. cit., p. 46) gives its character only to the totality of completed knowledge.

13. Francis Bacon, Valerius terminus 1: "In aspiring to the throne of power the angels transgressed and fell; in presuming to come within the oracle of knowledge man transgressed and fell...."

14. Valerius terminus 1: "... he was fittest to be allured with appetite of light and liberty of knowledge; therefore this approaching and intruding into God's secrets and mysteries was rewarded with a further removing and estranging from God's presence."

15. Valerius terminus 1: "... it was not that pure light of natural knowledge, whereby man in Paradise was able to give unto every living creature a name according to his propriety, which gave occasion to the fall; but it was an aspiring desire to attain to that part of moral knowledge which defineth of good and evil, whereby to dispute God's commandments and not to depend upon the revelation of his will, which was the original temptation."

16. Valerius terminus 1: "... as if according to the innocent play of children the divine Majesty took delight to hide his works, to the end to have them found out...." Compare Novum organum, I 132.

17. Valerius terminus 1: "... God hath framed the mind of man as a glass capable of the image of the universal world, joying to receive the signature thereof as the eye is of light, yet not only satisfied in beholding the variety of things and vicissitude of times, but raised also to find out and discern those ordinances and decrees which throughout all these changes are infallibly observed."
18. *Valerius terminus* 1: “And although the highest generality of motion or summary law of nature God should still reserve within his own curtain, yet many and noble are the inferior and secondary operations which are within man’s sounding.”

19. *Valerius terminus* 1: “... but it is a restitution and reinvesting (in great part) of man to the sovereignty and power (for whencesoever he shall be able to call the creatures by their true names he shall again command them) which he had in his first state of creation.”

20. *Valerius terminus* 1: “And therefore knowledge that tendeth but to satisfaction is but as a courtesan, which is for pleasure and not for fruit or generation.” Compare *Valerius terminus* 9.

21. *Valerius terminus* 1: “... the new-found world of land was not greater addition to the ancient continent than there remaineth at this day a world of inventions and sciences unknown, having respect to those that are known, with this difference, that the ancient regions of knowledge will seem as barbarous compared with the new, as the new regions of people seem barbarous compared to many of the old.” Compare *Valerius terminus* 5.

22. *Valerius terminus* 17: “That those that have been conversant in experience and observation have used, when they have intended to discover the cause of any effect, to fix their consideration narrowly and exactly upon that effect itself with all the circumstances thereof, and to vary the trial thereof as many ways as can be devised; which course amounteth but to a tedious curiosity, and ever breaketh off in wondering and not in knowing....”

23. *Novum organum*, *praefatio*: “Quin illis hoc ferre solenne est, ut quicquid ars aliqua non attingat id ipsum ex eadem arte impossibile est statuunt.” Compare *Novum organum* I 88.


25. Leibniz to Johannes Bernoulli, February 21, 1699, *Mathematische Schriften*, ed. C. I. Gerhardt (Berlin and Halle: 1850–1863), vol. 3, p. 574: “Scio multos dubitare, ut insinus, an nos possimus cognoscere, quid sit Sapientiae justitiaeque divinae conforme. Puto tamen, ut Geometria nostra et Arithmetica eiam apud Deum obiunct, ita genera bona justique leges, mathematicae certitudinis et apud Deum quoque validas esse.” *Animadversiones in partem generalem Principiorum Cartesianorum*, ed. C. I. Gerhardt, *Philosophische Schriften* (Berlin: 1875–1890), vol. 4, pp. 375ff, commenting on on II 45: “... sed natura, cujus sapientissimus Auctor perfectissimam Geometriam exercet, idem observat, aliqui nihil in ea progressus ordinatus servarent.” *Mathesis divina*, for its part, is not an independent and final principle, but rather is founded on the principle of sufficient reason; it is the form in which the rational explanation of realized possibilities displays itself. *Tentamen anagogicum* (Philosophische Schriften, vol. 1, pp. 278–274, 304; compare vol. 2, pp. 105, 438; vol. 3, p. 51; vol. 4, p. 216; and vol. 7, p. 191). This converges with the observation that Leibniz’s divine geometry is not spatial/intuitive but rather, after the model of analytic geometry, the epitome of the generative calculus of bodies. Spatial/corporeal nature is only the pictorial equivalent of this geometry; but the Platonic sense of this assertion is suspended, though for Kepler it was still bound up with the God Who practices geometry: “Non aberrat... ab archetypo suo Creator, geometriae fons ipsissimus, et, ut Plato scripsit, aeternam exercens geometriam...” *Harmonice mundi*, *Gesammelte Werke*, ed. Caspar (Munich: Beck, 1937–) vol. 6, p. 299. The progress of mathematics represents the process by which man penetrates into the coherence of ratio sufficiens and the world calculus and thus at the same time withdraws his knowledge from the requirement of legitimation.

26. Galileo, *Dialogo dei massimi sistemi* (henceforth: *Dialogo*) I: “... adunque bisognnerà dire che né anco la natura abbia inteso il modo di fare un intelletto che intenda.”

27. *Dialogo* I: “... dico che l’ intelletto umano ne intende alcune così perfettamente, e ne ha così assoluta certezza, quanto se n’abbia l’istessa natura....”
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28. Dialogo I: “...poiché arriva a comprenderne la necessità, sopra la quale non par che possa esser sicurezza maggiore.”

29. Dialogo I: “...anzi, quando io vo considerando quante e quanto maravigliose cose hanno intese investigate ed operate gli uomini, pur troppo chiaramente conosco io ed intendo; esser la mente umana opera di Dio, e delle più eccellenti.” The argument is less medieval than it looks; it assigns the burden of giving a satisfactory account of the intellect’s author to its verifiable accomplishments instead of presupposing illumination and man’s having been created in the image of God.

30. Dialogo IV: “Mirabile e veramente angelica dottrina: alla quale molto concordemente risponde quell’altra, pur divina, la quale, mentre ci concede il disputare intorno alla costituzione del mondo, ci soggiunge (forse acciò che l’esercizio delle menti umane non si tronchi o anneghittisca) che non siamo per ritrovare l’opera fabbricata dalle Sue mani.”

31. Materialien zu Brechts “Leben des Galilei” (Frankfurt: Suhrkamp, 1963), pp. 12-13. In addition, the note in “Construction of a Role” (p. 60): “He appealed to his irresistible inquisitive drive, as a detected sex criminal might appeal to his glands.” The anthropological systematics in which Brecht’s figure of Galileo belongs are clarified by the categories of his theory of the theater; in place of the Aristotelian dyad of ‘pity and fear’ in the dramatic reception, there enter, for the non-Aristotelian experimental theater, “curiosity and helpfulness” (compare Materialien, pp. 168, 169).

32. Galileo, Dialogi [Dialogues Concerning Two New Sciences] I: “Ma se le digressioni possono arrecarci la cognizione di nuove verità, che predigida a noi, non obligati a un metodo serrato e conciso, ma che solo per proprio gusto facciamo i nostri congressi, digredir ora per non perder quelle notizie che forse, lasciata l’incontrata occasione, un’altra volta non ci si rappresenterebbe? anzi chi sa che bene spesso non si possano scoprir curiosità più belle delle primariamente cercate conclusioni?”

33. Galileo, Dialogo III: “...un conoscere che infinite cose restano in natura incognite.”

34. Descartes to Mersenne, October 11, 1638, in Oeuvres, ed. Adam and Tannery (Paris: Cerf, 1897-1913), vol. 2, p. 380: “Il me semble qu’il manque beaucoup en ce qu’il fait continuellement des digressions, et ne s’arrete point à expliquer tout à fait une matiere; ce qui monstre qu’il ne les a point examinees par ordre, et que, sans avoir considéré les premieres causes de la nature, il a seulement cherché les raisons de quelques effets particuliers, et ainsi qu’il a basti sans fondement.”

35. U. Ricken, “Gelehrter” und “Wissenschaft” im Französischen. Beiträge zu ihrer Bezeichnungsgeschichte vom 12. bis 17. Jahrhundert (Berlin: Akademie Verlag, 1961), pp. 167-168. In the Discours de la Methode (I), the sciences curieuses are the disciplines lying apart from the Scholastic curriculum. See Etienne Gilson in Descartes, Discours de la Methode, texte et commentaire (Paris: J. Vrin, 1947), p. 109, with the gloss reproduced there from Furetière’s Dictionnaire universel. A trace of the magic and the mantic remains in such unusual interests, an excess over what is useful in life, which bars them from the system of the Method. (Gilson, op. cit., pp. 120-121, 140-141). The antithesis, pour mon utilité/pour ma curiosité is found in the letter to Mersenne of February 9, 1639 (Oeuvres, ed. Adam and Tannery, vol. 2, p. 499). The defense of curiosité by now is only incidental and without argumentative effort: “Ce n’est pas un crime d’estre curieux de l’Anatomie... j’allois quasi tous les jours en la maison d’un boucher, pour lay voir tuer les bestes...” (vol. 2, p. 621). The unanswerable questions automatically exclude themselves under the criterion of the Method because their treatment evades mathematisation: Regulae ad directionem ingenii 8 (vol. 16, p. 598). There remains the radical significance of the carefulness exerted in assuring oneself of the evidence: “Aitque haec omnia quo divittius et curiosius examino, tanto clarius et distinctius vera esse cognosco...” (Meditaciones III 16; Oeuvres, vol. 7, p. 42).
Chapter 10

1. Regarding this terminology: by “world model,” I mean the systematic representation of reality that is dependent on the state of the natural sciences at a given time and that integrates the totality of their assertions; I designate as a “world picture” the summary of reality in which and by whose means man coordinates himself with this reality, orients his evaluations and the ends of his actions, grasps his possibilities and needs, and understands himself in his essential relations.

2. Voltaire, Questions sur l’Encyclopédie: Bornes de l’esprit humain, ed. R. Naves (Paris: Garnier, 1961), pp. 472ff: “On demandait un jour à Newton pourquoi il marchait quand il en avait envie, et comment son bras et sa main se remuèrent à sa volonté. Il répondit bravement qu’il n’en savait rien. Mais du moins, lui dit-on, vous qui connaissez si bien la gravitation des planètes, vous me direz par quelle raison elles tournent dans un sens plutôt que dans un autre; et il avoua encore qu’il n’en savait rien.” The antithesis to Leibniz’s principle of sufficient reason as the hypertrophy of a pretension of reason that is indifferent to life stands in the background here.


6. In his *Dictionnaire* article "Curiosité," Voltaire had criticized the beginning of the second book of Lucretius's didactic poem, where the image of the onlooker observing a shipwreck from security on the shore was used to illustrate the attitude of the Epicurean wise man to the world of atomic accident: "Suave mare magni turbantiibus aquora ventis/ E terra magnum alterius spectare laborem..."

7. The iconology of the triumphant sufferer on behalf of *curiosité* is perfected by the Berlin Academy's orator of the day, Émile Du Bois-Reymond, in 1892: "It was the crowning moment in Maupertuis's life. One sees him standing in the snow, wrapped in his reindeer hide, perhaps carrying out, by the light of a pine torch that barely illuminates the polar night, the short calculation in his diary that shows the flattening of the earth at the poles, and thus yields Newton's victory and his own victory. To describe him in this way would certainly have been better than in the attitude in which he was ridiculed by Voltaire, where he was indeed dressed in the costume of Lapland but had his hand on a globe, as though he were flattening the North Pole of an earth that was still plastic."


10. In general, the telescope here again is still the classical instrument of *curiosité*: "Rien n'avanceroit plus ces découvertes que la perfection des télescopes..." (*Lettre sur le progrès des sciences*, section 9). Maupertuis's impatience for the perfection of this instrument was justified when one considers the 'leap' that was still to occur in the performance of the telescope not many years later, with the Herschels.


20. Maupertuis, *Essai de Cosmologie*, *Oeuvres*, vol. 1, pp. 11ff: "Le hasard, diroit-on, avait produit une multitude innombrable d'individus; un petit nombre se trouvait construit de manière que les parties de l'animal pouvoient satisfaire à ses besoins; dans un autre infiniment plus grands, il n'y avait ni convenance, ni ordre: tous ces derniers ont péri... ces espèces, que nous voyons aujourd'hui, ne sont que la plus petite partie de ce qu'un destin aveugle avait produit." Here Maupertuis opposes the wave of literature in the first half of the eighteenth century aiming to prove the existence of God by teleological arguments—not the least of his motives being to emphasize the solitary position of his own proof of God's existence based on the principle of minimal action: "N'est pas faire tort à la plus grande des vérités, que de la vouloir prouver par de tels arguments?"

22. Maupertuis, *Venus physique I 1*, *Oeuvres*, vol. 2, pp. 4ff: “Peu curieux sur le passé, nous interrogeons avec avidité ceux qui nous promettent de nous apprendre quelque chose de l'avenir... Cependant l'obscurité est la même sur l'avenir et sur le passé...”

23. Maupertuis, *Essai de Cosmologie III, Oeuvres*, vol. 1, p. 74: “Quand je réfléchis sur les bornes étroites dans lesquelles sont renfermées nos connaissances, sur le désir extrême que nous avons de savoir, et sur l'impuissance où nous sommes de nous instruire; je serois tenté de croire que cette disproportion, qui se trouve aujourd'hui entre nos connaissances et notre curiosité, pourrait être la suite d'un pareil désordre.”

24. Rousseau, *Si le rétablissement des Sciences et des Arts a contribué à épurer les moeurs* (1750) (First Discourse): “Le voile épais dont elle a couvert toutes ses opérations semblait nous avertir assez qu'elle ne nous a point destinés à de vaines recherches. Mais est-il quelqu'une de ses leçons dont nous ayons su profiter, ou que nous avons négligée impunément? Peuples, sachez donc une fois que la nature a voulu vous préserver de la science, comme une mère arrache une arme dangereuse des mains de son enfant...”

25. Rousseau, *Discours sur l'origine et les fondements de l'inégalité parmi les hommes* (1755) (Second Discourse): 1: “Ses modiques besoins se trouvent si aisément sous sa main, et il est si loin du degré de connaissances nécessaire pour désirer d'en acquérir de plus grandes, qu'il ne peut avoir ni prévoyance ni curiosité. Le spectacle de la nature lui devient indifférent à force de lui devenir familier. C'est toujours le même ordre, ce sont toujours les mêmes révolutions; il n'a pas l'esprit de s'étonner des plus grandes merveilles et ce n'est pas chez lui qu'il faut chercher la philosophie dont l'homme a besoin, pour savoir observer une fois ce qu'il a vu tous les jours. Son âme, que rien n'agite, se livre au seul sentiment de son existence actuelle, sans aucune idée de l'avenir, quelque prochain qu'il puisse être...”; translated by G. D. H. Cole in *The Social Contract and Discourses* (New York: Everyman’s Library-Dutton, 1950), p. 211.

26. Rousseau, *De la société générale du genre humain* (the second chapter of the first draft of the *Contrat social*, not included in the definitive version). Kant defined the function of Rousseau’s theory of the state of nature thus: “Rousseau does not want us to return to the state of nature but rather to look back to it” (Akademie edition, vol. 15, part 2, p. 890).


29. David Hume, *A Treatise of Human Nature*, vol. 2, part III, section X, *Philosophical Works*, ed. Green and Grose (London: 1874-1875), vol. 2, pp. 226ff: “Human life is so tiresome a scene, and men generally are of such indolent dispositions, that whatever amuses them, tho' by a passion mixed with pain, does in the main give them a sensible pleasure.”


34. Edmund Burke, *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*, ed. J. T. Boulton, (London: Routledge and Kegan Paul; New York: Columbia University Press, 1958), p. 31: “The first and the simplest emotion which we discover in the human mind, is Curiosity. By curiosity, I mean whatever desire we have for, or whatever pleasure we take in novelty. We see children perpetually running from place to place to hunt out something new: they catch with great eagerness, and with very little choice, whatever comes before them; their attention is engaged by every thing, because every thing has, in that stage of life, the charm of novelty to recommend it. But as those things which engage us merely by their novelty, cannot attach us for any length of time, curiosity is the most superficial of all the affections; it changes its object perpetually; it has an appetite which is very sharp, but very easily satisfied; and it has always an appearance of giddiness, restlessness and anxiety. Curiosity from its nature is a very active principle.... Some degree of novelty must be one of the materials in every instrument which works upon the mind; and curiosity blends itself more or less with all our passions.” It is instructive to see what reshapings and shiftings of accent are consistent even with ‘strong influence'; disinclination and inclination toward what is playfully excessive appear to determine the difference, and “troublesome labor” as the price appropriate to the truth is unalterable even for Mendelssohn.


37. Lichtenberg, “Einige Betrachtungen,” p. 30: “... little more is left to man than the cultivation of the surface, by which I mean, the field of the moral world....”


42. Lichtenberg, *Aphorismen J* (1789-1793) 919.


46. Lichtenberg, *Aphorismen L* (1796-1799) 10. On the limitation of human knowledge by the need for happiness, Lichtenberg had already noted this in 1777: “It is always depressing for me when I consider that in the investigation of many things one can go too far; I mean that they can become detrimental to our happiness. I have a specimen of this in myself: I wish that I had been less fortunate in my efforts to learn to get to know the human heart...” (*Aphorismen F* 507).

47. Lichtenberg, “Einige Betrachtungen,” p. 27.


50. A. Stadler, *Kants Teleologie und ihre erkenntnistheoretische Bedeutung* (Berlin: 1874), p. 14: "In its boundary concept, the thinking understanding reached its highest stage by recognizing therein its own innermost nature. This concept is at the same time the expression of its authentic dignity. For the fact that it was able to discover the limits of its activity from within the region that they mark off, even though it could not see beyond these same limits, demonstrates the magnitude of its competence. On the other hand, this concept is also a source of calm for the human inquisitive drive." Here the active components of the Kantian balance sheet are seen not so much from the point of view of the pathology of reason and its painful cure by amputation as rather in the achievement of a new intensification and calm, lying, as it were, in the line of progress, but also concluding it. One need not say that such a reception of Kant is a misunderstanding; but the aspect of therapeutic intervention, of the curtailment that cuts into the flesh, is overlooked.

Chapter 11


4. Friedrich Just Riedel, *Theorie der schönen Künste und Wissenschaften* (Vienna and Jena: 1774), p. 168. Still, at almost the same time a more assiduous author, who is still constrained by theology, can announce to his readers that he will not "pander to any extraordinary curiosity," so that, for example, in regard to the soul he will do no more than what is "fundamental and useful," namely, to investigate its powers as accurately as possible. This from Georg Friedrich Meier, *Metaphysik* (2nd ed. Halle: 1765), vol. 3, section 471. (I owe this reference to W. Strube.)

5. *Gespräche* (note 2), pp. 287–288. It is significant, though, that when Humboldt is interrupted by the respectful revolutionaries, he is not directly in the presence of his 'subject matter,' and in the attitude appropriate to that, but instead is in the role of the producer of literature, the author of the best-seller, *Kosmos*. The comparison with Archimedes stems from Gauss (letter to Schumacher, April 17, 1849).


7. *Gespräche*, p. 279. This same distinction is contained in the memoirs of the Egyptologist, Heinrich Brugsch, *Mein Leben und mein Wandern* (2nd ed. Berlin: 1894), pp. 25ff, whose patron Humboldt had been. His account of his first visit to the Egyptian section of the Berlin Museum in 1839 culminates in this sentence: "I was seized not by mere curiosity [Neugierde] but by the sincerest desire for knowledge [Wissbegierde]. . . ."


11. Feuerbach, *Die Einheit der Seelen- und Gotteslehre*, *Werke*, vol. 10, p. 174: "God alone decides the fate of the soul; He alone is the concept—articulated in full clarity, exhibited and realized—of the soul; He alone is the soul that has been drawn into the light and out of the obscure and confused ideas that arise from its connection with the body."


14. Feuerbach, *Nachgelassene Aphorismen*, *Werke*, vol. 10, p. 517. Compare Ernst Bloch, *Atheismus im Christentum* (Frankfurt: Suhrkamp, 1968), p. 282: "In this way, then, Feuerbach’s atheism is conceived both as the destruction of an enervating illusion and also precisely as an inspiring retransformation of the theological overcoming of restrictions into a finite, human one."


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30. Freud, Beyond the Pleasure Principle (1920), Complete Psychological Works, vol. 18, p. 24; original: Entdeckt des Lustprinzips, Gesammelte Werke, vol. 15, p. 23. Freud introduces The Ego and the Id with the comment that he is pursuing trains of thought begun in Beyond the Pleasure Principle, trains of thought that he regards "with a certain benevolent curiosity" (Gesammelte Werke, vol. 13, p. 237).


Part IV

Chapter 1


2. In 1781 Goethe could still write to Charlotte von Stein, "These days constitute an epoch for me again [machen wieder in mir Epoche]," simply because he feels driven "to certain decisions"
(May 3, 1781). Or a little later, acquaintance with Friedrich Melchior Grimm "certainly constitutes an epoch for me [macht gewiss Epoche bey mir], in the way I am situated" (October 1, 1781). And again, to the absent Charlotte: "It is an amazing epoch for me, just when you are not with me" (July 9, 1786). Shortly thereafter, after his flight to Italy, he writes in the diary he is keeping for Charlotte: "Farewell! Remember me in this important epoch of my life" (October 14, 1786). Here the epithet "important" is still required in order to reinforce "epoch."


5. Goethe, *Diary*, June 24, 1831.

6. Bossuet, *Discours sur l'histoire universelle* (3rd ed. Paris: 1700; 13th ed. Amsterdam: 1738) I 5: "C'est ce qui s'appelle Époque, d'un mot Grec, qui signifie s'arrêter, parce qu'on s'arrête là pour considérer comme d'un lieu de repos, tout ce qui est arrivé avant ou après, et éviter par ce moyen les anachronismes, c'est-à-dire, cette sorte d'erreur qui fait confondre les temps." The term "epoch" is also applied to the most prominent turning point in the history of science. Alexis-Claude Clairault, who was admitted to the Academy of Sciences at the early age of eighteen on account of his accomplishments in mathematics and later participated in the expedition that Maupertuis led to Lapland to demonstrate the flattening of the earth at the pole, said in the open meeting of the academy on November 15, 1747, regarding the work of Newton: "Le fameux livre des Principes mathématiques de la Philosophie naturelle a été l'époque d'une grande révolution dans la Physique"—Du système du monde, dans les principes de la gravitattion universelle, published in 1754, cited by I. Bernard Cohen in "The Eighteenth-Century Origins of the Concept of Scientific Revolution," *Journal of the History of Ideas* 37 (1976): 268. The connection of the concept of 'epoch' to the fundamental idea of 'revolution' is still based exclusively on the metaphor of the special point in the orbit of a heavenly body. Voltaire, finally, conceived of [the] 'enlightenment' as both the state of a republic of intellects extending across Europe and beyond and also an extension of time that is characterized by a radical change: "Je vois avec plaisir qu'il se forme dans l'Europe une république immense d'esprits cultivés. La lumière se communique de tous les côtés...Il s'est fait depuis environ quinze ans une révolution dans les esprits qui sera une grande époque"—letter to D. M. Golitsin, August 14, 1767, Correspondance, ed. T. Besterman (Geneva: Institut et musée Voltaire, 1953–1965), vol. 66, p. 181. Here the relation between 'revolution' and 'epoch' has reversed itself; the revolution introduces the epoch as the subsequent state that results from it.


11. Jacob Burckhardt, op. cit. (note 10), no. 18. For Burckhardt this means something negative: The Jews, who were on the side of the Arians—no doubt because their situation was bound to be made easier because, according to this doctrine, they had not killed the Son who was equal to God—would have survived, with the victory of Arianism, in safety and "in one or two centuries [would have] become the masters of all property and would already, in those days, have made Germans and Romans work for them." In other words, there would have been a capitalistic Middle Ages that would have made the modern age superfluous!

13. Goethe, diary entry, February 3, 1830, "Looking at pictures that were sent to him!"


Chapter 2

1. Nicholas of Cusa, *De venatione sapientiae* VIII 22.

2. An aftereffect of the originally processual transcendence of the biblical idea of God is the absorption of a dynamic element into the postbiblical idea of transcendence, as, for example, when Clement of Alexandria describes the Lord of the universe, to whom the Christian philosophy is supposed to lead upward, as a goal object, which is difficult to hunt down, which "always draws back and distances itself further from him who strives for it" (Stromateis II 2; section 5, 3).


4. Nicholas of Cusa, *De venatione sapientiae* XII 32: "Quanto igitur quis melius sciverit hoc sciri non posse, tanto doctior."

5. Nicholas of Cusa, *De venatione sapientiae* XII 32.

6. Nicholas of Cusa, *De venatione sapientiae* XIV 41: "Habent igitur omnia ut non alia sint quam sunt, quia deus ipsa diffinit, et ab ipso non-aliud habent non aliud in specie generare, sed sibi simile efficere."

contradictorium videtur necessario esse.” The argument is only modeled on the ontological
proof that proceeds from the mere concept of God; in fact the inference is not from the concept
but rather from the truth implication of the judgment—indeed, in fact, of the relation of the
subject and the predicate given in it, that is, independently of its formal truth. For this
purpose an additional Platonizing assumption is required: that each judgment, insofar as it
claims to be true, participates in the ‘Idea’ of truth and thereby presupposes the existence of
this Idea itself. For the Cusan, its identification with God needs no argument.

8. C. Baeumker, “Das pseudohermetische ‘Buch der Vierzundzwanzig Meister,’” in Beiträge zur

9. Nicholas of Cusa, De docta ignorantia II 4, 5, 11 and 12.

10. Nicholas of Cusa, De docta ignorantia I 12.


13. Philo, De potestate Caii 15, cited after H. Jonas, Gnosis und Spätantiker Geist (Göttingen: 

14. Philo, De specialibus legibus I 40; De migratione Abrahami 134.

15. Petrarch, Invective contra medicum, ed. Ricci, III, par. 78: “Doctus fieri non potest, nisi qui
se noverit atque oderit ignorantem: defectus proprium dolere notitia principium est profectus.”

16. Rousseau to Voltaire, September 10, 1755: “... ce que nous ne savons point, nous n'aimons
beaucoup moins que ce que nous croyons savoir. Or, quel plus sûr moyen de courir d'erreurs
en erreurs, que la fureur de savoir tout? Si l'on n'eût prétendu savoir que la terre ne tournait
pas, on n'eût point puni Galilée pour avoir dit qu'elle tournait.” Somewhat later, Lichtenberg
appeals explicitly to docta ignorantia in order to prevent natural-scientific comprehension from
becoming a hindrance to its own extension: “It is not such a bad idea to explain a phenomenon
with some mechanics and a strong dose of the incomprehensible rather than entirely by
mechanics—that is, docta ignorantia is less of a disgrace than indocta”; see Vermischte Schriften

ignorantiae humilitat et humiliando exaltat et doctum facit.”

18. Johannes Wenck von Herrenberg, De ignota litteratura, ed. Vansteenberghe, in Beiträge zur
Geschichte der Philosophie des Mittelalters 8 (1910) (henceforth: De ignota litteratura), par. 24: “Sic
ergo scriba doctae ignorantiae, intrans caliginem tenebrarum linquens omnem speciem et
decorem creaturarum, evanescit in cogitationibus, et non valens Deum intueri sicuti est, quia
adhuc viator, ipsum nequaquam glorificat, sed in tenebras suas errans, culmen divinæ laudis
ad quod omnis psalmodia perduretur derelinquit et postponit, quod forse nefandissimum et
incrèdulum quis fidelium ignorant?” In the Conclusio III, the reproach of having broken through
the reservation of pure contemplation is explicitly raised against “knowing ignorance”: “Sed
homo ille doctae ignorantiae vult in eadem docta ignorantia, sequestrata omni similitudinem,
rem in sua puritate intelligere” (par. 28). It is only an apparent inconsistency when Wenck
says in Conclusio IX, “… scriba doctae ignorantiae similitudinem accipit pro re” (par. 87), since
such a confusion is in his eyes the necessary consequence of failure to recognize the eschatological
reservation, as it was formulated in Conclusio IV: “… futuro statui facialis Dei visio, quam hic
(sc. scriba doctae ignorantiae) transiliendo similitudinem intelligere videtur, reservata est” (par.
50).
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19. Wenck also appeals to the doctrine of the ‘figurative’ sense of the text: “Quapropter scriptura sancta in symbolis nobis tradidit divinum inspirata ac revelata pariformiter ad con­seuadunem naturalis nostrae conceptionis.”

20. Wenck, De ignota litteratura, par. 29: “... si esset inattingibile (sc. quidditas rerum) motus ille intellectuales esset sine termino ad quem, et per consequens non motus, et per consequens infinitus et frustra quod esset destrueri propriam operationem intellectus.”

21. Wenck, De ignota litteratura, par. 27: “Unde et ipsa praecisa veritas, in eo quod praecisa habitudinem importat et proportionem ad alias veritates non praecisas, sicut et maximitas absoluta ad miximitates habituindibus concretas.”


23. Nicholas of Cusa, Apologia doctae ignorantiae (Paris ed.), fol. 36v: “Veritas enim in imagine nequaquam, uti est, videri potest; cadit enim omnis imago eo ipso, quod imago a veritate sui exemplaris...” Sed qui videt, quomodo imago est exemplaris imago ille translato imaginem ad incomprehensibilem veritatem incomprehensionibilib se convertit.”

24. Nicholas of Cusa, Apologia doctae ignorantiae, fol. 37r: “Videt enim ibi constitutus id, quod discursu vario vestigialiter quaeritur per vagantem in agro; et quantum ipse quaerens accedit aut elongatur a quasito, plane intuetur.”

25. Nicholas of Cusa, Apologia doctae ignorantiae, fol. 39v.

26. Nicholas of Cusa, De Possess: “Quid est mundus nisi invisibilis dei apparitio, quid deus nisi visibilium invisibilitis?”

27. Nicholas of Cusa, Excitationes IX (Paris ed.): “Posse credere est maxima animae nostrae virtus, excedit omne virtutem intellectivam; ad illa enim pertingit, quae vult, procedit enim ex libertate voluntatis. Potest enim credere vel non credere rationalis anima, si vult vel non, et hoc est donum maxime dei. Ita spiritus seu libera voluntas per fidem, quam assumit, dominatur intellectui, et informat eum sua forma...” Credit sibi vera esse nuntiata, et capit quasi visa, hoc est in certitudine, ac si vidisset. Sic fides quoad intellectum, est in coincidentia visibilis et invisibilis.”

28. Nicholas of Cusa, De filiatione dei (Paris ed.), fol. 65r: “Quia enim non credit, nequaquam ascendet, sed seipsum judicavit ascendere non posse sibi ipsi viam praecedendo. Nihil enim sine fide attingitur, quae primo in itinere viatorem colligat. In tantum igitur nostra vis animae potest sursum ad perfectionem intellectus scandere, quantum ipsa credit.”

29. Nicholas of Cusa, De geneis (Paris ed.), fol. 75r: “Experientia didici autoritate maxime studio conferre, qui enim recipit dictum aliquod quasi divina revelacione propalatum et id quaerit omni conatu intellectualiter videre, quod credit; quaelegunque dictum illud fuerit thesaurus ubique latens, se inapprehensionibilib ibi reperibilem ostendit. Hinc alissima fide ad alissima ducimur...”


32. F. J. Clemens, Giordano Bruno und Nikolaus von Cusa. Eine philosophische Abhandlung (Bonn: 1847), pp. 98–99. The note has been reedited by R. Kibansky in E. Hoffmann, “Das Universum
33. Loc. cit. (note 32): “Consideravi quod non est possibile quod aliquis motus sit praeceis circularis; unde nulla stella describit circulum praecissum ab orni ad orrum.”

34. Loc. cit. (note 32): “Necesse est igitur nullum punctum fixum in octava sphaera esse polum; sed variabitur continue, ita quod semper alius et alius punctus instabiliter erit in loco poli.”


36. Loc. cit. (note 82), “Consideravi, quod esta insta non potest esse sed movetur, ut aliae stellae. Quare super polis mundi revolvitur, ut ait Pythagoras, quasi semel in die et nocte, sed octava sphaera bis, et sol parum minus quam bis in die et nocte.”

37. Nicholas of Cusa, De docta ignorantia II 1.

38. Nicholas of Cusa, De docta ignorantia II 1: “Universum vero cum omnia complectatur, quae deus non sunt, non potest esse negative infinitum, licet sit sine termino et ita private infinitum; et hac consideratione nec finitum nec infinitum est.”

39. Nicholas of Cusa, De docta ignorantia II 2: “ac si dixisset creator: Fiat, et quia deus fieri non potuit, qui est ipsa aeternitas, hoc factum est, quod fieri potuit deo similis.”

40. Nicholas of Cusa, De docta ignorantia II 3.

41. Wenck, De ignota litteratura, par. 37.

42. Nicholas of Cusa, De venatione sapientiae VII 22; the problem of the administrator mundi, who appears linguistically as a peculiar foreign body in the Cusan’s doctrine, comes up once again in connection with the subaltern dii participantes of Proclus in chapter XXI 62.

43. Nicholas of Cusa, De docta ignorantia II 11: “Nam si quis esset supra terram et sub polo arctico et alius in polo arctico,—sicut existenti in terra appareret polum esse in zenith, ita existenti in polo appareret centrum esse in zenith.”

44. Nicholas of Cusa, De docta ignorantia II 11: “Vides mundum et eius motum ac figuram attingi non posse, quoniam apparebri quasi rota in rota et sphaera in sphaera, nullibi habens centrum vel circumferentia...”

45. Nicholas of Cusa, De docta ignorantia II 12.

46. Wenck, De ignota literatura, par. 35.

47. Nicholas of Cusa, De ludo globi I.

48. Thomas Campanella, Universals Philosophia I 1, c. 1, a. 7, n. 4, Monumenta Politica et Philosophica Rariora, ed. L. Firpo, series I, no. 5 (Turin: 1960), 17 AB: “Deinde respondet Aristoteles, quod coelestia sunt maximae entitatis, ita ut tellus, quasi punctum ad ipsa, et propertiae sufficit, quod de coelestibus est sapientia. Sed prorecto insipiente loquentur, cum quia scientia hominis est de rebus, qua nobis circumstant; quae licet ad ciem sinit quasi punctum, tamen scientia nostra de hoc puncto est, qui nobis non est punctum. Coelestia vero remota sunt a nobis, nec de illis certiduo est...”

49. Nicholas of Cusa, De venatione sapientiae XXI 63. The unjustified censure of Plato and Aristotle is combined with an equally unjustified appeal to Epicurus, to whom a God cuncta
ad sui laudem creans et optima providentia gubernans is ascribed. On God's cosmic self-praise compare De conceptu et I: "Deus autem omnia propter seipsum operatur . . . ."

50. Nicholas of Cusa, De docta ignorantia II 12: "Et sic qualibet stella alteri communicat lumen et influentiam non ex intentione, quoniam omnes stellae movuntur tamquam atque choriscant; ut sint meliori modo, unde ex consequent participatio oritur;—sicut lux ex sua natura luget, non ut ego videam, sed ex consequenti participatio fit, dum utor lumine ad finem videndi—: Ita quidem deus benedicens omnia creavit, ut, dum quodlibet studet esse suum conservare quasi quoddam munus divinum, hoc agat in communione cum allis . . . , pariiformiter de mundi partibus."

51. Nicholas of Cusa, "Dies Sanctificatus," sermon (in note 7), p. 80. Where there is talk of man's special position, it relates to his being the representative of all creatures in the Incarnation: "Hominem autem sursum creavit ad se: omnia enim animalia, et omnia creat, in homine, quasi in fine, quiescunt" (Sermon XXXIII); "Creavit autem ultimo Deus hominem, tanquam in quo complementum et creaturarum perfection consisteret" (Sermon XIX); "Et non fuisse possibile universam naturam conditam ad Divinitatem vehi posse nisi in homine . . . ." ("Dies Sanctificatus," par. 32). Occasionally the traditional formula also recurs, which defines the role of man as witness to the gloria dei; God must 'exhibit' his work if he wants to be glorified: "Nihil enim movit creatorem, ut hoc universum condaret pulcherrimum opus, nisi laus et gloria sua quam ostendere voluit; finis igitur creationis ipsae est qui et principium. Et quia omnis rex incognitus est sine laude et gloria, cognosce voluit omnium creator, ut gloriam suam ostendere posset. Hinc qui voluit cognosce creavit intellectualem naturam cognitionis capacem" (letter to Nicholas Albergati, ed. G. von Bredow, Sitzungsberichte der Heidelberger Akademie, Phil-Hist. Kl., 1955, no. 3).

52. Nicholas of Cusa, De docta ignorantia II 12: "Non enim appetit homo aliam naturam, sed solum in sua perfectus esse."

53. Nicholas of Cusa, De venatione sapientiae XXVII 81. The (up to the present) first and last German translator deprives the passage of its instructive contortedness by reading it as saying that "God possessed from eternity the idea of the creative will."

55. Nicholas of Cusa, De docta ignorantia III 3: "... sicut ipse est maximus, ita et opus eius."

56. Nicholas of Cusa, De venatione sapientiae XXVII 81: "... cum nihil esset creatum . . . , non fuerunt illa plus creatabilia quam alia, quae nihil commune cum istis habent et de quibus nullum possimus conceptum facere."

57. The creative will and the plan of creation are, as such, contingent; God could also not have created anything, and He could have created something else. But His action cannot be measured against these possibility assertions because even 'possibility' originates in divine determination, which precedes the real creation from eternity. Thus only in relation to divine freedom is it correct that God's determinatio could also have turned out differently. As an assertion about the world, it is false to say that it could also not have been created or could have been created differently. The Platonic Ideas simply do not exist any longer, and neither are they simply shifted into the divine Spirit as a fixed canon of what is thinkable, as Augustine could still assume; rather, what is thinkable exists only as what has once actually been thought. This is the basis of the core sentences of chapter XXVII in De venatione sapientiae: "Non enim praecessit ipsam mentem divinam alia mens, quae ipsam determinaret ad creandum humum mundum. Sed quia ipsa mens aeterna libera ad creandum et non creandum vel sic vel aliter, suam omnipotentiam, ut voluit, intra se ab aeterno determinavit." One easily sees that the voluntaristic abundance is involved in the ut velut, which blocks the given interpretation of determinatio as the thinkable's being thought, just as it blocks laying stress on a posited posse fieri, which oscillates between possibilis and potentia in the Aristotelian/Scholastic sense.
58. Nicholas of Cusa, *De docta ignorantia* I 22: "Unde quamvis deus multa potuisset providisse, quae non providit nec providebit, multa etiam providit, quae potuit non providere, tamen nihil addi potest diviniae providentiae aut diminui."

59. Loc. cit. (note 58): "... humana natura infinita complicat et complectitur, quia non solum homines quia fuerunt, sunt et erunt, sed qui possunt esse, licet numquam erunt, et ita complectitur mutabilia immutabiliter, sicut unitas infinita omnis numerum. . . ."

60. Nicholas of Cusa, *De docta ignorantia* III 1: "Nihil in universo quod non gaudeat quod singularitate quae in nullo alio reperibili est."


62. Giovanni Pico della Mirandola, *Heptaplophus*, e. 5, c. 6, ed. E. Garin (Florence: Vallecchi, 1942), pp. 300ff: "Est autem plerunque consuetudis a regibus usurpata et principibus terrae, ut si forte magnificam et nobilium civitatem condiderint, iam urbe absoluta, imaginem suam in medio illius visendam omnibus spectandamque constituant. Haud alter principem omnium Deum fecisse videmus, qui tota mundi machina constructa postremum omnium hominum in medio illius statuit ad imaginem suam in similitudinem formatum." Written four years after the *Oratio*, this is the regression of a man who for years was driven about from place to place, who was pardoned in 1498, and for whom one year later Savonarola was to deliver a funeral oration.

63. Giovanni Pico della Mirandola, *Oratio de hominis dignitate* (note 61): "Definita ceteris natura intra praescriptas a nobis legis coercetur. Tu, nullis angustiis coercitus, pro tuo arbitrio, in cuius manu te posui, tibi ilam praeuentias. Medium te mundi posui, ut circumspicieris inde commodius quicquid est in mundo. Nec te caelestem nec terrenum, neque mortalem nec immortalem fecimus, ut tui ipsius quasi arbitrarius honorariusque plastes et factor, in quarn malueris tue formam effingas." The "center" has become a location of indifference to the possibilities lying on the radii; one's position in the world is no longer an indication of one's essence, but rather the theme of a chosen self-image: "Poteris in inferiora quae sunt bruta degenerare; poteris in superiora quae sunt divina ex tui animi sententia regenerari." Man is the self-definitive being, "cum datum id habere quod optat, id esse quod velit."

64. Plato, *Theaetetus* 151 E-152 A.


66. Nicholas of Cusa, *De ludo globi* II.

67. Nicholas of Cusa, *De beryllo* 6: "homo habet intellectum qui est similitudo divini intellectus in creando."

68. Nicholas of Cusa, *De beryllo* 29: "Ego autem attendo quomodo etsi Aristoteles reperisset species aut veritatem circa illa; adhuc propterea non potuisset attingisse quid erat esse nisi eo modo quo quis attingit hanc mensuram esse sextarium: qua est quod erat esse sextario. Puta quia sic est, ut a principio republcae ut sit sextarium est constitutum. Car autem sic sit et non aliter constitutum, propterea non sciret, nisi qui demum resolutus dicere quod principi placuit legis vigorem habet. Et ita dico cum sapiente, quod omnium operum dei nulla est ratio scilicet cur caelum caelum et terra terra et homo homo, nulla est ratio nisi quia sic voluit qui fecit. Ulterior investigare est fatuum, ut in similis dicit Aristoteles, velle inquirere primi principii quodlibet est vel non est demonstrationem. Sed dum attente consideratur omnipn creaturam nullam habere essendi rationem alunde nisi quia sic creat in quodque voluntas creatoris sit ultima essendi ratio sitque ipse deus creator simplex intellectus qui per se creat etsi quod voluntas non sit nisi intellectus seu ratio, immo fons rationum; tunc clare videt quomodo id
quod voluntate factum est, ex fonte prodiit rationis. Sicut lex imperialis non est nisi ratio imperantis, quae nobis voluntas apparat."

69. Nicholas of Cusa, De Beryllo 31. Between the essence (quidditas) of the creature and the intention (intention) of the Creator, there is a relation similar to that between the spoken or written sign and the communicative intention of the speaker or writer: "... ut sensibilia sit quasi verbum conditoris, in quo continetur ipsius intention, quae apprehensa scimus quidditatem et quiescimus. Est autem intentionis gratia manifestatio, intendit enim se sic manifestare ipse loquens seu conditor intellectus. Apprehensa ignis intentione, quae est quidditas verbi, habemus quod erate esse. Nam quod erat esse apud intellectum, est in intentione apprehensae, sicut in perfecta domo est intentione adiicatoris apprehensae, quae erat apud eius intellectum." One sees how the Cusan too becomes entangled in the ambiguities of the metaphor, so rich in orientation for our tradition, of the "book" of the world or nature and vacillates back and forth between the picture book and the book of symbols, where indeed even the picture book is not yet unambiguously tied down to the concept of the picture that 'signifies itself.'

70. Nicholas of Cusa, De beryllo 16: "Nominant autem theologi exemplaria seu ideas dei voluntatem... voluntas autem, quae est ipsa ratio in primo intellectu, bene dicitur exemplar... ."


72. Peter Lombard, Sentences II, d. 7, a. 10: "... non est creator nisi qui principaliter ista format, nec quisquam hoc potest nisi unus creator deus. Aliud est enim ex intimo ac summo causarum cardinal condere ac ministrare creaturam, quod facit solus creator deus; aliud autem pro distributis ab illo viribus ac facultatibus aliquam operationem forinsecus admovere, ut nunc vel nunc, sic vel sic, exeat quod creatur. Ista quippe originaliter et primordialiter in quadam textura elementorum cuncta jam creata sunt, sed acceptis opportunitatis postea prodeunt." This distinction between the (primary) establishment of creatures and their (secondary) production should not be understood as an admission of the possible reduction of nature to its purely material character for human production; instead, everything whatsoever that can 'become' of the Creation is here already foreseen and anticipated in the Creation, even if it is not definitively actualized.

73. William of Ockham, Quodlibeta VII, q. 23.

74. The question arises implicitly with the problem of the possibility of the actually infinite, insofar as the denial of the actually infinite seems to be a restriction of God's potentia absoluta; compare A. Maier, Die Vorläufer Galilei im 14. Jahrhundert (Rome: Edizioni di storia e letteratura, 1949), pp. 115-215. The 'infinitists' who came forward in the first half of the fourteenth century decided against Aristotle and in favor of the potentia absoluta when they regarded the creation of an infinitum in actu as possible and thus as free of contradiction. There, of course, the problem of an activity that is equivalent to the divine potency emerges only in connection with the question of a created intensive infinity, for instance in the Commentary on the Sentences of Paul of Perugia: "concedo quod Deus posset facere agens infinitae virtutis intensive," cited by A. Maier, Metaphysische Hintergründe der Spätscholastischen Naturphilosophie (Rome: Edizioni di storia e letteratura, 1955), p. 881.

75. Nicholas of Cusa, De coniecturis II 14.

76. Loc. cit. (note 75): "... nec est aliud ipsam admirabili virtute ad cuncta lustranda pergere quam universa in seipsa (sc. humanitate) humaniter complicare."

der Bibliothek Warburg 10; reprinted Darmstadt: Wissenschaftliche Buchgesellschaft, 1968), p. 213, does not hit upon the exact sense of ars magis perfectoria quam imitatoria. The authentic sense of the text is more 'conservative,' to the extent that it holds to the Aristotelian distinction (from Physics II 8; 199 a 15–17) in the definition of ars, according to which “art on the one

hand perfects what nature is not able to bring to a finish, and on the other hand imitates (nature).” The spoon carver associates his handicraft with the skill that “perfects”; but this association falls critically behind what he has said just before, and specifically because he gives up his own language as illiteratus and ventures onto the level of his Scholastic partner in the dialogue. The mere fact that his material is taken from nature does not, even on Aristotelian principles, justify regarding spoon carving as an activity that ‘completes’; the question of the pregivenness or novelty of the ‘form’ must be fundamental here. Thus the translator remained closer to the consistent train of thought than did his text. But it is more important to see how the Cusan ‘labors,’ how he hesitates to step completely out of the cover of the traditional categories and play through his opening moves.

78. It is noteworthy that Nicholas makes his layman speak a more daring language than he uses where he himself is the immediate speaker and where, in addition, he addresses himself to a prospective cleric, as in his ‘spiritual testament,’ the letter to Nicholas Albergati of 1463 (ed. G. von Bredow, Sitzungsberichte der Heidelberger Akademie, Phil.-Hist. Kl., 1955), in which he summarizes his thought as the scientia ludentis. Here we are told, “Sicut enim deus invisibilis per

verbum, artem seu conceptum suum, sibi soli notum, omnia quae in natura subsisrunt creavit,

ita et intellectus per arte seu verbum suum sive conceptum omnia quae in arte sunt imitando

naturam operatur, ut aedificia, picturae, scripturae et similia intellectus opera ostendunt”

(n. 18). Essential examples that Nicholas uses elsewhere for man’s creativity are absent here in favor of ‘natural’ examples. In paralleling divine and humane predicatives, the sibi soli notum that is applied to God’s creation is left out, and in the place of the theological creavit there stands the anthropological operatur. Thus also ars, verbum, and conceptus receive meanings that are only analogous. Accordingly it goes on: “Sed opus dei nihil praesupponit quod sit ante: ... Sed intellectus praesupponit opus dei. Omnis enim conceptus eius est imitatorius operis dei ...”

(n. 19–20). And: “Non igitur potest unquam intellectus ad divinam creativam artem, ut sit sicut

magister, per se venire, et tamen nisi ad illam perveniat, non attingit quod apprehendere
cupit ...” (n. 23). It is questionable whether the editor hits on the intention of this text and does not level off the difference between it and other passages when she writes regarding it, “The sovereignty of the Creator is reflected in the freely creating power of the spirit. It can think out and invent new things, which no one before it has thought of, and make them

artificially. So when it is said that the spirit operates by imitating nature, then that does not by any means mean that its works of art are copies of natural objects. The imitation relates not to individual natural things but rather to nature as God’s work.” Even if this letter of the Cusan falls in the same year as the dialogue On the Globe Game, still one should not harmonize the linguistic difference between them by reading in here the inventio notum that is central there. There are more than stylistic differences between Nicholas the preacher and letter writer, on the one hand, and the speculative author, on the other hand.

79. Nicholas of Cusa, De mente, c. 18: “unde mens est creat a ab arte creatrice, quasi ars illa seipsam creare vellet ... in hoc enim infinitem imaginis modo, quo potest, imitatur ...”

80. Nicholas of Cusa, Compendium VI.

81. Nicholas of Cusa, De ludo globi II: “Crea anima sua inventione nova instrumenta, ut diiscernat et noscat: ut Ptolemaeus astrolabium et Orpheus lyram et ita de multis. Neque ex aliquo

extrinseco inventores creavint illa, sed ex propria mente. Explicarunt enim in sensibili materia

conceptum.”

82. Nicholas of Cusa, De coniecturis 11:8: “Coniectura est positiva assertio in aliteratem veritatem

uti est participans.”
83. Nicholas of Cusa, Compendium VIII: "Denum (sc. cosmographus), quando in sua civitate omnem sensibilis mundi fecit designationem, ne perdat eam, in mappam redigit, bene ordinatum et proportionabiliter mensuratum, convertiquae se ad ipsum, nuntiosque amplius licentiat, claudiique portas, et ad conditorem mundi internum tansfert intuitum, qui nihil eorum est omnium quae a nunus intellext et notavit. Sed omnium est artifex et causa, quem cogitat sic se habere ad universum mundum anterioriter, sicut ipsa ut cosmographus ad mappam. . . Et hinc in se reperit primum et propriidius signum conditoris, in quo vis creativa, plus quam in aliquo anio animali rebleat."

84. Nicholas of Cusa, De venatione sapientiae IV 9-10.


86. Nicholas of Cusa, De venatione sapientiae V 11: "Videtur autem naturam imitari geometry, dum circulum figurat." In the first German translation of this treatise of the Cusan, by P. Wilpert (Hamburg: Felix Meiner, 1964), the autem that marks the distinction between the two examples is not taken into account, evidently in the belief that both similes, that of the logician and that of the geometry, refer to the same point of analogy.

87. Nicholas of Cusa, De docta ignorantia I 11.

88. Nicholas of Cusa, De beryillo, c. 32.

89. Nicholas of Cusa, De docta ignorantia II 12.

90. Loc. cit. (note 89): "Unde eit machina mundi quasi habens ubique centrum et nulibi circumferentiam, quoniam circumferentia et centrum deus est, qui est ubique et nulibi."

91. Nicholas of Cusa, De visione dei, c. 7: "Cum sic in silentio contemplationis quiesco, tu domine intra praeordia mea respondens, dices: sis tu tuus, et ego ero tuus. O domine . . . posuisti in libertate mea ut sim, si voluero, mei ipsius. Hinc nisi sim mei ipsius, tu non es meus . . . Et quia hoc posuist in libertate mea, non me necessitas, sed expectas, ut ego eligam mei ipsius esse."

92. Augustine, Opus imperfectum contra Julianum I 78.

93. Loc. cit. (note 92): "Libertas arbitrii, qua a deo emancipatus homo est, in admitendi peccati et abstinenti a peccato possibilitate consistit. —Emancipatum hominem dicis a deo; nec attendis hoc cum emancipato agi, ut in familia patris non sit."

94. Nicholas of Cusa, "Dies Sanctificatus," sermon (cited in note 7), par. 80: "Notandum hic, quomodo incarnacio Christi fuit necessaria nobis ad salutem. Deus creavit omnia propter se ipsum et non maximae et perfectissimae nisi universa ad ipsum; sed nec ipsa ad ipsum unire potuerunt, cum finit ad infinitum nulla sit proportion. Sunt igitur omnia in fine in Deo per Christum. Nam nisi Deus assumpisset humanam naturam, cum illa sit in se medium alias complicans, tum universum nec perfectum—ymmo nec esset."

95. Preliminary stages in the development of the terminology of contractio were already present in Scholasticism. The sense of 'drawing something to oneself' is involved in a queasio of Thomas Aquinas's Summa theologica: "Utrum Christus defectus corporales contraxerit?" (III, q. 14, a. 3). This drawing to oneself is something neither volitional nor accidental; rather it is a matter of natural 'endowment': "Ilid enim contrahere dicimus quod simul cum natura ex origine trahimus." In the context of Christology it has the connotation of 'allowing oneself to become involved with,' not that of the necessity that is more characteristic of natural philosophy: "... illud dictatur contrah simul cum sua causa ex necessitate trahitur." The contractio relation
is not identical with the relation of Platonic ‘participation’; not only does the ideal draw the reality to it, but matter too is urged toward conceivability: “Unaquaeque materia per formam superinductam contrabitur ad aliquam speciem” (Summa contra Gentiles II 16, a. 2). This latter use most nearly anticipates the “restriction” that the Cusan conceives the infinite and indefinite as undergoing, in order to become a universe, a maximum contractum that, although it is an ‘everything,’ a universe, still only represents a possibilitas contracta with its gradus contractionis the possi futuri contractum ad id quod fit (De venataione septentriae 38, 114; also see De docta ignorantia II 4–8). A century later the concept of contractio recurs in the “Zimmum” of the Kabbalist Isaac Luria, the self-restriction of God in which “of His own accord He draws Himself into Himself” and thus makes it possible for something to exist that is not Himself—Gershom Scholem, Über einige Grundbegriffe des Judentums (Frankfurt: Suhrkamp, 1970), pp. 85–86. Bruno’s position will be the antithesis of this: God exhausts Himself when He creates, so that what He creates can only be Himself. Thus “restriction” for Bruno can never be anything but the “restriction” of matter (contraction di materia), which cannot realize the universe in any of its temporal states, but only in the passage through all of them.

96. Nicholas of Cusa, De docta ignorantia III 1: “Et universum non evacuat ipsam infinitam absolute maximum de potentiam, ut sit simpliciter maximum terminans de potentiam.”

97. Nicholas of Cusa, De docta ignorantia III 2.

98. Nicholas of Cusa, De docta ignorantia III 3: “Sed si homo elevatur ad unitatem ipsius potentiae, ut non sit homo in se subsistens creatura, sed in unitate cum infinita potenti, non est illa potenti in creatura, sed in seipsa terminata.”

99. Nicholas of Cusa, De docta ignorantia III 4: “... subiungentes dictum temporis plenitudinem praeteritam ac fesum semper benedictum primogenitum omnis creaturae esse.”

100. Wenck, De ignota litteratura, par. 35: “... dicet idem generare Filium et creaturas creare.”

101. Wenck, De ignota litteratura, par. 40.

Chapter 3

1. V. Spampanato, Vita di Giordano Bruno, con documenti editi e inediti (Messina: Principato, 1921), p. 786: Documenti Romani XI. It is surprising that the consciousness of the testimonial character of such a freely accepted death had so disappeared in the practice of the Inquisition that the possible reversal of the early Christian effect of the deaths of martyrs, against Christianity, does not seem to have occurred to anyone. This state of affairs belongs to the history of the elemental change in the subterranean idea of the ‘powerful’ truth, which coincides with the change of epoch itself; compare Hans Blumenberg, “Paradigmen zu einer Metaphorologie,” Archiv für Begriffsgeschichte (1960):12–17. Against this background, it sounds like historical irony that the Avvisi di Roma of the February 12, 1600, introduced the announcement of the postponement of the burning of the “eretico obstinatissimo,” which had been fixed for this day, with this disappointed turn of expression: “Oggi credevamo vedere una solennissima iustizia, e non si sa perché si sia restata...” (V. Spampanato, Vita di Giordano Bruno, p. 784: Documenti Romani VIII). The only witness of the burning who is accessible to us, the professor Caspar Schoppe (1576–1649), turns out to have had a subaltern’s atrophied faculty of vision for what took place before him: “Hodieigitur ad rogum sive piram deductus, cum Salvatoris crucifixi imagocui iam moritur-o osteRderetur, torvo eam vultu aspernatus reiecit, sicque usitatus misere periiit, renunciaturus credo in religius illis, quos finxit, mundis, quosam pacto homines blasphemini et impii a Romanis tractari so lentant”—D. Berri, Vita di Giordano Bruno di Nola (Florence: 1868) (henceforth: Vita), p. 401. Nevertheless, this onlooker appears to be the only one who, in expressing his scorn, established a connection between Bruno’s rejection of the God become man and his vision of the infinite multiplicity of worlds.
2. Berti, *Vita*, p. 390, Doc. XXIII: "... et l’esser in somma publico heresiarca et non gia intorno articolì leggieri, ma intorno alla Incarnazione del Salvator nostro et alla Santissima Trinità... ."


7. Bruno, *La cena de le ceneri*, Dialoghi, p. 83: "Or ecco quello, ch’ha varcato l’aria, penetrato il cielo, discorse le stelle, trapassati gli margini del mondo, fatte svanir le fantastiche muraglia de le prime, ottave, none, desíme ed altre, che vi s’avesser potuto aggiungere, sferè, per relazione de vani matematici e cieco veder di filoi» volgari.” The opened outlook on nature—"nudata la ricoperta e velata natura"—results from the removal of a hindrance, an obstructing cage, which had been erected in human history by deceitful manipulation, and does not result from overcoming cognitive difficulties given with the material itself and its ‘natural’ obscurity. One sees that Bruno still stands before the threshold of the seventeenth century and the surprise, which reversed its ‘attitude’ to nature, that it received from the telescope and the microscope; he believes in the adequacy of man’s visual powers to nature, as long as the hindrances of sophistical constructions are cleared from the path of the faculty of vision—he is still the *contemplator caeli*, who needs only to be led out of the cave of the constructors of artificial images in order to be able to experience reality as such and in its evidence. The other ‘savior’ images in the *Cena* also come out this way: the eyes provided to the moles, the blind men made to see, the dumb and lame who are healed, “che non valean far quel progresso col spirito... .” It is sufficient to produce ‘presence’ with respect to the subject matter in order to lay bare its nature: “Le rende non men presenti che si fussero proprii abitatori del sole, de la luna ed altri nomati astri.” Theoretical man does not step out of the all-enclosing and all-furnishing maternal process of nature; he relies on what is nearest to him and is thereby certain of what is farthest: “E n’ispre gli occhi a veder questo nome, questa nostra madre, che nel suo dorso ne alimenta e ne nutrisce, dopo averne prodotti dal suo grembo, al qual di nuovo sempre ne riacquista, e non pensar oltre lei essere un corpo senza alma e vita, et anche feccia tra le sustanze corporali. A questo modo sappiamo che, si noi fussimo ne la luna o in altre stelle, non sarreino ne in loco molto dissimile a questo... .” Here the homogeneity of the universe, the key axiom of the cosmology of the modern age, is not a rational/economic postulate but rather a postulate, pressing forward from the organic background metaphor, of the universal familiarity of being.

8. Copernicus, *De revolutionibus* I 11: “Sed cum modica sit differentia, non nisi cum tempore grandescens patefacta est: a Ptolemaeo quidem ad nos usque partium prope XXI, quibus illam anticipant.”


10. This complaint, which breaks forth from the sober recitation of the enhancement of the possibilities of astronomical knowledge, about the unlived lives, the time left empty of history, the ‘backwardness’ of reality with respect to possibility that threatens and actually occurs in man and only in man—this complaint loses the apparently accidental character that it has in this passage only from the point of view of the whole of the Nolan’s speculation: “Ma che di questi alcuni, che sono stati appresso, non siino però stati più accorti, che quei che furon prima,
e che la moltitudine di que' che sono a nostri tempi, non ha però più sale, questo accade per ciò che quelli non vissero, e questi non vivono gli anni altrui, e, quel che è peggio, vissero morti quelli e questi ne gli anni propri" [Dialoghi, p. 41].

11. For himself— who, since Copernicus, had scarcely been able to extend the temporal basis and, even assuming that he had been able to do so, could not have made anything of it because he knew almost no astronomy at all—Bruno claims not to see with the eyes of Copernicus when he is approached for a conversation at the beginning of the Cena—"per intender il suo Copernico ed altri paradossi di sua nova filosofia." He saw with his own eyes, even if he owed much to the zeal of the mathematicians in their observations, which "successivamente, a tempi e tempi" and "giongendo lume a lume" had provided the necessary prerequisites for the assertions that were now possible—"a tal giudicio, qual non possea se non dopo molte non ociose etadi esser parturito." But at bottom, he adds, these mathematicians are like translators from one language to another who themselves could not penetrate more deeply into the sense of what is translated—"ma sono gli altri poi, che profondano ne' sentimenti, e non essi medesimi." And Bruno counts himself among these "others," even with respect to Copernicus.


13. Bruno, La cena de le ceneri V, Dialoghi, p. 145: "... e sappiamo che il principio de l’inquisizione è il sapere e conoscere, che la cosa sii, o sii possibile e conveniente, è da quella si cave profitto.”


21. William of Ockham, Quodlibeta VI, q. 1.

22. William of Ockham, I. Sent. 48 1 M: "... si esset (sc. deus) causa naturalis, vel omnia produceret simul vel nulla."


24. Berti, Vita, p. 352, Doc. XI (from June 2, 1592): "La materia de tutti questi libri parlando in generale è materia filosofica e secondo l'intitulation de detti libri diversa, come si può veder in essi, nelli quali tutti io sempre ho definito filosoficamente e secondo li principii e lume naturale, non avendo riguardo principal a quel che secondo la fede deve esser tenuto e credo che in essi non si ritrova cosa per la quale possa esser guidicato, che de professio piutosto voglia impugnar la Religione che saltar la filosofia quantunque molte cose impie fondate nel lume mio naturale possa haver esplicato."
25. Berti, *Vita*, p. 355, Doc. XI: "... perché io stimavo cosa indegna della divina bontà e potenza che posessendo produr altro questo mondo un altro e altri infiniti, produsse un mondo finito...." In *The Christianity of Reason*, Lessing was to derive very similar results from the Aristotelian concept of God's thought that thinks itself if "God's every idea is a creation" and He thinks of nothing but Himself, then either He creates Himself or the created is, like Him, *ens infinitum* (section 13), in fact either as "infinitely many worlds" (section 15) or as the absolutely complete continuity of a unique world (section 18).

26. Bruno did not go along with one of the most obscure distinctions in the history of dogma, the distinction between *generatio* and *creatio*: the production of the Son of God as "generation," the production of the world as "creation." He holds to the Cusan's fundamental idea that the absolute "ability" must manifest itself in the arising of *aequalitas from unitas*—but the position of *aequalitas* in Bruno is occupied by not the Son but the infinite universe. What the Cusan and the Nolan have in common is the compulsion of omnipotence to exhaust itself.

27. Berti, *Vita*, p. 355: "... senza conoscer questo nome Persona che appresso S'Augustino è dichiarato nome non antico ma novo...."

28. Berti, *Vita*, p. 358, Doc. XII: "... e ho dubitato che queste tre possino sortire nome di persone, poiché non mi pareva che questo nome di persona convenisse alla divinità...."


30. F. J. Clemens, *Giordano Bruno und Nicolaus von Cusa* (Bonn: 1847), p. 222. Hermann Cohen repeated the negative evaluation of Bruno in comparison to the Cusan, though according to different criteria, in his introduction to Lange's *Geschichte des Materialismus*, in 1914. Nicholas, he says, "rediscovered the Platonic path to mathematics," and thus "became the first founder of modern philosophy." But "fate then did him the dubious favor of having Giordano Bruno inscribe his name on his banner, and while the latter could not abuse and revile other people sufficiently, he declared the deepest gratitude to the Cusan, and hardly to anyone else." Cohen solves the problem of the lack of influence of the Cusan's "profound initiating impulses to modern thought" by the "slight suspicion" that Bruno's applause could have frightened later philosophers away; see *Schriften zur Philosophie und Zeitgeschichte*, vol. II (Berlin: Akademie Verlag, 1928), pp. 190-191.


32. Bruno, *Spaccio de la bestia trionfante* II 3, *Dialoghi*, p. 708: "Perché quello che si sente e che si remira, si fà in certo modo molto, e, per dir meglio, altro ed altro; perché si fa obietto e potenza, conosciute e conoscibile; essendo che ne l'atto dell' intelligenza molte cose incorrero in uno."

33. Bruno, *De l'infinito universo e mondi*, proemiale epistola, *Dialoghi*, p. 349: "... da quel che, sicome è bene che sia questo mondo, non è men bene che sia ciascuno de infiniti altri."

34. Bruno, *De gli eroici furori*, argumento, *Dialoghi*, p. 948: "Per largo e per profondo peregrinare il mondo, cercate tutti gli numerosi regni, significhi che non è progresso immediato da una forma contraria a l'altra, né regresso immediato da una forma a la medesima; però bisogna trascorrere, se non tutte le forme che sono nella ruota delle specie naturali, certamente molte e molte di quelle." Here Circe personifies the *omniparente materia*. In this context, an instructive misinterpretation is given of Origen's *apokatastasis*, which is conceived as the lawfulness of a physical revolution of the contents of the world, whereas in Origen himself, each new world that is set up is the result and realization of the free moral decision of the preceding world
phase—Origen, De principiis I 6, 2, ed. P. Koetschau (Leipzig: Hinrich, 1913), p. 81: “In hoc iam iustum iudicium dei providentiae est, ut unicuique secundum diversitatem motuum pro merito sui decessus et commotionis occurrat.” The reason why this incidental misunderstanding is so instructive is that the Nolan passes over the difference—which is an index of his own authenticity—between the great world systematizer Origen and himself—the difference between the thoroughgoing personalization of the universe on the one hand and consistent impersonality on the other. This corresponds to the fact that the plurality of worlds in Origen is a sequence of judgment and creation in time, whereas in Bruno it is a simultaneity in space.

85. Such realism of the imagination can also be found in the arguments for the infinity of the world in De l’inftito universo II, Dialoghi, p. 394: “Oltre, sicome la nostra imaginazione è potente di procedere in infinito, imaginando sempre grandezza dimensionale e numero altra numero, secondo certa successione e, come se dice, in potenzia, cosi si deve intendere che Dio attualmente intende infinita dimensione ed infinito numero. E da questo intendere seguita la possibilità con la convenienza ed opportunità, che ponemo essere: dove, come la potenza attiva è infinita, cosi, per necessaria conseguenza, il soggetto di tal potenza è infinito. . . .”

Imagination is the criterion of what is possible, what is possible is the criterion of original power, and this power is the criterion of what is real—“il possere fare pone il possere esser fatto.”

86. Bruno, De la causa, principio et uno III, Dialoghi, pp. 280ff: “... onde se sempre è stata la potenza di fare, di produrre, di creare, sempre è stata la potenza di esser fatto, prodotto e creato; perché l’una potenza implica l’altra; voglio dir, con esser posta, lei pone necessariamente l’altra. . . . Perché la possibilità assoluta per la quale le cose che sono in atto, possono essere, non è prima che la attualità, né tampoco poi che quella. Oltre, il possere essere è con lo essere in atto, e non precede quello; perché, se quel che può essere, facesse se stesso, sarebbe prima che fusse fatto.” On the Cusan’s concept of possibility in its specific differentia, see A. Faust, Der Méglichkeitsgedanke. Systemgeschichtliche Untersuchungen (Heidelberg: C. Winter, 1981-1982), vol. II, pp. 266-293, especially the notes on pp. 287-288.

87. Bruno, De la causa III, Dialoghi, p. 281: “Lo uomo è quel che può essere, ma non è tutto quel che può essere.” As for the divine original ground—“il quale è tutto quel che può essere, e lui medesimo non sarebbe tutto se non potesse essere tutto. . . .” For all other things—“... le quali, quantunque sono quello che possono essere, potrebbero però non esser forse, e certamente altro, o altramente che quel che sono; perché nessuna altra cosa è tutto quel che può essere.”

88. Bruno, Opera latina I/1, pp. 112-114.

89. Bruno, Opera latina I/1, p. 72: “Sphaericum esse non tollit infinitum esse.”

40. Bruno, Opera latina I/1, p. 98: “... quod ubique centrum habet, estque ex omni parte sphæricum. Sicutjuxta intelligibilia modum est in Deo, in natura, in universi una substantia, juxtaque rationem propriam in hoc sensibili universo conjicitur, in quo nulla stella, nullus mundus, nullus orbis in circumferentia dictur alteri, qui sibi non sit in centro, quia unidue in universo aequalis habetur ad magnum parvumque horizontem respectus. Infinitum igitur sit oportet, quod undeque acqueal esse debeat.”

41. Bruno, De la causa III, Dialoghi, p. 285: “La potestà si assoluta non è solamente quel che può essere il sole, ma quel che è ogni cosa e quel che può essere ogni cosa: potenza di tutte le potenze, atto di tutti gli atti, vita di tutte le vite, anima di tutte le anime, essere de tutto l’essere; onde altamente è detto dal Revelatore: ‘Quel che è, me invia; Colui che è, dice cossi.’ Però quel che altrove è contrario ed opposto, in lui è uno e medesimo, ed ogni cosa in lui è medesima così discorrer per le differenze di tempi e durazioni, come per le differenze di attualità e possibilità. Però lui non è cosa antica e non è cosa nuova; per il che ben disse il Revelatore: ‘primo e novissimo.’” In conformity with the premise that one can speak of potentia absoluta only if one sees it as both ability-to-make and ability-to-become, the Nolan passes without
any comment from the identity of the divine power to the identity—realizing itself in the plurality of worlds through time—of a substratum that, as world material, includes openness to being defined as everything, and, as world soul, vocation for everything; resistance to the traditional conception of matter follows logically: "Conchiudendo, dunque, vedete quanta sia l’eccellenza della potenza, la quale, se vi piace chiamarla raggione di materia, che non hanno penetrato i filosofi volgari, la possente senza detraere alla divinità trattar più altamente, che Platone nella sua Politica e il Timo. Costoro, per aver troppo alzata la raggione della materia, son stati scandalosi ad alcuni teologi" (Dialoghi, p. 286).

42. On Osander and his role in the dispute about the truth of Copernicanism, see H. Blumenberg, Die Genesis der kopernikanischen Welt (Frankfurt: Suhrkamp, 1975), pp. 341-370.

43. Bruno, La cena de le ceneri III, Dialoghi, p. 89: "Or vedete, che bel portinaio! Considerate quanto bene s'apra la porta per farvi entrare alla participazion di quella onoratissima cognizione, senza la quale il saper computare e misurare e geometrare e perspettivare non è altro che un passatempo da pazzi ingennosi. Considerate come fidelmente serve al padron di casa." Bruno was not the first to use strong language in connection with this affair; as early as two months after Copernicus’s death, Tiedemann Giese, the Bishop of Kulm, described the preface as a shameful treachery in a letter to Joachim Rhetikus: "Quis enim non discruerit ad tantum sub nomine fidei securitate admissum flagitum?"—Koepenikus Gesamtanaage ed. F. Kubach (Munich: R. Oldenbourg, 1944-1949), vol. II, p. 454. Thus it is not the case that the preface has "only agitated tempers since the time of Alexander von Humboldt," as claimed H. Bornkamm, "Copernicus im Urteil der Reformatoren," Archiv fur Reformationsgeschichte 40 (1943): 171-183 (citation from p. 174).

44. Bruno, La cena III, Dialoghi, p. 90: "... dove non solo la ufficio di matematico che suppone, ma anche della fisica che dimostra il moto de la terra." See La cena IV, Dialoghi, p. 129: "Ma il suo scopo versa circa la natura e verificazione del soggetto di questi moti."

45. Bruno, Oratio valadictoria (1588), Opera latina 1/1, p. 17: "Copernicum etiam qualem putatis esse naturam mathematicum, sed (quod est mirum obiter) physicum? Plus ille inventur intellelisse in duobus capitibus, quam Aristoteles, et omnes Peripatetici in universa eorum naturali contemplatione."

46. Bruno, De l’inftinito universo II, Dialoghi, p. 429: "... fission de la terra; contra il quale crida tutta la natura, e proclama ogni raggione, e sentenza ogni regolato e ben informato intelletto al fine."

47. Bruno, La cena III, Dialoghi, p. 91: "... perché lui lo tiene per altri proprii e più saldi principii, per i quali, non per autoritate ma per vivo senso e ragionne, ha ossi certo questo come ogni altra cosa che possa aver per certa."

48. Bruno, De la causa, principio et uno V, Dialoghi, p. 826: "Però, benché un particolare mondo si muova verso e circa l’altro, come la terra al sole e circa il sole, nientedimeno al rispetto dell’universo nulla si muove verso né circa quello, ma in quello." Bruno’s infinite space remains, according to its implicit definition, the ‘container’ space of Aristotle and is still by no means the absolute space of Newton; the latter implies in principle that the movement of an isolated body could be ascertained by the organ of an absolute knowledge.

49. Bruno, De la causa V, Dialoghi, p. 320: "Alla proporzione, similitudine, unione e identità de l’inftinito non più ti accosti con essere uomo che forrnica, una stella che un uomo; perché a quello essere non più ti avicini con esser sole, luna, che un uomo o una forrnica; e però nell’inftinito queste cose sono indifferenti...."

51. This discussion may now be found in H. Blumenberg, *Die Genesis der kopernikanischen Welt* (Frankfurt: Suhrkamp, 1975), pp. 162–199.

52. Bruno, *Opera latina* I/1, p. 79: “Grave et leve non dicuntur de corporibus naturalibus, naturaliter constitutis.”

53. Bruno, *Opera latina* I/1, p. 186: “Longe igitur a naturali contemplatione desipit quod ait Aristoteles, quod si quis transponat terram, ubi nunc est luna, non furtur partium unaquaque ad ipsam, sed ad suum locum. Immo dicimus partus unius terrae non habere maiorem potentiam, ut sint partes alterius, quam partes unius animalis, ut sint alterius animalis partes.” It is significant that Bruno gives up the distinction between the earth and the moon—which for Aristotle was a radical heterogeneity because the moon, as (already) the lowest heavenly body, was considered no longer to be composed of the four elements—and speaks of the genus terra, of which there can be arbitrarily many instances, such as are interchanged in the thought experiment. The logic is sharpened still further by this plural of “earth” (which was impossible for Aristotle), because even then something like ‘organic’ individuality continues to be maintained, and all movements have a reintegrative function. But such organic individualization of world bodies again destroys the previously accomplished ‘progress’ in the direction of the postulate of cosmological homogeneity.

54. Bruno, *De l’inﬁnito universo* III, *Dialoghi*, p. 451: “Moto retto non è proprio né naturale a corpo alcuno’ principale; perche non si vede se non nelle parti che sono quasi escrementi che hanno effuso da corpi mondani, o pur, altronde, hanno inﬂusso alle congeneri sfere e continenti...”

55. Bruno, *Opera latina* I/1, p. 186: “Nihil ergo natum est ferri a medio, quod et ad medium ferri non sit (natura illud imperante) natum, quia particulari telluris non plus quisere compertiur, quam cuiusque animalis particularis.”

56. Bruno, *De l’inﬁnito universo* IV, *Dialoghi*, p. 484: “... il principio intrinseco impulsivo non procede dalla relazione ch’abbia a loco determinato, certo punto e propria sfera, ma da l’appulso naturale di cercar ove meglio e più prontamente ha da mantenersi e conservarsi nell’esser presente; il quale, quantunque ignobil sia, tutte le cose naturalmente desiderano...”


58. Bruno, *Articuli de natura et mundo* 54, *Opera latina* I/1, p. 170: “Nulla apud me, naturaliter se habentis, naturalis latio est pracer circularem... Porro nos non unam dicimus circa medium lationem, sed certe plures quam astra, quia terra multipliciter movetur circa proprium centrum, et non uno modo circa solem...”


60. Bruno, *Articuli* 38, *Opera latina* I/1, pp. 143–146: “Tempus, quod est mensura motus, non est in coelo, sed in astris, et primus ille motus, quem concipimus, non est alibi, quam in terra subjective... si quippe motus ille, quo omnia velocissimo raptu circa terram exagitati videntur, in terra subjective re vera compertiatur, tot sane erunt in universo tempora, quot sunt et astra. Neque enim potest esse tale unum in universo, ut omnium motuum mensura existat... Regula igitur motus diurno, sive a sole capitur solo, sive a terrae tantum motu, sive ab utroque, sive ab his, sive’ab aliis circuitibus, nulla est prorsus, neque esse potest geometrica... ubi enim est ista temporalis mensura? ubi est illud sibi aequum, quod alienum aequilatatem et inaequalitatem iudicet? Quia primus motus Aristotelis habebat omnium regulatissimi, utpote cui motus octavae sphaerae hic singularis esset primus, ideo ex ipso capta est ratio temporis
et mensurae durationis omnium: at quid nunc diceret, si alios motus comperiret, diurnique motus mensuram millegeminis irregulatisque commotionibus turbari videiret?"


62. Bruno, Articuli 40 (cited in note 61): "Nihilominus tempus esse dictimus, si omnia quiwerint. Propoterea non tempus sed temporis cognitionem motui alligare debuit Aristoteles. ... Sed nullo existente motu, nulla durationis cius erit mensura ... et ideo non accept (sc. Aristoteles) durationis speciem absoluta, sed secundum esse ad quandam motus speciem contractum. Si nusquam igitur fuisse motus, diversae non essent durationis species, sed una, et sine nomine (quod a differentia originem habet) aeternitas ... si omnia quiwerint, non propter denesinet tempus esse durationis mensura, quia una erit omni duratio, una queis."


64. Bruno, Articuli 39 (cited in note 63): "Et veluti sub uno infinito spatio, continuo, communis infinita particularium loca, propriaque spatio intelligentur, quae singulis quibusque quadrantis ita sub communi una omnium duratione, diversis diversae durationes atque tempora appraniens. See De la causa V, Dialoghi, p. 320: ... e perdne l'infinita duratio non differisce la ora dal giorno, il giorno da l'anno, l'anno dal secolo, il secolo dal momento; perché non son piu gli momenti e le ore che gli secoli, e non hanno minor proporzione quelli che questi a l'eternita."

65. Bruno, Articuli de natura et mundo 40, Opera latina 1/1, p. 150: "... tempus, quod acqualis et catholica mensura motus est, non potest aliter percepti, fingiue, quam per motum, sive naturaliter a circulione solis, vel lunae, vel alterius a strii, sive artificiaiter in fluxu aquae, vel pulveris, vel conversione punctorum, de quibus nullum non sensibiliter ab alio et a se ipso varium non condipnim. Et pro satis comperto habemus, nusquam motus quantitati et figurae geometrici acquali, physic acqualem motum, molem, atque figuram respondere."

66. Bruno, La cena de le ceneri III, Dialoghi, p. 109: "E non sono altri motori estrinseci, che col movere fantaschic siere vengano a trasportar questi corpi come inchiodati in quelle; il che se fisso vero, il moto sarrebbe violento furor de la natura del mobile, il motore più imperfetto, il moto ed il motore solleciti e laboriosi; e altri molti inconvenienti s'aggiongerebbero. ... Tutto avviene dal sufficiente principio interiore per il quale naturalmente viene ad esigitar, e non da principio esteriore, come veghiamo sempre accadere a quelle cose, che son mosse o contra o extra la propria natura."


68. Bruno, La cena V, Dialoghi, p. 147: "Segno ed indizio, dico, perché il vedere queste cose con certe disposizioni della luna, ed altre cose contrarie e diverse con contrarie e diverse disposizioni, procede da l'ordine e corrispondenza delle cose, e le leggi d'un'aumentazione che sono conformi e corrispondenti alle leggi de l'altra."

69. Bruno, La cena V, Dialoghi, p. 151: "Ogni cosa dunque, che è naturale, è facilitissima; ogni loco e moto naturale è convenientissimo. Con quella facilità, con la quale le cose che naturalmente non si muovono persistono fisse nel suo loco, le altre cose che naturalmente si muovono, marciano per gli lor spacci."

70. Bruno, Articuli de natura et mundo 61, Opera latina 1/1, p. 75: "Ubi non est motus circularis in natura, est eius vel similitudo, vel appetitus, vel inquisitio, et adpulsus ad ipsum." Further,
on article 58 (p. 172): "Nullam sphaerarum motu recto agitari videmus, quia certa nulla gravis est aut levis ... quae omnnes motus naturales, naturaliumque motuum species, circulares sunt vel circularem motum quaerunt et imitantur."


72. Bruno, De l'infinito mondo I, Dialoghi, p. 876: "Tanto più che, se è ragionevole che sia un buono finito, un perfetto terminato; improprionalmente è ragionevole che sia un buono infinito; perché, dove il finito bene è per convenienza e ragionevole, l'infinito è per absoluta necessità."

73. Bruno, De la causa IV, Dialoghi, p. 307: "... la materia non è quel prope nihil, quella potenza pura, nuda, senza atto, senza virtù et perfezione."

74. Bruno, De la causa IV, Dialoghi, p. 316: "... per il contrario le ha in odio ... più potentemente abomina che appete ... che ella ha in fastidio. ..."

75. Bruno, La cena V, Dialoghi, p. 154: "Perché, essendo la materia e sustanza delle cose incorrotibile, e dovendo quella secondo tutte le parti esser soggetto di tutte forme, a fin che secondo tutte le parti, per quanto è capace, si fia tutto, sia tutto, se non in un medesmo tempo ed instante d'eternità, al meno in diversi tempi, in vari instanti d'eternità successiva e vicissindamentalmente. ..."

76. Bruno, De la causa IV, Dialoghi, p. 297: "Come dunque ti piace, che le altre forme abbiano ceduto a questa, cossi è in volontà de la natura, che ordina l'universo, che tutte le forme cedano a tutte. Lascio che è maggior dignità di questa nostra sustanza di farsi ogni cosa, ricevendo tutte le forme, che, ritenendone una sola, essere parzial. Cossí, al suo possibile, ha la similitudine di chi è tutto in tutto."

77. Bruno, De la causa III, Dialoghi, pp. 262-274.

78. Bruno, La cena V, Dialoghi, p. 156: "... il moto locale è stato stimato principio d'ogni altra mutazione e forma ... ."

79. Bruno, La cena V, Dialoghi, p. 168: "... il fatto de tutte le parti de la terra, che successivamente devono participar tutti gli aspetti e relazioni del sole, facendosi soggetto di tutte complessioni ed abiti ... ciascuna parte venghi ad aver ogni risguardo, hanno tutte l'altre parti al sole; a fin che ogni parte venghi a participar ogni vita, ogni generazione, ogni felicita."

80. Bruno, Spaccio III 1, Dialoghi, p. 733: "Onde sempre piu et piu per le sollecite ed urgenti occupazioni allontanandosi dall' esser bestiale, piu altamente s'approssimano a l'esser divino."

81. Nicholas of Cusa, De concepturis II 14: "Intra enim humanitatis potentiam omnia suo existunt modo."

82. Bruno, La cena I, Dialoghi, p. 23; Oratio Valedictoria, Opera latina 1/1, p. 22.


84. Bruno, Cabala del Cavallo Pegaseo I, Dialoghi, p. 873.

85. The original meaning deposited in phrases such as personam agere, and then personam induere, personam ferre, or personam mutare.
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The Legitimacy of the Modern Age

Hans Blumenberg
Translated by Robert M. Wallace
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From Hegel and Marx, Dilthey and Weber, to Freud and the Frankfurt School, German social theory enjoyed an undisputed preeminence. After the violent break brought about by National Socialism and World War II, this tradition has recently come to life again, and indeed to such an extent that contemporary German social thought has begun to approach the heights earlier attained. One important element in this renaissance has been the rapid and extensive translation into German of English-language works in the humanities and the social sciences, with the result that social thought in Germany is today markedly influenced by ideas and approaches of Anglo-American origin. Unfortunately, efforts in the other direction, the translation and reception of German works into English, have been sporadic at best. This series is intended to correct that imbalance.

The term social thought is here understood very broadly to include not only sociological and political thought as such but also the social-theoretical concerns of history and philosophy, psychology and linguistics, aesthetics and theology. The term contemporary is also to be construed broadly: though our attention will be focused primarily on postwar thinkers, we shall also publish works by and on earlier thinkers whose influence on contemporary German social thought is pervasive. The series will begin with translations of works by authors whose names are already widely recognized in English-speaking countries—Adorno, Bloch, Gadamer, Habermas, Marcuse, Ritter—and by authors of similar accomplishment who are not yet so familiar outside of Germany—Blumenberg, Peukert, Schmidt, Theunissen, Tugendhat.
Subsequent volumes will also include monographs and collections of essays written in English on German social thought and its concerns.

To understand and appropriate other traditions is to broaden the horizons of one's own. It is our hope that this series, by tapping a neglected store of intellectual riches and making it accessible to the English-speaking public, will expand the frame of reference of our social and political discourse.

Thomas McCarthy
Hans Blumenberg's *The Legitimacy of the Modern Age* is a book that rethinks both the substance and the process of Western intellectual history in a remarkably thorough and original way, shedding light on some of the most difficult questions of our time. *Die Legitimität der Neuzeit* was published in 1966, the first major work of a younger German philosopher who, without being identified with any one of the dominant philosophical schools in Germany, had clearly assimilated all of them, together with the historiography of philosophy, science, and theology. The book soon became the center of a widespread discussion, and it continues to be one of the recent works most frequently cited in German philosophical discourse. A second edition, substantially revised in order to respond to criticisms and dispel misunderstandings evident in the reviews, appeared in three paperback volumes in 1973, 1974, and 1976. It is this second edition that is here presented in a complete translation.

1. The Intellectual Situation in Which Blumenberg Intervened

An English-speaking reader may wonder, to begin with, what can be meant by the title, *The Legitimacy of the Modern Age*. Assuming that the "modern age" is the age succeeding the Middle Ages and continuing through to the present, one might wonder why it should be described as "legitimate." Has it ever been suggested that it might be "illegitimate"?
While readers may not be familiar with this way of posing the question, they are certainly aware of related questions, of which the question of the legitimacy or illegitimacy of the modern age as a whole is a natural extension. For over two centuries now—Rousseau’s *Discourse on the Arts and Sciences* (1755) is a convenient benchmark for the period—serious thinkers have been questioning the dominance and even the validity of such basic modern concepts as reason, science, progress, freedom of the individual, and technology. Usually, of course, these criticisms are formulated with reference to what are taken to be antithetical ideals, such as imagination, intuition, nature, community, order, or transcendence. Sometimes these antitheses are seen as constant aspects of ‘the human condition,’ and what is questioned is only the superior status ascribed to reason (etc.) by the Enlightenment and its adherents. More often, though, the contrast is seen, at least to some degree, as representing a historical process whereby an initial, positively valued state of affairs (nature, cosmos, community, relation to transcendence, or whatever) was supplanted by the ‘modern’ condition. And the crisis-wracked state of the ‘modern world’ in the twentieth century is then naturally interpreted as evidence of the unhealthy effects of the turning away from the original, preferable state of affairs.

This kind of analysis is common among literary people—one thinks of T. S. Eliot, or of Russian and French authors such as Tolstoy, Dostoevski, Baudelaire, and Flaubert, whose resonance is still so great. Related attitudes are also present in various forms in the population at large, for example, in the recent ‘counterculture’ and in the current wave of anti-‘secular humanist’ Christian fundamentalism in the United States. In academic philosophy, the critical focus on the ‘Cartesian’ premises of empiricism and twentieth-century philosophy of science also comes very close to implying an original error behind certain basic modern concepts, though the critics are generally too sophisticated to call for an outright return to Aristotle, Aquinas, or other premodern authorities.\(^a\)

Since the second half of the nineteenth century, a number of major works of German scholarship have focused on questions related to the nature and status of the modern age and its basic concepts and attitudes. Marx’s concern to define ‘capitalism’ and to analyze its

\(^a\)Author’s notes, cited by superscript Arabic numbers, appear at the end of the book. Translator’s notes, cited by superscript lowercase roman letters, appear at the end of each chapter.
genesis from precapitalist economic and social formations and Nietzsche's celebration of the Renaissance as the greatest attempt to break free from what he considered to be the suffocating influence of Christianity are early landmarks in this effort. Wilhelm Dilthey's *The World-View and Analysis of Man since the Renaissance*, Max Weber's *The Protestant Ethic and the Spirit of Capitalism*, Ernst Cassirer's *The Individual and the Cosmos in Renaissance Philosophy* are others, more tentative and less spectacularly comprehensive than Marx or Nietzsche but equally serious in their effort to define basic characteristics of modernity—of something with which, without being able to identify it with 'the human condition' or even the whole of our Western tradition, and without exalting it above other civilizations or periods, they nevertheless felt inextricably involved. But no single, clear definition of this 'something,' of the modern period or modern attitude, emerges from their work.

It took radical opposition to provoke a more precise definition. Germany has experienced more extreme forms of some of the crises of the twentieth century than most other Western countries, and since the 1920s German philosophy has also perhaps taken extreme positions more seriously. Heidegger, for instance, suggested that the history of philosophy is characterized largely by forgetfulness of the most important question (the question of the meaning of Being). Husserl, in his *Crisis of the European Sciences* (written in the late 1930s), traced the agony of his times to a failure in the original formulation (somewhere deep in the Western past) of the theoretical attitude. Adorno, in his *Dialectic of Enlightenment* (written with Max Horkheimer in the 1940s) and his *Negative Dialectics*, tended to see the social and intellectual reality of his time as so thoroughly delusive that philosophy was reduced to a "negative dialectic" of refusal. To all of these thinkers there seemed to be something radically wrong in their tradition and their world. They did not, in general, locate the original error or fault in the modern age as such. To the extent that they situated it in history at all, they imagined it as earlier, as already beginning to be evident in, for example, Greek thought. However, it did appear that the modern age exhibited most clearly the results of the fatal error or fault embodied in the tradition.

The writer of this period who focused the question of the nature and legitimacy of the modern age most clearly in a major work is Karl Löwith. Löwith employed a more 'historiographical' approach in
formulating his philosophical issues than did most of his contemporaries. In *Meaning in History* (1949) he undertook to diagnose and analyze historically a central modern misconception: the idea of progress. In the process he established what seemed to amount to the illegitimacy of the modern age as a whole, an illegitimacy that followed from his thesis that some central modern ideas (especially that of progress) were secularized versions of what were originally—and properly—medieval/Christian ideas.

Löwith’s outright characterization of the modern age as crucially illegitimate was one of the main provocations leading to the original analysis and defense of modernity that is presented in Blumenberg’s *Legitimacy of the Modern Age*. Part I of this book is devoted to a fundamental critique of theories, including Löwith’s, that describe central modern phenomena as products of the secularization of Christian ideas. It also describes how the appearance of secularization, in such cases as the idea of progress, arises. Part II presents a comprehensive alternative account of the genesis of what Blumenberg takes to be the legitimate modern concepts and attitudes, as a human response to the late-medieval crisis of the Christian relation to the world. Part III then traces the history of interpretations of the human interest in theoretical knowledge of the world (“theoretical curiosity”) from the ancients to Feuerbach and Freud in order to bring into better focus the nature and status of modern science; and part IV examines the epochal “threshold” from medieval to modern in still greater detail as it appears in the thought (on opposite sides of the “threshold”) of Nicholas of Cusa and Giordano Bruno.

2. Löwith’s Indictment of ‘Progress’ and the Modern Age as Products of Secularization

To understand Blumenberg’s train of thought, one needs to have a clear idea of the way in which Löwith (and others) cast doubt on the legitimacy of modernity. Löwith’s *Meaning in History* focuses on the eighteenth- and nineteenth-century ‘philosophies of history’—from Voltaire, Turgot, and Condorcet to Hegel, Marx, Proudhon, and Comte—in which he finds the classical formulations of the modern idea of progress. Not content with optimism about their own times and their own futures, these authors (with the partial exception of Voltaire) interpreted history as a whole as embodying a logic of in-
evitable progress in which apparent relapses (what used to be called “dark ages,” for instance) have to be understood as necessary stages in preparing for subsequent steps forward. In the course of the twentieth century, most of us have become more or less skeptical about such theories, but certainly no alternative pattern of interpretation has achieved anything like the broad acceptance that the idea of progress once had. And one may reasonably wonder whether it does not still underlie many of our attitudes, such as our continuing faith in science and the sense of superiority and of somehow inevitable world leadership that certain Western countries still seem to possess.

In any case Löwith is not satisfied to note the prevalence of the idea of progress in eighteenth- and nineteenth-century thought and to congratulate those of us who think we have overcome this illusion. He respects the intellectual claims of the ‘philosophers of history’ whom he studies, so that for him their ideas constitute a real philosophical problem and not just a historical or psychological ‘phenomenon.’ The possibility of interpreting their ideas as naive projections of contemporary scientific and technical progress, economic growth, and ‘bourgeois-democratic’ revolutions onto the screen of the history of the human race as a whole is something that he does not even entertain. How then does Löwith interpret the modern ‘philosophies of history’? He interprets them as a “secularization” of the eschatological pattern set up by the Jewish and Christian religions, of their faith in a fulfillment of the world’s history through ‘final’ events (coming of the Messiah, Last Judgment, etc.), a faith whose essence he describes as “hope,” “living by expectation,” or simply “futurism.” In contrast, he describes ancient philosophy and religion as founded on a “reverence for the past and the ever present,” which are embodied in the cyclical pattern of reality exemplified by organic life and the revolutions of the heavens. In history this pattern took the form of the continual growth, maturity, and decline of individuals, cities, peoples, and (for some ancient thinkers) entire ‘worlds.’ It was Judaism and, above all, Christianity that broke the rule of this model in the Hellenistic/Roman world, introducing the entirely novel ideas of creation from nothing and total final destruction, of a unique world history centered (in Christianity) on a unique Incarnation and directed at one absolutely final Judgment. This, Löwith argues, is the only possible source of the modern notion of a single, unified, future-directed history of progress,
despite the irreligious and even antireligious postures of many of the modern theorists of progress.

Whether or not English-speaking readers have previously encountered Löwith’s thesis, they are undoubtedly familiar with the similar proposition that Marx’s idea of communism (and other similar revolutionary visions) are ‘really’ secularized versions of the biblical paradise or the coming of the Messiah. This particular ‘secularization theory’ has been repeated so often (Löwith too subscribes to it), and so seldom directly denied, that it might almost be described as “common knowledge.” A similar situation existed in Germany during the 1950s and early 1960s with regard to Löwith’s thesis that the idea of progress is a secularization of eschatology. It was more or less independently proposed by several other writers in the 1940s and 1950s, was not systematically criticized by anyone, and became, in effect, part of the ‘conventional wisdom’ of German scholarship.

It is a profoundly pessimistic doctrine. Löwith (to continue to use him as our prime example) was not discussing Marxism alone but modern ‘philosophy of history’ in toto (apart from twentieth-century authors such as Spengler and Toynbee and his admired nineteenth-century predecessor in the criticism of ‘progress,’ Jacob Burckhardt), and he did not hesitate to extend his diagnosis to the “modern mind” in general. Since abandoning the Christian versions of creation and consummation, Löwith writes, “The modern mind has not made up its mind whether it should be Christian or pagan. It sees with one eye of faith and the other of reason. Hence its vision is necessarily dim in comparison with either Greek or biblical thinking.” The bastard nature of the idea of progress—a pattern whose true meaning is Christian and Jewish but whose modern form is non-Christian and non-Jewish, that is, “pagan”—is seen as characteristic of the modern mind in general. In Löwith’s later writings it becomes increasingly clear that the ‘alternative’ he has in mind is unambiguously “pagan”: It is a return to the cyclical cosmos of Stoicism. Such a return would presuppose the destruction not only of belief in ongoing progress but also of the minimal underlying idea of the irreversibility of basic historical change. It is not surprising, then, that this alternative is mainly implicit rather than being systematically argued for.

Löwith’s ‘alternative’ was not as universally adopted as was his theory of the secularization of eschatology. Heideggerians, theologians—everyone had his own preferred ‘alternative,’ but everyone
seemed at least tacitly to agree that the modern idea of progress had
been definitively analyzed and disposed of. And numerous other basic
modern ideas were quickly found to be secularized versions of this or
that Christian antecedent. German philosophical and historical scholars
have usually been more aware of and better grounded in Christian
theology than is common among their counterparts in the English-
speaking countries, and young scholars quickly made maximum use
of the new interpretive model.¹

3. Blumenberg’s Defense of Possible Progress and His
Account of the Origin of the Modern Age

This, then, was the situation when Blumenberg first presented his
critique of the secularization “category” at the Seventh German Phi-
losophy Congress in 1962, a critique that was expanded and equipped
with a complete alternative account of the origin of the modern age
in Die Legitimität der Neuzeit (1966) and was defended and further
elaborated in this revised edition.

Very briefly, as it applies to Löwith’s theory that the idea of progress
is the result of a secularization of Christian eschatology, Blumenberg’s
critique (part I, chapter 3) has two main elements. First, he points out
that the ‘future’ that the modern idea of progress anticipates is con-
ceived of as the product of an immanent process of development
rather than as a transcendent intervention comparable to the coming
of the Messiah, the end of the world, the Last Judgment, and so forth.
And if the common element is supposed to be “hope,” the Christian
attitude to the final events has been characterized far more by fear
than by hope for most of the Christian era and has been such as to
disconnect precisely the kind of forward-looking constructive effort
that is implied in ‘progress’—so that the transformation of the one
into the other is very difficult to picture. Second, there are in any case
alternative accounts of the origin of the idea, accounts that do not
reduce it merely to a naive projection of an optimistic period in Eu-
ropean history any more than Löwith’s does. Blumenberg describes
the idea of progress as arising from two primary early-modern form-
ative experiences: the overcoming of the fixed, authoritative status of
Aristotelian science by the idea of a cooperative, long-term scientific
progress guided by method; and the overcoming (in the literary and
aesthetic realm) of the idea of ancient art and literature as permanently
valid models of perfection in favor of the idea of the arts as embodying
the creative spirit of their particular ages and in that sense as capable
of again achieving validity equal to that of the creations of the ancients.
These two parallel developments, both of which occur primarily in
the course of the seventeenth century, are then followed by a process
in which the idea is extended to other realms (technology, society)
and generalized as the idea of progress 'across the board', which
figures in the writings of Voltaire and his successors in the 'philosophy
of history.'

Anticipating Löwith's response that this cannot be a complete account
of the origin of the idea of progress because "it cannot be a mere
accident that Greek philosophy did not come up with any philosophy
of history or of freedom, and that Greek historians thought very
differently from post-Christian metaphysicians about human nature
and the nature of history,"3 Blumenberg presents in part II, "Theological
Absolutism and Human Self-Assertion," a highly original interpretation
of the role of Christianity in bringing about modern "human self-
assertion," of which 'progress' is to be understood as a mode of im-
plementation. Blumenberg makes it clear here (and in parts III and
IV) that while the modern age is not the result of a transformation
(whether through 'secularization' or any other process) of something
that was originally Christian, this does not mean that it sprang into
existence spontaneously, as though into a historical void. The continuity
underlying the change of epoch is, he says, a continuity of problems
rather than of solutions, of questions rather than of answers. Instead
of remaining forever fixated on 'doctrines' or 'ideas' as the stuff of
our tradition, we need to learn to relate these to the human activity
of inquiring, of questioning, which gives them their relevance and
concrete meaning. When we do so, Blumenberg suggests, we may
find other kinds of continuity besides those of rightful inheritance or
illegitimate misappropriation, and other kinds of novelty besides that
of unprovoked 'creation from nothing.'

To summarize very briefly the analysis that Blumenberg unfolds in
part II: The problem to which modern "self-assertion" (science, art,
'individualism,' etc.) is a response was posed for us by the overriding
emphasis in the late Middle Ages on the theme of divine omnipotence.
As expressed in Ockham's nominalism, it was this theme that finally
destroyed the credibility—in a sense, even the conceivability—of the
cosmic order to which Löwith looks back and that High Scholastic
Aristotelianism had tried to reaffirm. Given the absolute and unlimited power of God to create (or destroy) whatever He pleases, with or without reason (the only ultimate reason being “Quia voluit” [because He willed it]), the actual, finite world becomes totally contingent, no longer the embodiment of the full range and variety—the order—of what is possible. In the face of such utter contingency, one can, of course, persist in focusing one’s hopes on salvation in the ‘next’ world, which was the official medieval ‘solution’; but this solution was rendered just as desperate by omnipotence, in the form of (undeserved and unearnable) ‘grace’ and predestination, as was the older reliance on the cosmos. Alternatively, one can set out (experimentally, hypothetically) to construct whatever may be possible in this particular world in the way of security and self-realization “even if there is no God” (part II, chapter 3, last paragraph). If one takes the latter route, one need not be applying Christian ideas in a non-Christian context (trying “to be God oneself,” as Luther suspected—see part II, chapter 3, text to note 55), but neither is one starting absolutely from scratch. The nature of what one undertakes is deeply determined by the problem—the contingency of existence in the world—that one is addressing. And that problem is evidently not an ‘eternal’ one. (Or else, Löwith might ask, why didn’t the Greeks et al. address themselves to it?) It is posed, and becomes inescapable, at a particular historical point for particular historical reasons, which we have to reconstruct if we want to understand our age and ourselves.

In his reconstruction of this process, Blumenberg does not put “theological absolutism” in the place of Descartes’s Cogito as the truly absolute and inexplicable source of the modern age, now pushed one chronological step backward in history. Instead, he interprets it, in some of the most fascinating passages of part II (chapters 1 and 3), as the ultimate working out of the ‘solution’ developed by the Christian “Fathers,” in particular by St. Augustine, to the problem of Gnostic dualism. And Gnosticism in its turn appears as a new response to the ancient questions (about order versus chaos, for example) that had reached such an extreme form in, for instance, Neoplatonism (see part II, chapter 1, first three paragraphs) as to be ripe for reformulation as the contest of good with evil.
4. Blumenberg’s Explanation of the Modern Doctrines of ‘Inevitable Progress’

It is important to notice, though, that problems or questions do not always function in this relatively straightforward way as the focus of the central interests and efforts of an age, from which its secondary ideas flow (like progress from “self-assertion”). Questions that do not have such a central role do not for that reason fade away when an epochal change dissolves the context in which they originated. And this fact helps to explain some very confusing phenomena, for example, the great modern ‘philosophies of history.’ Löwith might very naturally have responded to Blumenberg’s critique of his interpretation of progress as secularized eschatology with the following question: If the modern idea of progress is essentially so modest as your account of its genesis implies—just a hypothetical projection into the future of the kind of process and success that Europeans had begun to experience by the seventeenth century in certain areas of endeavor—then why is it that in nearly all of its best-known modern formulations, in the great ‘philosophies of history,’ it is presented as the universal and necessary pattern of human history as a whole? However, a defense of the legitimacy of the modern age does not entail a defense of every prominent phenomenon of that age, but only of those that are essential to its central undertaking. And the notion of progress as a necessary and inevitable process is certainly not essential to human self-assertion; indeed from one point of view it might almost be described as its antithesis. Blumenberg describes this notion, and the ‘philosophies of history’ that embody it, as the result of an attempt—which was ‘natural’ but was nevertheless doomed to failure—to answer a premodern question by modern means, means that were not adapted to the task. Christianity, he says, through its claim to be able to account for the overall pattern of world history in terms of the poles of creation and eschatology, had put in place a new question, one that had been (as Löwith so forcefully insists) unknown to the Greeks: the question of the meaning and pattern of world history as a whole. When modern thinkers abandoned the Christian ‘answers,’ they still felt an obligation to answer the questions that went with them—to show that modern thought was equal to any challenge, as it were. It was this compulsion to “reoccupy” the “position” of the medieval Christian schema of creation and eschatology—rather than leave it empty, as a rationality
that was aware of its own limits might have done—that led to the
grandiose constructions of the ‘philosophy of history.’ And naturally
these constructions drew more attention to themselves than did the
modest idea of possible progress that was overextended (and dis­
credited) in their service.

5. Some Other “Reoccupied Positions” in the Modern Age

Up to this point in my summary of Blumenberg’s analysis of the
modern age, the idea of progress has been my leading example, and
for several reasons: because its problematic character is widely rec­
ognized, because it has been the subject of a highly focused attack in
Löwith’s Meaning in History, and because that attack led directly to the
general question of the legitimacy of the modern age as a whole. The
alternative analysis that I have been describing—according to which
the legitimate modern idea of ‘possible progress’ was distorted and
largely discredited as a result of its being forced to “reoccupy” a
“position” that was established by medieval Christianity (the “position”
of an account of history as a whole)—is an instance of a pattern that
Blumenberg describes as affecting quite a number of equally important
modern ideas, so that it ultimately serves to clarify and to defend the
legitimacy of the full range of what Blumenberg takes to be genuinely
modern. I shall now briefly list four other instances of Blumenberg’s
use of his model of “reoccupation,” so as to give an idea of the range
of its applicability and to lead into a concluding discussion of the model
in its full generality. Without developing these instances in the extensive
detail that they deserve, I shall add a few comments on their potential
importance for the particular areas of inquiry in which they are situated.

First, Blumenberg tells us in part II, chapter 2, that the assumption
that “the world has a particular quality for man”—specifically, an
“endangering” quality—which “prescribes his basic mode of behavior”
as “self-preservation” (part II, chapter 2, last two paragraphs), reoc­
cupies the position of the idea of divine providence as the teleology
determining the “quality” of the world for man, and thus man’s
necessary basic mode of behavior. This is one upshot of Blumenberg’s
reformulation (to which most of this chapter is devoted) of Nietzsche’s
critique of the remnants of teleology in modern thought, specifically
in the idea of ‘self-preservation’ which is such a powerful ‘overriding
end’ in modern theories all the way from Hobbes to Darwin and
contemporary 'sociobiology.' Blumenberg wants to distinguish sharply between this teleology, with its requirement of behavior aimed at "self-preservation," and "self-assertion," which is not required by anything inherent in the world or in man, but is purely historical. If I read this chapter correctly, Blumenberg is suggesting that the relation between "self-preservation" and "self-assertion" is the same as that between "inevitable Progress" and the possible progress that he defends. It is certainly true that since the time of Hobbes, if not earlier, the self-assertion of individuals has been seen largely as their quest for survival and 'security,' which is a much narrower project than "self-assertion" as Blumenberg defines it—as the "existential program" in which "man posits his existence in a historical situation and indicates to himself how he is going to deal with the reality surrounding him and what use he will make of the possibilities that are open to him" (part II, chapter 2, third paragraph). What seems to have happened, then, is that our unformulated, semiconscious project of self-assertion has been forced to play the role of—to "reoccupy" the "position" of—a basic mode of behavior required by a supposedly crucial characteristic of reality. So it has appeared mainly in the guise of the 'self-preservation' required by the 'dangerous character' of reality. And in the process, self-assertion's authentic meaning and relation to the past (as a response to "theological absolutism" in the process that I have sketched), has been prevented from coming into focus, and it has been discredited as a merely 'instinctive,' egotistical, and ignoble attitude in comparison to the ideal human attitudes of other ages.

A second example: The early modern mechanistic mode of explanation of nature, with its absolute 'matter,' reoccupies the position of the late-medieval nominalistic mode of explanation with its absolute (divine) 'will.' (See part II, chapter 3, paragraph 15.) When we consider how since Descartes the syndrome of the 'mind/body problem' repeatedly emerges from the feeling that matter is somehow 'ultimate,' in which case 'mind' must be reducible to it—and how, in the idealistic reaction, exactly the reverse is asserted—then the potential importance of this suggestion becomes evident. Again, Blumenberg is not indicting modern materialism as mistaken or illegitimate in toto. Instead, he is suggesting that a legitimate core idea—that of a reality that can be grasped mathematically (res extensa: 'matter') for the purpose of "self-assertion"—has been forced into the "inherited," alien "position" of
the sole principle of all explanation or understanding whatever. Chapters 3, 4, and 5 of part II lay out an extensive context for this suggestion.

A third case is the supposedly secularized paradise or messianic expectations of Marxism. Blumenberg points out (part I, chapter 7, last three paragraphs) that as with ‘progress,’ the process and the end state projected by Marx differ from the religious ones in that their accomplishment is supposed to be the result of immanent human processes rather than of transcendent intervention. The appearance of secularization here arises, Blumenberg says, because just as the philosophy of history “reoccupied the position of” the “salvation story” (from the Creation to the Last Judgment) as an account of world history as a whole, so the ideal of communism ends by reoccupying the position of the ‘beatific vision’ of Christian theology as a conception of happiness that (unlike classical, Greek conceptions, for example) cannot be disappointed by concrete experience. “The constancy of language” here (the ‘evangelistic’ language of, say, the Communist Manifesto) “is an index of a constant function for consciousness but not of an identity of content.” And presumably the Marxian ‘content’ cannot fairly be judged on the basis of the role it has been forced into, any more than the modest idea of progress can be so judged.

A fourth example is to be found in part I, chapter 8, where Blumenberg deals with the thesis (put forward by Carl Schmitt, the controversial professor of jurisprudence, in his Politische Theologie [Political Theology] of 1922 and 1934) that “all the significant concepts of the modern doctrine of the state are secularized theological concepts.” (See part I, chapter 8, text to note 3.) Blumenberg introduces his discussion of Schmitt’s ‘secularization theory’ (a discussion that is much expanded in this edition to deal with a new book that Schmitt published in 1970 under the title Politische Theologie II) with four paragraphs on the relation between Christianity and modern politics—more specifically, between theological absolutism and modern political absolutism. It is clear from this discussion and from his subsequent discussion of Schmitt’s secularization theory of the state that Blumenberg does not share that theory. It is also clear, however, that he agrees with Schmitt that there is a marked contrast between “the modern doctrine of the state” (where Schmitt has in mind concepts like sovereignty, raison d’état, ‘will,’ ‘decision,’ ‘friend and enemy’) and the modern rationalism that tries to comprehend politics in terms of such concepts as contract, consent, liberty, law, and rights. The latter concepts are all consistent
with “self-assertion” and the fundamental individualism that it implies, whereas the former, those used to explicate the notion of the state itself, all suggest the possibility, with which we are so familiar in modern history, of the state overriding the interests of individuals. How is this discord within both modern thought and modern practice to be explained? Again, Blumenberg clearly agrees with Schmitt that medieval Christianity is a necessary part of the explanation. There is a “mirror-image correspondence between political and theological absolutism.” The “intolerability of the factionalization of absolute [religious] positions within the state” that resulted from the Reformation “was counteracted by means of the transfer of the category of the unconditional friend/enemy relation onto the conflicts between the national states that were in the process of integrating themselves. . . .” (It is no accident that both royal “absolutism” and Hobbes’s theory of the sovereign were born during this period.) But Blumenberg evidently does not see this “projection,” the national state’s “taking over of the pseudomorphic qualities of absolute [divine] authority,” as a process of secularization. “The symmetry of the development of internal conflicts between absolute positions and the setting up of an absolute agent may be describable as an ‘inducing’ process but hardly as the transfer of specific attributes of one realm to the other”; it was a consequence of the disintegration of Christianity as a unity in the European world, of the multiplication of Christian ‘denominations’ and the political problems created by that multiplication, rather than of a unilateral and uncoerced ‘adoption’ of theological attributes by the secular state.

Blumenberg does not use the terminology of “reoccupied positions” here, but I believe that the same idea underlies what he says. He has described another case where a conflict in modern thought appears to be explained by a ‘secularization’ theory, but that explanation in fact distorts the reality. As he said in his brief discussion of Schmitt in the first edition of this book, “The doctrine that ‘all the significant concepts of the modern doctrine of the state are secularized theological concepts’ has not become more plausible since it was propounded in 1922, to the extent that we have learned to doubt whether this ‘modernity’ was ever modern—here there are the striking nonsimultaneities in what is chronologically simultaneous, the durability of the not yet modern in the modern age, the fundamental delay of enlightenment.” In other words, the “modern doctrine of the state,” like ‘inevitable
Progress' and so forth, is not modern in the same sense as "self-assertion" is and needs to be understood and radically criticized if self-assertion, enlightenment, and true modernity are ever to prevail.

6. Blumenberg's Project as a Radicalization of Enlightenment

These accounts and others that I have not the space to mention cut a wide swath through the intellectual phenomena of our age. One could imagine them, if effective, clearing our minds—and even, by extension, our lives—of some very pervasive and destructive patterns of confusion. To that extent, Blumenberg's work would embody in a new form the Enlightenment's vision of philosophy as a liberating force in the world. Thus it is very important that we be clear about the nature of his model and its implications.

What exactly does Blumenberg mean when he says that these phenomena—the great philosophies of history, the axiom that the self's overriding concern is 'self-preservation,' early modern mechanistic materialism, the anticipation of communism, the modern 'primacy of the political,' and so on—result from the reoccupation of positions established by medieval Christianity? To begin with, some of our ideas, like the original modest idea of possible progress, are simply articulations of the "existential program" of "self-assertion." Others, however, are attempts at answering questions that do not naturally arise as part of the project of "self-assertion," questions that we "inherit" from earlier phases of our history and that we feel we ought to be able to answer. But the process is not as simple as this description makes it sound. There are two important qualifications. First, of course, the "inherited" questions have lost their specifically medieval/Christian character. We no longer feel, for example, that we need or ought to be able to describe the overall pattern of God's dealings with the world, as medieval Christianity did. Instead, we want to be able to describe the overall pattern of history as a whole—a project that does not, on the face of it, necessarily require the theorist to have recourse to hypotheses that modern rationality has forsworn. And second, the problem to be addressed has more the character of a need, or perhaps an obligation, than the articulate, conceptual character of an explicit question. In the medieval Christian context it was so fundamental as hardly to require formulation as a question—obviously one wanted to be able to grasp the overall pattern of God's dealings with the
world; otherwise what was the purpose of revelation? In the modern age we inherit this need, and in trying to satisfy it with the means available to us, we imply what we now understand the question to be, rather than consciously and critically stating it.

It is this quality of ‘need’ or ‘obligation,’ this absence of explicit derivation and formulation as a question—and the ‘translations’ that these qualities make possible between one epoch and the succeeding one—that lead Blumenberg to use the metaphor of a system of “positions” that are “occupied” (and “reoccupied”) by ideas. And this metaphor, explicated in terms of the contrast of “content” with “function,” figures in his central doctrine that “totally heterogeneous contents [can] take on identical functions in specific positions in the system of man’s interpretation of the world and of himself” (part I, chapter 6, third paragraph). The contrast of content with function is what ultimately distinguishes Blumenberg’s model from the secularization theory, which it obviously resembles in the importance it assigns to the medieval Christian experience in determining modern phenomena. The idea of progress, for example, is viewed neither as a secularized Christian idea nor as a modern idea unaffected by Christianity; in Blumenberg’s account, it is essentially modern in its content (the initial idea of possible progress) but heavily affected by Christianity in the function that the content is forced to perform (the function of explaining the meaning and pattern of history as a whole). (This is in addition, of course, to being “affected by Christianity” in the sense that self-assertion, of which it is a part, originates as a response to the crisis of medieval Christianity, to theological absolutism.)

What exactly does Blumenberg expect to result from this sort of analysis? Its implications obviously extend well beyond the satisfaction of scholarly curiosity about the origin of modern intellectual phenomena. Certain ideas are shown to follow from a project or a posture—“human self-assertion”—which while not inevitable or universally obligatory, at least seems to involve no necessary ‘false consciousness’; while a second set of ideas (that of ‘inevitable Progress,’ for example) is presented as resulting from attempts to meet ‘needs’ that are not rational,” are not humanly universal, but came into being as the presumed background of a third set of ideas (medieval, Christian) that are incompatible with the first set. One cannot help thinking that to the extent that this situation is understood, the power of the second set of ideas must be diminished. However, unlike his eighteenth-century
predecessors, Blumenberg has a powerful awareness of the obstacles to this sort of enlightenment. It is not by accident that he uses the term "need" for the motive that produces "reoccupations" rather than using the dismissive terminology of "idols" or "prejudices" with which science and enlightenment were originally satisfied to label their opponents. He thus recognizes a certain 'rootedness' in the phenomenon that cannot simply be swept away by rationality, though it should be noted that this is not the 'rootedness' of a 'philosophical anthropology'—if needs come into being in history, presumably they can also disappear, or at least be altered by their owners' changed attitudes to them.

Blumenberg often mentions the Enlightenment's intolerance of the ages preceding it, expressed in the common idea that dogmatic religion prospered only because of the lies of priests—an intolerance that led the Enlightenment to underestimate the resilience of some of the 'prejudices' that it set out to combat. He clearly intends not to repeat this sort of error. And yet the question might be asked whether he does not slip into a similar error when he distinguishes between questions that we confront as a result of "reoccupations" of medieval Christian "positions" and those that arise directly from the project of self-assertion and appears to suggest that it is the latter with which we should really be concerned. A defender of the timeless nature of metaphysical questions (the "great questions," as they are often called) might argue that this is an invidious distinction, that all questions should be taken on their own terms, whether they are open to modern, scientific treatment or not (unless we are going to fall into the kind of dogmatism represented by logical positivism, which declared questions that were not amenable to scientific treatment meaningless), and that the way in which questions happen to have arisen has nothing to do with their claim to our attention.

Blumenberg is so aware of this possible objection that he has devoted a major part of his book—part III, on "The 'Trial' of Theoretical Curiosity"—to a consideration of its nature and historical roots. For the innocence of theoretical curiosity—in other words, the equivalence of all theoretical questions, none of which are to be regarded as inherently distracting or unworthy of attention—is itself one of the distinctive beliefs of the modern age, which that age asserted against the medieval Christian suspicion (beginning with Augustine) that curiosity distracted the soul from its overriding interest in God and salvation. If we decide that certain questions are to be avoided because
they would not have arisen in the modern context had we not felt obliged to emulate the accomplishments of preceding ages, this would seem to raise questions about our faith in the innocence of curiosity. Is it possible that Blumenberg is again prescribing a kind of discipline of the soul, based on a fear of its getting dispersed and lost among incompatible interests?

The answer is no, Blumenberg is not constraining curiosity because he is not in fact recommending that certain questions be avoided. Rather, he is expanding the range of curiosity, and compensating for the difficulty or impossibility of satisfying it in certain cases, by raising and undertaking to answer second-order questions about how the troublesome questions of, for example, the philosophy of history arose. What he says to the defender of metaphysics is that when certain questions have been frustrating all efforts at answering them for centuries, sometimes to the point (as in the great philosophies of history) where those efforts have themselves become disreputable or have been abandoned in exhaustion, we should try stating them clearly as questions and investigating the circumstances in which questions of this nature first came to be asked. When we satisfy this second-order kind of curiosity, we may discover that the question seems more at home in its original circumstances—as the question of the meaning and pattern of the world’s history as a whole, for example, seems in the context of medieval Christianity—than it has ever seemed in the modern contest. Without perhaps being critically ‘destroyed’ or removed from the system of ‘valid’ questions by this process, the question certainly presents itself in a new light as a result of it. Seeing the question in this light, we are no longer simply curious people who happen to be confronted with an interesting and seemingly important question. Now, as a result of our analysis, we are conscious of our particular situation and commitments in relation to that question: a situation (probably) outside the context of its origin, and commitments (probably) that make it exceedingly difficult for us to generate an answer to it that we can defend against our own criticism. But this is not a merely negative result: It is a positive step forward in self-knowledge. By questioning the nature of our own questioning, we alter the dynamic of our curiosity not by fiat, by proscribing questions, but by extending it to and satisfying it on another level.6

An important consequence of our increased self-consciousness (since the eighteenth century) about central modern concepts like science
and progress, and of our increased sympathy for and understanding of other periods in our history (and other cultures) in which these concepts did not (and do not) play a central role, has been an ongoing and pervasive split in our thinking. On the one hand, we depend on science, progress, and so forth, and the rationality they represent, to an ever increasing degree. On the other hand, we often wonder what the grounds for this dependence are—is it not simply an expression of one among many possible human attitudes? Science and progress will never answer the ‘great questions’ of metaphysics; they will not save our souls; they will not even fill us with the eudemonia that the Greeks expected from the completion of theory, because they will never be complete. How is it that we are committed to them? Should we not perhaps be able to go beyond this seemingly arbitrary commitment?

And yet when we do attempt to go beyond it or back behind it—to formulate an alternative world view—the possibilities are so endless, and the grounds for choosing between them (other than faith and conversion) so slight, that we generally wind up in a very unsatisfying relativism: ‘understanding’ everything, committed to nothing.

Blumenberg’s response to this situation is, first, to demonstrate that modernity is not an arbitrary commitment—that while it is not a transformed, ‘secularized’ version of earlier, Christian commitments, it is very much a product of them, as a response to the crisis of the medieval Christian world view, which in turn was intimately determined by what went before it. In other words, our modern commitments are highly determined by our history.

At the same time, by demonstrating this and also demonstrating (by means of the functional model and the idea of “reoccupation”) that modernity’s problems do not result from the inconsistency of its authentic elements, he shows that modern science and progress may be capable of more than we imagine in moods of sober resignation to our historical ‘fate.’ If modern science can clarify itself—the historical conditions of its possibility and necessity, and thus its nature; and if it can distinguish the questions to which it is suited from those that are forced upon it; and if it can help us, through this knowledge, to revise our attitudes to the latter; then it will be helping us to ‘master’ reality not only in the sense of ‘the facts’ but also in the sense of the very process of inquiry itself. And this would go a long way toward overcoming the alienation from that process that is expressed in both
our resignation and our relativistic dallying with 'alternatives.' As Blumenberg writes:

There are phases of objectivization that loose themselves from their original motivation (the science and technology of the later phases of the modern age provide a stupendous example of this); and to bring them back into their human function, to subject them again to man's purposes in relation to the world, requires an unavoidable counter-exertion. The medieval system ended in such a phase of objectivization that has become autonomous, of hardening that is insulated from what is human. What is here called "self-assertion" is the countermoves of retrieving the lost motives, of new concentration on man's self-interest. (Pp. 177-178)

Retrieving the lost motives of modern science and philosophy—restoring their relation to man's self-interest—by articulating and pursuing them more radically than has hitherto been done, is the central purpose of this book.

Notes

a. Throughout this introduction and the translation that follows, single quotation marks have been used exclusively as 'scare quotes,' to draw attention to special uses of terms or to emphasize the problematic status, in the discussion, of the concepts referred to by the words in question. The only exception to this rule is a quotation within a quotation (i.e., within a set of double quotes), which requires single quotation marks for contrast.


d. "Science," here and throughout this introduction and the translation that follows, refers to what in German is called Wissenschaft, which covers both the natural sciences and the 'cultural sciences' [Geisteswissenschaften], to which Blumenberg's own work, for example, belongs.


1958); C. F. von Weizsäcker, *The Relevance of Science* (New York: Harper & Row, 1964)—German edition: *Die Tragweite der Wissenschaft* (Stuttgart: Hirzel, 1966). Bulmann’s and von Weizsäcker’s books were both originally Gifford lectures, which is why their original publications were in English.


h. Those who are acquainted with the writings of Hannah Arendt and Leo Strauss will recognize the affinity between their attitudes to ancient philosophy and Löwith’s.

i. Two major earlier ‘secularization’ theorists, Max Weber and Carl Schmitt, might be seen as forerunners of this wave of the 1950s. Their writings did not, however, lend themselves so readily to imitation or generalization as Löwith’s did. In Weber’s *The Protestant Ethic and the Spirit of Capitalism* the “secularization” process was almost an afterthought, not essential to the central thesis of the book. And for Schmitt (as Blumenberg describes in part I, chapter 8) secularization was (uniquely) a category of legitimacy, which was not an interpretation that could meet the kinds of needs that Löwith’s did.


k. For Blumenberg’s definition of the term, see part II, chapter 2, paragraph 3.

l. Such a question is implied by a broader statement on p. 197 of Löwith’s review (cited in note j).

m. *Die Legitimität der Neuzeit* (Frankfurt am Main: Suhrkamp, 1966), p. 60.

n. Blumenberg described the need for an account of the pattern of history as a whole as “not, in itself, rational” in the first edition (cited in note m), p. 36.

o. As is also clear from the themes of several of his other works: “Paradigmen zu einer Metaphorologie,” *Archiv für Begriffsgeschichte* 6 (1960):7–142; *Schiffbruch mit Zuschauer: Paradigma einer Daseinsmetapher* (Frankfurt: suhrkamp taschenbuch wissenschaft #289, 1979); *Arbeit am Mythos* (Frankfurt: Suhrkamp, 1979); and *Die Lesbarkeit der Welt* (Frankfurt: Suhrkamp, 1981). These examine the nature of metaphor and myth and their persistence through all the ‘enlightenment’ of the modern age. In fact a major focus of Blumenberg’s remaining major work, *Die Genesis der kopernikanischen Welt* (Frankfurt am Main: Suhrkamp, 1975), is on the influence of Copernicanism as a dominant metaphor in modern times.


q. This turning can be seen as an extension (and a reformulation) of Kant’s “transcendental” turning, which sought to protect reason from self-inflicted antinomies through inquiry into the conditions of the possibility of objective knowledge, and thus to limit reason’s ambitions by enhancing its self-knowledge. The relation is evident in Blumenberg’s discussion of Kant in part III, chapter 10.
Secularization: Critique of a Category of Historical Wrong
Status of the Concept

What the term "secularization" signifies should, it seems, be readily determinable. Whether as an observation, a reproach, or an endorsement, everyone is familiar with this designation for a long-term process by which a disappearance of religious ties, attitudes to transcendence, expectations of an afterlife, ritual performances, and firmly established turns of speech is driven onward in both private and daily public life. One need not even stick to the data (though of course they are the easiest to fix empirically and statistically) of institutional membership and influence, which are characterized by a higher degree of inertia than their motivational basis in the human life-world. It used to be one of those standing turns of speech to lament the world's becoming "ever more worldly" (rather than ever less so), while now what is asserted is that the modern age is an epoch of pure "worldliness," and its body politic is accordingly the secular state.

We would not be able to accept the formulas of 'secularization' as so much a matter of course if we did not find ourselves still within the horizon of the operation of this process: We are describing something that would not even exist for us if we were not still in a position to understand what had to precede it, what the hope of salvation, what the next world, transcendence, divine judgment, refraining from involvement in the world and falling under the influence of the world once meant—that is, to understand the elements of that 'unworldliness' that must after all be implied as a point of departure if we are to be able to speak of "secularization." That there are fewer sacred things
and more profane ones is a quantitative determination to which any number of differentiations could be appended in order to describe this same disappearance. Its final stage would be a situation in which no remains of these elements were left in existence, but at that point one would cease to be able to understand the term "secularization" at all. In this descriptive sense one can cite almost anything as a consequence of secularization, including specific losses, as, for instance, when someone says that the crisis of all authority is a phenomenon or a result of secularization. Something is absent, which is supposed to have been present before. Such a statement hardly explains the loss; it simply subsumes it in the great stock of what was somehow fated to disappear.

Bear in mind also that the use of the expression no longer implies any clear judgment of value. Even one who deplores secularization as the decay of a former capacity for transcendence does so with hardly less resignation than someone who takes it as the triumph of enlightenment—since after all it has not turned out to be the final, definitive triumph. The historian will incline to neither attitude. But what attitude will be appropriate for him when he speaks of "secularization"? One would think that that would have been to some extent clarified. It is just that assumption that will be disputed here.

Expressions of such a generous character, of such a degree of generality and intransitive indeterminacy, are allowed to pass, in our overrich supply of terminology, until almost without arousing notice or suspicion they present themselves in a more precise function. The world that became ever more worldly was a subject whose extension was about as obscure as that of the impersonal "it" in the proposition "It's raining." But in the more precise function, propositions of an entirely different form appear, propositions of the form 'B is the secularized A.' For example: The modern work ethic is secularized monastic asceticism; The world revolution is the secularized expectation of the end of the world; The president of the Federal Republic is a secularized monarch. Such propositions define an unequivocal relation between whence and whither, an evolution, a change in the attributes of a substance. The great all-inclusive process of the secularization of the world now no longer appears as a quantitative loss but rather as an aggregate of specifiable and transitively qualitative transformations in which in each case the later phase is possible and intelligible only in relation to the earlier phase assigned to it. What we have here is
no longer the simple comparative statement that the world has become more ‘worldly’ but rather, in each asserted case, only the assertion of a specific mutation leading to the specific ‘product of secularization.’

I am not proposing a linguistic prohibition here. Anyone who wants to speak of secularization as a tidal wave, which at a particular time has reached a particular point, which perhaps presses irresistibly forward or may be dammable, which here or there breaches the dam, which appears to recede at another point—such a person may hold to his description of changing conditions and their general direction, unaffected by what is at issue here. Only the claim to render intelligible by this terminology something that would otherwise not be intelligible, or would be less so, will be contradicted here.

Insofar as “secularization” is nothing but a spiritual anathema upon what has transpired in history since the Middle Ages, it belongs to a vocabulary whose explanatory value depends on presuppositions that are not available to theory and that cannot be credited to or expected of the understanding of reality that is itself characterized as “worldly.” But secularization has been accepted as a category for the interpretation of historical circumstances and connections even by people who could not be prepared to conform to the theological premises. Here the difference between the theological and the historical uses of the categories of worldliness and secularization lies neither in a change of the prescribed evaluation nor in the reinterpretation of loss as emancipation. For a positive evaluation of secularization is perfectly possible even in theology: The very people who were attempting to restore the radicalness of the original religious distance from the world and to renew theology’s declarations of transcendence “dialectically” could see in the massive evidence of the manifestation of the world as ‘worldliness’ the advantage of its unmistakable character of immanence. What is foreign to the world, and appears to it as the paradoxical demand that it give itself up, was supposed to withdraw itself, in a new distinctness, from the entanglement and camouflage in which, perhaps for the sake of demonstrable success, it had become falsely familiar and acceptable. A theology of ‘division,’ of crisis, had to be interested in making clear the worldliness of the world rather than in overlaying it with the sacred. That is what gave the use of the term “secularization” its specific theological pathos.

The full calamity of the world—but precisely of the ‘world,’ in the full sense of the term—is required in order to secure evidence for the
expectation of a salvation that is ‘not of this world’—however such calamity or salvation may (epochally or episodically) be defined. Once ‘secularization’ had become the cultural-political program of emancipation from all theological and ecclesiastical dominance, of the liquidation of the remnants of the Middle Ages, it could equally well be formulated as a postulate for the clarification of fronts, for the decisive and ineluctable division of souls (of ‘the sheep from the goats’) in anticipation of the final eschatological judgment dividing ‘this world’ from ‘the next.’ Thus what had in fact occurred in the process of secularization did not have to be protested as a loss of substance but could appear as an abandonment of encumbrances. The secularization that was thus expected to clarify fronts went over, in a not untypical process of reception—or, more harshly put, of the capture of terminology—from one front to the other. The case of “secularization” is not the last one in which such a crossover has occurred.

What followed the theology of crisis (and its existential-theological forerunners) lay in the same tendential direction: a theological justification of secularization. From an unexpected direction—that of theology itself—came vindication of Feuerbach’s thesis that it could only be understood as a detour of anthropology. The patterns and schemas of the salvation story were to prove to be ciphers and projections of intraworldly problems, like a foreign language in which is expressed the absolutism of the world, of man, of society, so that all unworldliness would be a metaphor that had to be retranslated into literal speech. The problem in such a case, quite logically, is not secularization but the detour that made it necessary in the first place. For detours, of course, we do have the trusty schema of the consciousness that finds its way to itself, that achieves consciousness of its own identity. What is in order after this detour is no longer the division of sheep from goats, the clarification of fronts, but rather the unveiling of the identity of the one interest for the realization of which a God had to exist at most as an assistant in the process of its accomplishment. But would it not have been better then if He had not existed at all?

The philosophical observer of this scene of theology’s self-interpretation recognizes the familiar pattern of all self-preservations: the pattern of the reduction of the endangered substance to an intangible core content, of accepting the supposedly or actually relevant role of rendering theoretical service for this or that practice, in the end of making oneself at home in the role of assistant to the most
up-to-date human interest. The strength of these secularization theo-
rems lies in the fact that they carry with them a supplementary theory,
which not only makes it possible to find good, after the fact, the loss
of respect and the forfeiture of meaning that has set in, but also
provides itself with a revaluation of this process as itself a providential
one. Thus a loss of power, influence, occupied positions, and cultural
ambience can be understood “as a providential process with a purifying
effect on Christianity.”2 Then the assessment of secularization as a
threat to the existence of religious forms and contents in the world,
as the decline of the respect accorded to theological statements and
to their pragmatic transpositions, is only (in its turn) a ‘worldly’ fear-
fulness, which is no more suitable to the trustingness implied by faith
than is a failure to understand the refusal of dominion that characterizes
the biblical figure of the kenosis, of the savior as servant. Secularization
itself is not refused but rather the service it is supposed to render as
an argument vindicating the ‘meaning,’ the ‘cultural value’ of Chris-
tianity within the world. Not only is the end of history held in reserve
for theology, but the historical process itself (contrary to all the apparent
failures of earlier claims, if not to conquer the world, at least to explain
it) is opened up to a comprehension that follows the schema of a
contemporary para-theory, according to which resistance to therapy
is the chief symptom of its progress toward its goal.

The world that in this way is not only accepted and tolerated but
systematically ‘provided for’ cannot resist such cooptation by providence
any more than it need do anything special in order to take upon itself
a role whose point is precisely not to understand itself. Then the
incomprehension of the historical or philosophical critic vis-à-vis the
category of ‘secularization’ would be exactly what was to be expected
of him. But at the same time this expectation cannot motivate him
to decide not to seek further, by means of his own authentic capacity
for comprehension, for what can be accomplished by means of the
term “secularization.”

The difficulty that begins here is due to the fact that everyone ‘still’
thinks he understands to a certain extent what is meant by the term
“secularization” and ascribes the sense he finds in it to the common
usage we are discussing. The query, what then it is meant to signify
and to assert, must reckon with a certain annoyance on the part of
the person to whom it is addressed. Is it not enough to admit that
quantitative statement about the lessening of an influence, the dis-
appearance of an imprint, the subsidence of an intensity, in order to grasp the limiting case to which the formulation that describes worldliness as the signature of the modern age refers?

It is not only a question of where a linguistic element properly belongs, not only a question of words, but also a question of things. It must be remembered that the signature of the modern age has been described not only as the taking over and the expansion of the world but also as its loss. The contrast provided by this thesis of Hannah Arendt's, a thesis that is directed against the dogma of secularization, at least makes clearer what must be gained in the way of precision in order to make the concept of secularization fit for use in historiography.

Hannah Arendt speaks of an “unequaled worldlessness” as the hallmark of the modern age. “Modern man, when he lost the certainty of a world to come, was thrown back upon himself and not upon this world.” The reality of the world over against which he saw himself had at this very point begun to seem doubtful, in that direct contact through the senses had been exposed by mathematical physics as a presentation of only the superficial appearances of more substantial realities. This thesis also presents the modern age as a continuation of Christianity by other means, but as a continuation in the same direction, a direction of world alienation [Entweltlichung]. Man has “removed himself from the earth to a much more distant point than any Christian otherworldliness had ever removed him.” However one may assess the weight of these statements, they do in any case show that the ‘worldliness’ of the modern age cannot be described as the recovery of a consciousness of reality that existed before the Christian epoch of our history. There is no historical symmetry according to which this worldliness would be, as it were, a disposition for the return of the Greeks’ cosmos. The Renaissance was only the first misunderstanding of this sort, an attempt to forestall the new concept of reality that was making its entrance by interpreting it as the recurrence of a structure already experienced and manageable with familiar categories. The point is that ‘the world’ is not a constant whose reliability guarantees that in the historical process an original constitutive substance must come back to light, undisguised, as soon as the superimposed elements of theological derivation and specificity are cleared away. This unhistorical interpretation displaces the authenticity of the modern age, making it a remainder, a pagan substratum, which is
simply left over after the retreat of religion into autarkic independence from the world. In any case one does not achieve a historical understanding of secularization by conceiving its implied 'world' as the recovery of an 'original' reality that had been lost with the entry of Christianity. "Whatever the word 'secular' is meant to signify in current usage, historically it cannot possibly be equated with worldliness; modern man at any rate did not gain this world when he lost the other world, and he did not gain life, strictly speaking, either; he was thrust back upon it..." 

Hannah Arendt's thesis of 'world alienation' is not, as such, the subject of our discussion here; but what it shows is the dubiousness of setting up worldliness and unworldliness as a pair of alternatives that are tipped now one way and now the other in history, so that when transcendent ties and hopes are abandoned, there is only one possible result. As soon as one leaves the sphere of influence of the theological system of categories, the world to which the modern age appears to have turned its full attention can be an 'unworldly' world in regard to its concept of reality or to the nature of its intuition as compared to an immediacy ascribed to the ancients. Only where the category of substance dominates the understanding of history are there repetitions, superimpositions and dissociations—and also, for that matter, disguises and unmaskings.

The question how the term "secularization" is used in texts of contemporary historical theory is directed, above all, at the difference between descriptive and explanatory uses. One particular type of statement does not, in accordance with its own claims, come up for discussion in this context at all because no greater objection can be brought against it than that very little is asserted by it. Even if what is meant is not only the qualitative disappearance of features having a sacred or ecclesiastical derivation but also a type of transformation of this realm of derivation itself, that is, an "alteration in the social form of religion" in the direction of a 'cultural-religious' function, and thus a "tendency towards the inner 'secularization'" of religious institutions themselves, still this means only an obscuring of differentiations, an approach toward and an increasing resemblance to what is expected (or maybe only what is supposed to be expected) by the surrounding society. Someone might say that it would be purely arbitrary, and excessively demanding, to ask, on methodological grounds, for more than this descriptive finding. Nor do I ask for anything more;
rather I encounter claims to something more, and in fact find these claims indicated by a specifically different manner of speaking. There is after all a difference between, on the one hand, saying that in a particular state the "secularization of the countryside" is very advanced, and that this is indicated by the empirical decline of obligations owed by village communities to the church, and, on the other hand, formulating the thesis that the capitalist valuation of success in business is the secularization of 'certainty of salvation' in the context of the Reformation doctrine of predestination. For quite unmistakably, in this latter thesis—a model one for the secularization theorem—a certain specific content is explained by another one preceding it, and indeed in such a way that the asserted transformation of the one into the other is neither an intensification nor a clarification but rather an alienation from its original meaning and function.

Clearly the characterization of a relation as the historical dependence of an "alienated" formation on an "original" one is not enough to make it a case for the meaningful application of the term "secularization." And here the question arises whether that which must still be added to complete the term’s meaning is not unavoidably a theological element. Does the concept of secularization then go beyond what can be accomplished in the comprehension of historical processes and structures by implying not only a dependence but something like an exchange of worlds, a radical discontinuity of belonging, together with, at the same time, identity of that which belongs? Does this concept not introduce into our understanding of history the paradox that we can grasp the modern age’s basic characteristic of ‘worldliness’ only under conditions that, precisely on account of this quality, must be inaccessible to us?

Hermann Lübbe has pointed out that “the use of concepts that are current in the ‘politics of ideas’ is not free of consequences” and that he who does not want to find himself unexpectedly in the front lines must be concerned about clarifying [Aufklärung] and neutralizing what is latent in concepts. Lübbe considers it “possible to delineate a strictly scientific use of the concept of secularization.” In fact, he suggests, this would be “in agreement with the insights and aims of the most recent theology of secularization.” Here one may question whether such a convergence of insight and interests must not encounter its limit at the point where ‘clarification’ [or ‘Enlightenment’: Aufklärung], which according to C. H. Ratschow’s definition is nothing other than
"acute secularization," proceeds to the secularization of the concept of secularization itself.

When the question is posed here of the possibility of a scientific use of the term "secularization," the criterion of scientific status is not identical with the postulate of science as the only status. This clarification is called for in view of the joyful solidarity that has recently broken out among those who believe they can share in the overcoming of the limitations of that scientific status by means of an enharmonic confusion of interdisciplinary with superdisciplinary work. The mere symbiosis of opposition to 'positivism' (or to whatever is taken for it at any given time) does not by itself legitimize all of the heterogeneous presuppositions that have been brought into this relation.

Translators Notes

a. In German the terms Säkularisierung (literally: secularization) and Verweltlichung (literally: being made, or becoming, worldly) are used interchangeably because the saeculum from which the Latin secularisatio derives (and thus Säkularisierung and "secularization") refers to an "age," hence "the present age," "this world" (as opposed to the next), and ultimately "the world" as opposed to the transcendent. As English has no substantive term (such as "worldification") corresponding to Verweltlichung, "secularization" has been used to translate both words. The reader will better appreciate a number of the author's arguments if he remembers the equivalence of "secular" with "worldly" and bears in mind the connotations of the latter term each time he sees the word "secularization."

b. The reference to "theology of crisis" is to the theology of Karl Barth and his followers, also known as "dialectical theology." "Crisis" here is used in a sense relating to its Greek root verb, krinein, which means to separate, to divide, to choose, or to judge.

c. The point of this sentence depends on a special characteristic of the German philosophical vocabulary that cannot be reproduced in English. Die Aufklärung, the German term for what we call "the Enlightenment," has more useful connotations than our term because while in English we can only "enlighten" one another, in German one can aufklären (clear up, clarify) the subject itself. Aufklärung, then, designates not only a historical period (and a quasi-missionary activity: "carrying enlightenment" to other, benighted people) but also a type of activity directed at problems and subject matter generally, a type of activity that is epitomized in "the Enlightenment." but is understood to be possible and in order now as much as then. This is what makes possible the paradoxical situation in which Lübbe's attempted "clarification" (Aufklärung) of the concept of secularization would itself (according to Ratschow's definition of Aufklärung) be "acute secularization"—and the suggestion that a "neutral" and uncommitted approach to the concept of secularization will be a difficult thing to achieve.
If one took the frequency of its application as evidence, there could be no doubt about the historical applicability of the category of secularization. Its productivity seems to be unlimited. To demonstrate the full extent of the phenomenon seems to me to be superfluous. The examples that I am about to present are only intended once again to create awareness of the way in which the concept is applied, so that the explanatory claim, as opposed to the merely quantitative statement and description of conditions, is not lost from view.

In modern epistemology the priority of the question of a guarantee of knowledge, of theoretical certainty, is said to be the secularization of the fundamental Christian problem of certainty of salvation. This connection is supposed to be made clear by the way in which the epistemological problematic emerged “from absolute doubt about reality as such”; that is, by the degree of absoluteness of the skepticism underlying the claim to certainty. It is further asserted of Descartes that the science he founded “will take over the function performed up to that point by church dogma, the function of a universal spiritual safeguard for existence.” If that were so, then Descartes in his own case would already have fulfilled Ludwig Feuerbach’s dictum: “Our philosophers up to now are nothing but mediated theologians, operating through the abstract concept.”

Measured by the frequency of its repetition, the assertion that the modern work ethic is a “secularization of saintliness” and of the attendant forms of asceticism has made no less of an impression. But
the dandy too is supposed to be a secular descendent of the Christian saints, though he is also reminiscent—by Baudelaire's formula, that he causes astonishment but cannot be astonished himself—of the Stoic ideal of the wise man. Finally, the recklessness of self-disclosure in literary self-presentations of the most various kinds is supposed to be nothing other than the "secularized self-examination" of pietism and puritanism, the candor of religious reflection raised to a quasi-scientific precision, just as earlier the Spanish picaresque novel is supposed to have arisen from the prototype of Augustine's Confessions, and Defoe's Robinson Crusoe from the spiritual journal of the puritan, kept for the purpose of gaining certainty of salvation—in which connection the sheer survival of the shipwrecked Robinson as demiurge has made immanent that transcendent certainty of salvation.

I intend no polemic here. I do not wish to dispute the argumentation in individual cases. My only purpose is to induce a kind of anamnesis by reminding the reader, by means of a few examples from the writings of unnamed authors, of the abundance of analogous assertions, which cannot have escaped him in the literature of recent years but which perhaps have already made themselves such a matter of course for him that the relations they posit, however daring they may be, hardly attract his attention any longer.

The postulate of the political equality of all citizens is supposed to have secularized the prior concept of the equality of all men before God, while the basic ideas of our criminal law "function like a secularized theology" and imply a "concept of guilt borrowed from the sacral relation." In political theory it has been asserted, and frequently repeated, that "all the significant concepts of the modern doctrine of the state... [are] secularized theological concepts." This assertion relates not only and not primarily to the history of concepts but also to the systematic structure in which such concepts function: States of emergency have an analogous position in politics and law to miracles in theology. A "secularization of the tidings of salvation" is said to have been carried out by Machiavelli, specifically in the form of the idea of propaganda, which "seeks to hold the absolute strivings and desires of men in the world fixed, in spite of changing circumstances, on such leading ideas of worldly salvation as, for example, the power and unity of their native country." It has become almost a fashionable pastime to interpret expectations of political redemption, like those
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typified by the Communist Manifesto, as secularizations either of the biblical paradise or of apocalyptic messianism.

Once one has come to understand the idea of progress as a transformation of a providentially guided 'story of salvation' [Heilsgeschichte], then either the infinity of this progress will have to be given out as the secularization of the omnipotence that had reigned over history previously, or an expected final stage of progress, a 'golden age,' 'permanent peace,' or 'universal equality after the dismantling of the state' will have to be a sort of 'eschatology without God': "What used to be known as 'the fullness of time,' perfection of the present in eternity, the locus of salvation, is now called by Saint-Simon 'perfection of the social order,' by Kant 'the kingdom of pure practical reason,' by Goethe, Schiller, and Hölderlin 'humanity and new mythology,' by Rousseau 'return to nature,' by Winckelmann 'return to the ancients,' by Wieland and Gessner 'imaginative power of the poet.'"
The world of the Middle Ages was finite, but its God was infinite; in the modern age "the world takes on this divine attribute; infinity is secularized."

Finally, science—of which Hegel in his Philosophy of Right already said that in its claim to freedom of teaching it "develops itself like a Church into a totality with a characteristic principle, which can with considerable justice regard itself as taking over the place of the Church itself"—this science that wants not only to understand the world but also to deduce principles of conduct within it, as in Descartes' program for his morale définitive, acquires such an "excessive competence" precisely because it is the "secularization of the originally Christian combination of world design and directions for action."

So simple is it, apparently, to identify the substance in its metamorphoses, and to line up the metastases relative to their one origin, once one has found the formula. Naturally its easy applicability and the consequent frivolous multiplication of instances do not speak against the procedure itself; they only make the examination of its admissibility, of its rational presuppositions and methodical requirements, all the more urgent. For the procedure's genuine efficacy, or the appearance of it, diffuse the light of a superficial plausibility even over applications that I can only describe as secularization "run wild." It seems as though one need only make specific a highly general statement like Nietzsche's: "How science could become what it now is can only be made intelligible from the development of religion." One then obtains a series of
derivative theses such as that the concern of modern physics about the laws and the construction of nature can only be understood as “a variant of the idea of creation in secularized form”; or that the academic examination system is the secularized Last Judgment, or at least a secular variant of the Inquisition; or that “the scientist purified of all concrete history,” epitomized in the ‘professor,’ is the product of a “secularized form of ancient purification and mortification rituals.” And so it goes on. Every literary supplement shows that it still goes on.

What the examples collected here have in common is that they go beyond the quantitative/descriptive use of the term “secularization” and no longer have anything to do with the old lamenting confirmation that the world grows ever more worldly. The extension of the area of competence of worldly authorities and of types of life planning and regulation of action that are no longer founded on and directed by religion, the displacement of responsibilities in education and instruction, the development of rituals no longer derived from liturgy—all of this is still not secularization in a precise sense whose aim is the understanding of historical processes. The examples I have cited bring together phenomena that are separate in historical time in such a way as to assert that the later are the result of the secularization of the earlier, that the one results from the other. Thus a more or less precise concept of secularization picks itself out. “Secularization is not to be understood as a simple process of the dissolution of traditional religion, but as a transformation of the ruling value system into various institutional ‘ideologies,’ which still underpin the actual interrelated workings peculiar to the institutions.”

This is cited not as an authoritative definition but rather as an example of the kind of more precise formulation that lies between the designations “dissolution” and “transformation.” For a usage defined in this way, what is called for is not only calculation of quantitative shares, analysis of comparative weights, or comparison of different total situations over time but also evidence of transformation, metamorphosis, conversion to new functions, along with the identity of a substance that endures throughout the process. Without such a substantial identity, no recoverable sense could be attached to the talk of conversion and transformation.

Against my critique of the concept of secularization, Hans-Georg Gadamer has asserted that this concept performs “a legitimate hermeneutic function.” He describes this function of the secularization
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concept as follows: “It contributes a whole dimension of hidden meaning to the self-comprehension of what has come to be and presently exists, and shows in this way that what presently exists is and means far more than it knows of itself.” And he adds a sentence that is significant for his conviction of the epochal range of this category: “This holds also and especially for the modern age.” A concept legitimizes its hermeneutic function by what it produces. What is to be produced is described by Gadamer as something that is hidden from the self-comprehension of the present, and thus of the modern age—indeed as a whole dimension of hidden meaning. This is a very strong assertion when one considers that hermeneutics in general has only to do with a surplus of meaning over and above what is granted and understood as self-evident, in accordance with the axiom of Matteo Mattesilano: “Semper mens est potentior quam sint verba” [The mind is always more potent than words]. “A whole dimension of hidden meaning”—after all that can only mean, in this context, that by the concept of secularization the self-comprehension of the modern age as worldliness has to be explained as a superficial, foreground appearance. It is revealed as a consciousness that is not transparent to itself in its substantial relations, a consciousness to which hermeneutics discloses its background. To that which has only been projected, by secularization, on the foreground of worldliness, this hermeneutic accomplishment first restores and makes plain its historical fullness. The genuine substance of that which was secularized is ‘wrapped up in’ [die Implikation des] what thus became worldly, and remains ‘wrapped up in’ it as what is essential to it, as when, in the model instance developed by Heidegger for the hermeneutics of his school, “Dasein’s understanding of Being” is essential to it and yet “in the first instance and for the most part” hidden and withdrawn from it. I am almost inclined to say that that was what I was afraid of.

I do not want yet to go into the question of how one is to conceive this dimension of hidden meaning after it has been rendered present once again. First I must ask how the hiddenness of the surplus in what is given, of the hidden meaning in what is overt, came about. For this will determine how the hermeneutic method can operate. No doubt it will proceed, after all, simply by relating the given to what preceded it by an unequivocal nexus of dependence. In the hermeneutic retrogression through secularization, the understanding must hit upon the conditions of the possibility of what it undertakes in this way to render
intelligible. Everything turns on the question whether the worldly form of what was secularized is not a pseudomorph—in other words: an inauthentic manifestation—of its original reality.

Without doubt, the concept of secularization in its “legitimate hermeneutic function” gains in pregnancy of meaning. It becomes still more difficult to oppose its application or to set limits to it. But the concept does not gain in solid methodical utility. It does not allow the product of secularization to detach itself from the process of secularization and make itself autonomous. The illegitimacy of the result of secularization resides in the fact that the result is not allowed to secularize the process itself from which it resulted. For the hermeneutic function remains legitimate only so long as it lays open to self-consciousness what is hidden from it, convicts it of having been subject to the illusion of autonomous presence, and thus binds it to the newly disclosed dimension.

I myself have made use of the license of hermeneutics to uncover an implication that is hidden from the contemporary understanding in referring, for the sharper definition of the concept of secularization, to its latent metaphoric content. This attempt neither was meant as nor presupposed a history of the concept, and it can be made neither meaningless nor meaningful by a demonstration that the use of the term “secularization” in the history of ideas does not take the term’s political/legal or canon-law uses as its point of departure; it is entirely independent of such evidence. It is perfectly possible—in fact it is probably the case—that the concept of secularization was introduced in a purely descriptive sense and was only associatively and occasionally supplemented by a reference to the political expropriation of ecclesiastical goods. Only I believe that I am able to observe that this historical association impelled the development of increased precision in the term’s use in a particular direction. And I do not think that this was accidental. The alienation of a historical substance from its origin, which it carries with it only as a hidden dimension of meaning, unavoidably raises the question whether this is a process of self-alienation or externally induced deformation. The difference here is the difference between the proposition that the attribute of infinity crossed over from God to the world because in its highest intensification the idea of creation simply cannot avoid this consequence and the alternative proposition that infinity was usurped for the world in order by this means to let the world take over God’s position and function.
In the latter case the cosmological antinomies in Kant's Transcendental Dialectic, for example, would be the dead end to which we have come as the result of a sort of forcible violation of God.

Thus, contrary to all the assumptions of etymologically oriented conceptual historians, there is no need for a continuum of verifiable instances of the metaphorical content of "secularization." Nevertheless the demonstration that this metaphorization is not verifiable early in the term's history, that is, that "secularization" was not initially used in a sense modeled on the juristic concept, has had a reassuring effect if only because the application of a metaphor to the inner sacred values of Christianity was felt to be extremely disturbing. A metaphor is after all a rhetorical artifice, nothing serious and certainly nothing that can lead to any sort of knowledge. But I think that an account of the word's literal history proves too little when the first hearer of the expression who was not entirely ignorant of history could have remembered its juristic meaning, and when a retroactive definition by orientation to the juristic concept would always suggest itself as soon as one felt a need to formulate the concept transitively, that is, to indicate a what and a whereto. For, to clarify it thus one more time, a 'secularized' bishop, something that scarcely calls for further inquiry, is very different from a 'secularized' saint or a 'secularized' eschatology, by which surely a question is meant to be answered and not just a moral qualification assigned, as in the case of the 'secularized' prelate. The eschatology that was secularized is still present, though hidden, in the horizon of an expectation of violent salvation in which, according to the secularization thesis, it is supposed to have been dissolved—or better: "suspended and carried forward" ["aufgehoben"]—as something that carries on or is carried on in the new phenomenon.

Thus the category of secularization need not have been derived from a metaphor initially; it is possible for it to have taken on the metaphorical orientation precisely for the purpose of conceptual definition. Only if one sees language as setting the pace for all concept formation will one be able to exclude the possibility of the later consolidation of a designation for an already accomplished concept. The juristic act of secularization as the expropriation of church property was so practiced and so named from the Peace of Westphalia onward. The canon-law use of saecularisatio designates the release of a cleric from the community and the obligations of his order into the status of a secular priest; this intraecclesiastical transposition, so defined since
the end of the eighteenth century, plays no role in the history of the formation of the broader ‘secularization’ terminology but rather remains “a special case, which stands in some relation to the historical and political concept of secularization but . . . did not further determine or define the character of the category of secularization that was derived from that concept in the philosophy of history.” On the contrary, the example of the ‘Final Resolution of the Reichstag’s Special Commission’ [Reichsdeputationshauptschluss] of 1803 established the term “as a concept of the usurpation of ecclesiastical rights, as a concept of the illegitimate emancipation of property from ecclesiastical care and custody.” These defining elements make “the attribute of illegitimacy into a characteristic mark of the concept of secularization.” One should not overlook here the fact that the French Revolution’s seizures of church property, with their subsequent extension of 1803, were bound to appear as a consequence of the century of Enlightenment. The earliest explicit contact between philosophy and secularization, as far as I can determine, was constituted by the inclusion of the external procedure of expropriation in the a priori rational process of history. In his text of 1799 On my Scholarly Education [Über meine gelehrte Bildung], Berlin’s Enlightenment critic Friedrich Nicolai ridiculed the wave of a priori historical speculation that had been set in motion above all by Kant’s Quarrel of the Faculties and in the process referred among other things to a polemic set in motion in 1799 by a pamphlet entitled Reason Requires Secularizations [Die Vernunft fordert die Säkularisierungen]. In this pamphlet the measures were approved “on a priori grounds,” whereas a counterpamphlet entitled Reason does not Require Secularizations [Die Vernunft fordert die Säkularisierungen nicht] disapproved this seizure of church property “on equally universal a priori grounds.” Here, then, even before the Act of 1803, a connection is established between reason and secularization that unmistakably renders the transfer of property only an external episode and demonstration of the rule of rational progress, and that could encourage an expanded assault on the opposing forces on the other side. What was possible with external, legally transferable property would no doubt also be possible with less massive and still less protected spiritual residues. Not only did an extension of the realm of application of the basic notion suggest itself; it was practically enforced by a concept of history that placed every event in the context of the carrying out of a rational logic. The metaphorization of the Act of 1803 would then be only a linguistic postscript
Chapter 2

to the fact that the juristic/political event itself was a merely symp­
tomatic expression of a long-term—‘secular’—tendency. Marx em-


cumstances separate from the elements of the legal concept. I would not exclude this possibility altogether if it were the case that the conceptual history to which Zabel gives us access could yield other criteria of conceptual definition. But that is not the case precisely because the evidence brought forward makes a basic state of affairs exceedingly clear: The term "secularization" is used for a very long time with an ambiguity that admits of no obligation, and in an occasional manner directed at anything but precision. Zabel sees his conceptual history as a homogeneous whole, in the course of which it is only at the very end that anyone occasionally hears in the terminology the metaphorical background of 'expropriation of church property,' whereas most of the authors who are serious and are to be taken seriously want nothing to do with it, but rather employ a loose usage of a descriptive nature.

What is one to conclude from this evidence? At least not that the early phases of a concept's history deserve precedence in a discussion of what can be accomplished by the 'dressed-up' function of the concept as a "category of interpretation," once the special relation to the legal concept has been picked out of the background so that the determinateness and the production of determinateness that are constitutive of a concept are finally able to come into play. Zabel's result seems to me interesting precisely because it makes it understandable why for such a long time, and in authors as important as the ones he cites, nothing substantial was accomplished when the term "secularization" was employed. Since concepts are something that we ourselves constitute, their history can be understood teleologically, so that conceptual history is not bound by the schema of degeneration, in which full weight and value are present only in the originality of the initial instant.

Thus investigation of the conceptual history of 'secularization' appears to have brought to light a contradictory result: On the one hand, it has dissected out a process that tends toward 'terminologization,' a process directed at removing any ambiguity of conceptual content, and thus toward methodical definiteness, while on the other hand, it describes the later phases of this process as phases characterized by a metaphorical usage. However, it is not the usage that is metaphorical but rather the orientation of the process of concept formation. A tightening up from a vague exhortative and lamenting usage to the definition of a typical process form makes the 'recollection' of the historical legal proceedings appear almost inevitable. This is an instance
of what I have tried to describe as “background metaphorics,” a process of reference to a model that is operative in the genesis of a concept but is no longer present in the concept itself, or may even have to be sacrificed to the need for definition, which according to firm tradition does not permit inclusion of metaphorical elements. One could also speak of implicative metaphorics. Undoubtedly the process of ‘terminologization’ is driven forward by inclusion of the expression in the relevant lexicons and handbooks, which on account of their need for definiteness beget standardization by declaring it. To cite right away perhaps the most influential example of this process: “Secularization, that is to say, the detachment of spiritual or ecclesiastical ideas and thoughts, and equally the detachment of spiritual (consecrated) things and people, from their connection to God.”12 This formula already represents a late stage of the process of concept formation because it integrates both the historical and the canon-law processes of secularization as subsidiary special cases of a comprehensive movement including, above all, ideas and thoughts. The connection to the juristic process that stands in the metaphorical background seems to be softened, rendered harmless, or neutralized by the term “detachment”; though when in the end the correlate of this “detachment” turns out to be a “connection to God,” then this expression’s weight of meaning makes it evident that a sanction must be thought of as having been violated and that a character of forcible injustice must be included in the concept.

Such quasi-definitional formulas, as substitutes for the indefinite term “secularization,” can bring with them their own indefiniteness to the extent that they give rise to specific additional questions. The fruitful concept of “detachment” ingeniously leaves open the question whether it is meant transitively or intransitively, that is, whether those ideas and thoughts, things and persons detach themselves from their connection to God or whether there is some agency present that carries out this detachment. I believe one must unfold the totality of these additional questions, omitted or impeded though they may be in a particular formula, as necessary parts of the process of concept formation. When we do so, an orientation toward the background metaphorics of the legal process gives us as our guide in the application of the secularization category the catalog of the characteristic features of expropriation proceedings: the identifiability of the expropriated
property, the legitimacy of its initial ownership, and the unilateral nature of its removal.

In regard to the satisfaction of these criteria, one should not allow oneself to be disturbed by theological talk that perhaps justifies the unilateral removal with the loftier idea of a selfless surrender of the divine to the world but by that means implants in the unaltered historical process a mystery that the theoretical onlooker cannot penetrate. The legitimacy of the primary ownership, in view of the special origin of these ideas and thoughts, is—not accidentally—formulated with less hesitation. "Today people tend to speak of secularization where ideas and knowledge are detached from their original source, from revelation, and become accessible to human reason under its own power. Secularization, then, affects spiritual processes that were originally made possible by faith but then begin to be carried out by man by means of the faculties at his disposal." The paradigm in the background shows through even in the cautious formulation that speaks of "detachment" from the original source; and the human reason that acts under its own power seems in doing so to exercise only a sort of 'application.' The arbitrary interchangeability of 'detachment' and 'self-detachment' is the riddle of such a formulation when we are told, "At first it was historians who spoke of secularization, meaning the transfer of ecclesiastical and spiritual authority and property rights to worldly powers. Then the word was applied to a process in the history of ideas in which ideas and modes of behavior detach themselves from the religious context of their original establishment and are derived from universal reason." Here the derivability of ideas and modes of behavior from universal reason appears unexpectedly right alongside their religious origin, so that strictly speaking only a convergence could be established, rather than a nexus, in the phenomenon of secularization.

Often one will only be able to tell from the consequences that are deduced from secularization what characteristics are ascribed to the process. What is the result when secularization has been confirmed and consciousness of it has been aroused? A further formulation in this regard: "Uncovering the process of secularization and making it conscious preserves the continuity between present and past. . . . Even in the negative relation of the present to the past, there is a continuity of the historical. . . . The reality in which we really live is veiled by misleading ideas." Worldy reason's consciousness of its own au-
thenticity is a misleading veil over a reality that otherwise could not overlook its continuous historical descent from that upon which it denies its dependence. Indeed there is also a suggestion that the imputation of discontinuity is not disinterested, insofar as it allows the present to deny its obligation to the past. The category of secularization is meant to make it evident that the denial of historical dependence is motivated by an epochal self-interest; it presents the alleged break between modern rationality and its past as ideological. It makes conscious—and that is the inevitable consequence of the theoretical accomplishment to which it lays claim—an "objective cultural debt."16

If "the modern world can largely be understood as the result of a secularization of Christianity,"17 then that must be demonstrable in the historian's methodical analysis by reference to the criteria of the expropriation model. To define the burden of proof in this way does not at all mean that one cannot also speak of 'secularization' in a less precise sense. My only concern is to clarify how the claim can be established that assertions about the constitution of the modern age that are defensible, that at least point the way to possible confirmation, are being made. The mere observation that the modern world in which we live has in mind very little—and less and less, at that—apart from itself would not justify bringing this 'secularization' into a relation specifically with Christianity, which in such a case would only accidentally and arbitrarily happen to occupy the position of 'un-worldliness' in the past that is contrasted with this present. The proposition that the modern world is to be understood as a result of the secularization of Christianity is certainly not meant to convey so little. But what must it say, if it is meant to say more?

Translator's Notes


b. The author is referring to his argument that as a model, the expropriation of church property contains the essential components of the contemporary concept of secularization: identifiability of the expropriated property, legitimacy of the initial ownership of that property, unilateral character of the expropriation. (See the fourth paragraph from the end of this chapter.) Here the author is addressing criticisms of this argument that have been made since it was presented in the first edition of this book, Die Legitimität der Neuzeit (Frankfurt am Main: Suhrkamp Verlag, 1966), p. 20.
c. A *Begriffsgeschichte*. 'Conceptual history' (*Begriffsgeschichte*) has become a recognized scholarly discipline in Germany, similar to our 'history of ideas' but, as the name suggests, more closely associated with philosophy. It characteristically examines the histories of specific concepts from their first emergence up to the present. In the process of responding to 'concept-historical' criticisms of his account of the concept of secularization, the author makes some important points in the remainder of this chapter about the kinds of conclusions that are derivable from conceptual history and about the historical relations between concepts and metaphor.

d. The reorganization of the German territories—arrived at under the pressure of Napoleon's annexation of the left bank of the Rhine—in which numerous bishoprics and other ecclesiastical properties were divided up among the secular princes.
Among the propositions that in the second generation can already be described simply as “well-known” is the thesis that modern historical consciousness is derived from the secularization of the Christian idea of the ‘salvation story’ [Heilsgeschichte] and, more particularly, of providence and eschatological finitude. Karl Löwith’s important book, *Meaning in History. The Theological Implications of the Philosophy of History*, has had a protracted dogmatizing effect in Germany since its first appearance in 1949 (and in German, as *Weltgeschichte und Heilsgesehene*, in 1953). Löwith takes German idealism’s conception of its historical position and achievement as an objective thesis about the genesis of the modern concept of history. For Löwith, Hegel’s theory of the “suspension and carrying forward” [“Aufhebung”] of the Christian and Reformation phase of history in the underlying structure of the modern spiritual and political world, especially in its constitutive consciousness of subjective freedom, degraded “sacred history to the level of secular history and exalt[ed] the latter to the level of the first.” If the historical process were the self-realization of reason [as it was for Hegel], then according to its immanent logic, what presents itself externally as the discontinuity of secularization would have to possess internal continuity. Secularization would then be the process that brought theological pre-history to its logically necessary transformation and its final form. Seen objectively, the homogeneous reason in history is neither a factor nor a result of secularization except in part and from a special point of view.
Only if one considers Löwith’s philosophical work in the two decades since the publication of his principal work on the philosophy of history does his affinity to this concept of secularization become fully intelligible. The secularization of Christianity that produces modernity becomes for Löwith a comparatively unimportant differentiation as soon as he turns his attention to the unique epochal break that in one stroke decided in favor of both the Middle Ages and the modern age: the turning away from the pagan cosmos of antiquity, with its cyclical structure of security, to the one-time temporal action of the biblical/Christian type. For one concerned with the fateful disjunction of nature and history, the accent shifts from the beginning of the modern age to the end of antiquity; for everything that followed, this gave rise to something like a collective historical liability, whose sum total is progress as fate.2

What is at issue is not Hegel. His concept of history only provides the argumentative instrument with which to regain the initial position that Löwith had reached in 1935 with his early work on Nietzsche: to set up the renaissance of cyclical cosmology, as proclaimed by Nietzsche in his doctrine of “eternal recurrence,” against the dominance of the linear historical consciousness.3 The autonomy of this historical consciousness as an ultimate category is exposed as its self-deception as soon as it is recognized, in accordance with the secularization theorem, as existing ‘by the grace of Christianity. Potentially, then, the finality of history is once again only penultimate, before the recurrence of unhistory. Seen from the point of view of secularization, the false conflict of the medieval and the modern can be reduced to the single episode of the interruption of the human connection to the cosmos. This impressive, though cautiously expressed, total conception found in Löwith’s later work explains both the vehemence and the delay of his response to the critique of secularization as a hermeneutic instrument.4

But precisely because such a weighty function is assigned to the category of secularization in Karl Löwith’s thought, one that exceeds every other burden entrusted to it, one must be allowed to raise, if not the reproach of a lack of proof, at least the question of the proper burden of proof. In doing this, it is true, Löwith thinks I went too far when I included evidence of the identity of the secularized substance among the requirements of the burden of proof and at the same time
opposed any substantialistic conception of historical identity.\(^5\) I do in fact regard the secularization theorem as a special case of historical substantialism insofar as theoretical success is made to depend on the establishment of constants in history, much as in the approximately contemporaneous "\(\text{topos} \) research."\(^6\) This anticipation of what knowledge has to accomplish seems to me problematic: Constants bring a theoretical process to an end, where on different premises it might still be possible to inquire further. This point, the shutting down of the theoretical process by substantialistic premises, must be a concern of any critique to which constants are submitted as supposedly final results. No a priori statement whether there are substantial constants in history can be made; all we can say is that the historian's epistemological situation cannot be optimized by the determination of such stable elementary historical quanta.

To speak of secularization under substantialistic premises would only shift the difficulty to the question of when the historically constant quantity was originally 'desecularized,' an indispensable precondition of its being exposed to any subsequent resecularization. This consideration makes it clear that the theological talk of secularization can avoid the problem of constants only because it presupposes as beyond question an absolute and transcendent origin of the contents that are affected by it. If Karl Löwith legitimizes secularization, insofar as for him it is still an intra-Christian and postpagan phenomenon—legitimate, that is, only within the overall illegitimacy of the turning away from the cosmos in favor of history—then he must already have 'secularized' the premise of the nonderivable originality of the whole system that has fallen away from the cosmos. Thus at one point or another the characteristic of unilateral removal crops up again even when the modern age is supposed to be legitimized precisely as the product of secularization.

The progress that is exposed as fate would then be the late (and in itself not illegitimate) consequence of an earlier illegitimacy, of the infringement of the right that nature has over man and that in antiquity was left to it and confirmed by a kind of thinking that for Karl Löwith would bear the imprint above all of the Stoa. For a change we can leave aside the question whether the transformation of the Christian story of salvation into the modern idea of progress is a legitimate, logical consequence or a unilateral deformation in order to test the evidence of the genetic nexus itself, which after all is not self-evident if only because other theses about the derivation of the idea of progress
are at least possible. The early modern age not only brought forth models of ‘progress’ itself but also found them already present, and for the first time explicitly identified them as such—for instance, that of astronomy, with the increased accuracy it gained as a result of the length of temporal distances. What signs are there that even suggest a likelihood that theological eschatology, with its idea of the ‘consummation’ of history by its discontinuance, could have provided the model for an idea of the forward movement of history according to which it was supposed for the first time to gain stability and reliability through its consummation or its approach to its consummation? How one assigns the values here is secondary compared to the question whether a relation of genetic dependence, if not demonstrable by pointing to the record of the original event, still at least can be made probable enough that further search for such ‘records’ would be justifiable.

There are entirely harmless formulations of the secularization theorem, of a type that can hardly be contradicted. One of these plausible turns of phrase is “unthinkable without.” The chief thesis then, roughly put, would be that the modern age is unthinkable without Christianity. That is so fundamentally correct that the second part of this book is aimed at demonstrating this fact—with the difference, however, that this thesis gains a definable meaning only through a critique of the foreground appearance—or better: the apparent background presence—of secularization.

Much in the modern age is ‘unthinkable without’ the Christianity that went before it. So much one would expect in advance of any deep inquiry. But what does it mean in the particular case of the coordination of concrete characteristics? I rely on what seems to have become, if not universally, at least widely recognized. Regarding the dependence of the idea of progress on Christian eschatology, there are differences that would have had to block any transposition of the one into the other. It is a formal, but for that very reason a manifest, difference that an eschatology speaks of an event breaking into history, an event that transcends and is heterogeneous to it, while the idea of progress extrapolates from a structure present in every moment to a future that is immanent in history. Naturally the idea of progress did not generate the instances of progress that have always occurred in individual human lives, individual generations, and the combination of generations, as results of experience, will, and practice; ‘progress’
is the highest-level generalization, the projection onto history as a whole, which evidently was not possible at just any point in time. We have to ask what it was that made it possible. My opinion is that it was novel experiences involving such a great extent of time that the spring into the final generalization of the ‘idea of progress’ suggested itself as a natural step. One such experience is the unity of methodically regulated theory as a coherent entity developing independently of individuals and generations. The fact that hopes for the greater security of man in the world grow up around this expansionism of progress, and that these hopes can become a stimulus to the realization of the idea, is demonstrable. But is such hope identical with Christian eschatology, now gone over into its secularized form? Eschatology may have been, for a shorter or a longer moment of history, an aggregate of hopes; but when the time had come for the emergence of the idea of progress, it was more nearly an aggregate of terror and dread. Where hope was to arise, it had to be set up and safeguarded as a new and original aggregate of this-worldly possibilities over against those possibilities of the next world. From a point of view that understands history as progress, the theological expectation of the final events impinging on it from outside—even if they were still hoped for—appears as a hindrance to the attitudes and activities that can secure for man the realization of his possibilities and the satisfaction of his needs. It is impossible to see how the one ‘expectation’ could ever result from the other, unless perhaps we were to represent the disappointment of the transcendent expectation as an agent of the immanent one. But then the time when the idea of progress first emerged and impressed itself on history would have to be moved forward by considerably more than a millennium.

The idea of progress and the utopian projections of its limiting cases have been seen as surrogates for a missing politics, surrogates that precisely as such enter into the function of expectations of transcendent salvation and thus transpose these into immanence. “Utopianism arose from an incapacity for political action that at first was historically conditioned but was then laid down as philosophy of history.” But precisely because utopianism is grounded in the political deficit of the Enlightenment’s moralistic critique of history—in its forgoing of contemporary applicability—it is questionable whether its relation to the future was laid down for it in advance by eschatology’s imprint on consciousness. And then there is not much to be said for the proposition
that it was "the process of secularization that transposed eschatology into a progressive history." Why should the divine salvation plan be 'transformed' and 'enlightened' when the relation to history had become that of a moralistic critique, which after all certainly does not want to imitate the function of a Last Judgment, in relation to which all of history becomes pure past, that is, the opposite of a process that can be influenced by critique?

In regard to progress, the advocates of secularization theory should have decided early on whether they were going to make the Last Judgment or Providence the terminus a quo because the inclusion of the Stoics' providence in Christianity was itself already an attempt to provide some insurance for a history that eschatology no longer provided for, or at any rate no longer saw as in need of regulation: The eschatological God of the end of history cannot at the same time be the God who makes Himself known and credible in history as its caretaker. A secularized eschatology may correspond to the tribunal before which a victorious revolution brings its enemies and of which the absolute act would no longer have anything to do with ethics: "When one had successfully carried out a revolution, one can hang its opponents, but one cannot condemn them"; but the idea of progress is precisely not a mere watered-down form of judgment or revolution; it is rather the continuous self-justification of the present, by means of the future that it gives itself, before the past, with which it compares itself. The post-Scholastic critique of the authority of Aristotle, to the extent that it did not consist merely of putting Plato in Aristotle's place, had continually to take care to justify itself, which it did by pointing to the progress of knowledge that the abandonment of Aristotle made possible. Self-comparison with the authorities of antiquity and reflection on method, thanks to which this comparison could be evaluated positively each time in favor of the present, were the most powerful beginnings of the idea of progress. In this process Descartes's Cogito, to which idealism retrospectively assigned a central role here, did not in fact function in a way that supports the idea that this punctiform act especially represented the absolute quality of a theological antecedent: "In the course of the unfolding of Descartes's Cogito ergo sum as the self-guarantee of man who has got free of religious bonds, eschatology turns into utopia. To plan history becomes just as important as to get a grip on nature."
But that is accomplished precisely not by the absolutism of the self-guarantee but rather by the idea of method, and indeed not by its organizing itself specifically for history in a different way than for nature but rather by making theoretical domination of nature the condition of the historical “marcher avec assurance dans cette vie” [to walk with confidence in this life]. The idea of method is not a kind of planning, not a transformation of the divine salvation plan, but rather the establishment of a disposition: the disposition of the subject, in his place, to take part in a process that generates knowledge in a transsubjective manner.

Just as partially as in the field of theory, the idea of progress makes its appearance in the field of the literary and aesthetic argument with the tradition. Here it is not primarily the establishment of a continuous sequence of surpassings of what at each point has already been achieved but rather the comparison between the literature and art of antiquity, with its canonized exemplary status, and the output of one’s contemporaries. Here the idea of progress arises from protest against the status of permanent prototypes as obligatory ideals. The querelle des anciens et des modernes [quarrel of the ancients and the moderns] is the aesthetic analogue of the detachment of theory from the authority of Aristotelianism. In the course of this argument, both the champions of the preeminence of antiquity and the advocates of modernity at first made use of a thoroughly “natural-cyclical conception” of the course of history, so that the nexus between a prior Christian stage and the concept of history emerging from the querelle is made problematic by this intervening neopagan stage. Thus H. R. Jauss is right to warn, against Werner Krauss’s thesis regarding the “origin of the historical world view” as well, that the beginnings of historical consciousness are “not to be grasped by means of the category of a secularization of the theological understanding of history or of Bossuet’s Christian philosophy of history.” The disadvantage of the aesthetic model of progress, as is already made clear by the fact of the querelle, is the contestability and the controversial status of possible or actual instances of progress in this area; its advantage is the uncontested premise that here it is man, and man alone, who produces the realities in the aesthetic sphere, and hence would also be the agent of any progress that might take place in it. Even the aesthetics of genius could only express this state of affairs emphatically. The transfer of the structural schema of aesthetic, theoretical, technical, and moral progress...
to the collective idea of a unified history presupposes that man sees himself as the only one in charge in this totality, that he takes himself to be the one who "makes history." Then he can hold it possible to deduce the movement of history from the self-understanding of the rational, demiurgic, or even creative subject. The future becomes the consequence of actions in the present, and these become the realization of the current understanding of reality. Only thus does progress become the sum of the determinations of the future by the present and its past.

Man-made history has an appearance of predictability. Kant speaks of an "a priori possible description of the events that should come to pass" in it, just as he speaks of the "soothsaying historical narration of what is impending in the future," because here the theoretical subject is at the same time the practical origin of the objects of the theory: "But how is an a priori history possible? Answer: When the soothsayer himself causes and contrives the events that he proclaims in advance." The idea of a providence from whose disposition history proceeds would not perhaps have had to be destroyed specifically in order to make possible this foundation of the rationality of the historical totality as long as this 'providence' was the pure world reason of the Stoics and had not taken on the character of the impenetrable acts of sovereignty of theology's God. For the proposition that man makes his history, taken in itself, arouses no greater confidence in the course of history than does the assumption of a world reason that superintends it; but once 'providence' is drawn into the absolutism of an unfathomable will, then the actions of men—even if for each individual they are always those of all the others—are more reliable. The proposition that man makes history still contains no guarantee of the progress that he could bring about in making it; it is initially only a principle of self-assertion against the uncertainty imposed on knowledge by the overwhelming heterogeneous theological principle, the irrelevance of which to man's insight into his own works—and that means into his own history as well—is postulated. The principle, beyond that, that knowledge of history is the precondition of the rational and thus progressive making of history, so that the idea of progress is a regulative idea for the integration of actions, could no doubt only have been derived from the model of the integration of theoretical actions in the new science. No, it is not to be believed that "secularized as the belief in progress, Messianism still displayed unbroken and immense vigor."
It was certainly a result of the quick disappointment of early expectations of definitive total results that the idea of progress underwent expansion into that of 'infinite progress.' Descartes still seriously thought of the attainment during his lifetime of the final theoretical and practical goals of his program of method, that is, the completion of physics, medicine and (following directly from these) ethics. Thus the introduction of infinity here was hardly the winning of a divine attribute for human history; rather it was initially a form of resignation. The danger of this hyperbolizing of the idea of progress is the necessary disappointment of each individual in the context of history, doing work in his particular situation for a future whose enjoyment he cannot inherit. Nevertheless the idea of infinite progress also has a safeguarding function for the actual individual and for each actual generation in history. If there were an immanent final goal of history, then those who believe they know it and claim to promote its attainment would be legitimized in using all the others who do not know it and cannot promote it as mere means. Infinite progress does make each present relative to its future, but at the same time it renders every absolute claim untenable. This idea of progress corresponds more than anything else to the only regulative principle that can make history humanly bearable, which is that all dealings must be so constituted that through them people do not become mere means. If eschatology or messianism were really the substantial point of departure of the modern historical consciousness, then that consciousness would be permanently and inescapably defined by teleological conceptions, by ideas of ends. This proposition cannot be converted into the assertion that where absolute teleological conceptions do appear, as in Descartes’s definitive ethics (morale définitive) or Francis Bacon’s recovery of paradise, this is already enough to demonstrate the presence of secularizations.

Translator’s Notes

a. The author’s critique of "substantialistic" ontologies of history, referred to here, was presented in the first edition of Die Legitimität der Neuzeit (Frankfurt: Suhrkamp, 1966), p. 69. The parallel passage in this translation of the second edition is on pp. 113-114.

b. Toposforshung, "topos research" is the systematic investigation of recurrent rhetorical topos—topics or subjects—seen as underlying thought and writing in a given tradition. The classic work in this field is E. R. Curtius’s Europäische Literatur und Lateinisches Mittelalter (Berlin: A.
Part I


Instead of Secularization of
Eschatology, Secularization
by Eschatology.

Unlike the idea of providence that was taken over from Hellenistic
philosophy into the patristic literature, the biblical eschatology is an
element native to theology; in Greek philosophy world cycles and
world incinerations were immanent processes of nature, the self-
consumings of the cosmic process, which have their corresponding
self-restorations. So the preference for eschatology over pronoia [Provi-
dence] in the secularization theorems corresponds to a quite sound,
though unexpressed, understanding of the criterion [for the use of
secularization as a historical explanation] that an element must belong
originally to Christianity if it is to be possible to speak meaningfuly
of its later being secularized. A sufficient reason why the idea of
providence could not be secularized in a late phase of the history of
Christianity is that it had already participated, at the beginning of that
history, in the one fundamental secularization [Verweltlichung: becoming
worldly] of Christianity that was accomplished by rolling back escha-
tology and recovering a respite for history. The fact that the world
as a whole is well administered has significance, as a source of satis-
faction, only if its duration is once more supposed to have a positive
value.

So the criterion of original ownership [by Christianity] as a condition
of the possibility of secularization cannot be set aside on the grounds
that it would require a demonstration of absolute originality, which
does not exist in history. If someone is inclined to regard speculative
trinities and triads as consequences of Christianity’s divine trinity, then
he has the criterion of genuine ownership on his side in a way that someone who wants to trace the drive of the various monisms toward rational unity back to the meaning of monotheism in Christianity does not. Perhaps it would be more accurate to speak of a high degree of specificity of the element suspected of being secularized rather than of original ownership. When Georg Simmel thought that he recognized the outbreak of World War I as the 'absolute situation,' it was not a lack of affinity to theological thinking that prevented this from having the appearance of a secularizing quotation but rather the absence of any specifically Christian homology, even if one allows that the absolute demands of the New Testament's Sermon on the Mount must have appealed to a kind of 'absolute situation.' That an idea belongs specifically within the theological horizon would be attested most clearly by a relation of ownership based on authorship, in regard to which an expropriation could then be very clearly demonstrated. However, this methodical ideal cannot deny its derivation from a standpoint within the modern system of reference. The idea of ownership of what one has originally produced, thought, and created is a modern idea. Even the justification of divine right by the Creation is not so self-evident as it seems to those who derive 'natural-law' conclusions from it. And one must also consider the fact that theology itself cannot in the strict sense claim authorship of its contents, to the extent that it traces these back to an act of 'bestowal' by revelation. On the other hand, the whole complex of secularization would never have contracted the odium of the violation of another's rights were it not for the (either open or secret) adoption of the premise that here something had entered the stream of history, from a unique, single, and unsurpassable source, that would otherwise have been withheld from that stream. The whole process of the historical criticism of the biblical contents has not been able to pry loose this presupposition of the secularization thesis.

Historical theology has represented almost every aspect of Christianity as the product of its Hellenistic environment. It is clear that the secularization thesis could only achieve its present-day significance in connection with the denial of this historical subordination, in connection, that is, with 'dialectical' theology and also with the separation of the 'kerygma' from the mythological conditions of its entry into the world. There is an implicit acknowledgment of the criterion of authentic ownership in all this. But at the end of the long campaign
of historicism, scarcely anything remains that satisfies this criterion. We especially have to bear in mind that the Hellenistic materials that were Christianized in the early centuries have once again become available, a millennium and a half later, to accomplish directly now, without the passage through Christianity, what then ‘appears’ as secularization. The rejection of Aristotelianism together with its Scholastic derivative forms allowed not only Platonism to become influential but also especially certain chief articles of the Stoic philosophy that had already made an impression on the Christian authors of the first centuries but that now took on an autonomous function. The extent of what Descartes, for instance, took from the Stoic tradition may well even now not have been fully identified: the precedence that it gave to ethics and its instrumentalization of physics for that end, its logic of hypothetical inferences, its anthropological model of the wise man as the invulnerable and inaccessible autarkic subject, the inaccessibility of consciousness to physical contingency and empirical uncertainty. Although Wilhelm Dilthey pointed to the importance of the Stoic tradition for the genesis of the early modern age’s “natural system,” this has not prevented an abundance of assertions of supposed ‘secularization.’ When Auguste Comte speaks programmatically of ‘organizing providence,’ then there is certainly no doubt to what his appeal addresses itself—namely, a diffuse religious trust in the fatherly regulation of the world’s affairs—but no one will be able to deny that the philosopher is employing a concept of which there is no trace in the New Testament whatsoever. Thus the question regarding the burden of proof is not only directed at the Christian tradition’s original ownership of contents that it might in fact merely have transmitted and turned over to worldly use, but it must also take seriously the fact and the function of the rediscovery of antiquity, which did not have to rely on the Middle Ages, and by which the original elements were set up alongside their Christianized correlates. What might appear to be a secularized reconstruction can always be the worldly original itself again, though admittedly now appearing in a function altered by the antithetical relation of modernity to the Middle Ages.

An instructive variant of the question of the burden of proof for the secularization thesis arises in connection with Rudolf Bultmann’s “demythologizing” project. In the midst of the New Testament texts’ historical conditioning and saturation with received ideas, Bultmann wants to rescue an irreducible and original core that resists all historicism
by means of its formal worldlessness. This "kerygma," by virtue of its definition, cannot be secularized: It cannot 'go over into' worldliness; it can only 'disappear' in it. This must be borne in mind when Bultmann speaks of the "historicization of eschatology" that was begun by St. Paul and radically carried through by St. John.\(^2\) Theology always returns to its classical heresies: The doctrine of the kerygma is a variation of Docetism, and secularization repeats the (however conceptualized) Incarnation. Consequently it appeals to the theologian as a process with which he could not be more familiar: The deus revelatus [revealed God], historicized, becomes once again the deus absconditus [hidden God], as which He revealed himself. Secularization does not transform; it only conceals that which the world cannot tolerate and to be unable to tolerate which is its essential character. The advantage that Bultmann the New Testament scholar holds over Bultmann the philosopher of history is the way the onset of the process of secularization is moved forward to the beginning of Christian history; for secularization is already a foregone conclusion with that early "historicization of eschatology" between St. Paul and St. John. What pretends to be so formal is itself a Gnostic myth: The only things that escape the control of the world's powers are the untouchable core of the pneuma, on the side of man, and the kerygma's saving summons, on the side of God. The decision occurs in history, but not through it. But at the same time the early historicization of the essential contents of salvation consumes the substance that as a later secularization could have served to explain the modern age. How could something that on account of the transcendent nature ascribed to it was fated, almost from the moment of its proclamation, to be historicized, that as a cosmic eschatology had already lost its (in any case only reconstructible) authenticity, and that as a formless expectation of world catastrophe was handed over to the speculative calculations of the patristic and Scholastic literature and beyond—how could it be 'secularized' yet again? Just this is what Bultmann the philosopher of history seems to assume when he says that the idea of progress preserves the idea of eschatological fulfillment "in a secularized form," or when he describes Kant's attitude to history as "a moralistic secularization of the Christian teleology of history and its eschatology," or finally when he writes that in Hegel "the secularizing of Christian faith is carried out... consciously and consistently."\(^3\)
For Bultmann the cosmic eschatology of the world's destruction and the Last Judgment took over the position of the kerygma and its unmediated summons to 'existence.' Hence it is possible to trace it back to the worldly context of the cyclical cosmic speculations in which Hellenistic thinkers engaged, correlating it with a fundamental myth typified by the Stoics' continuous world renewal. In this connection it is characteristic of Bultmann that he interprets Jewish apocalyptics as merely a special case of this fundamental myth, one in which it is compressed into a single, unrepeated cycle. One may wonder whether it can be correct to describe the division between a cyclical course of the world process and a one-time historical decision as merely a quantitative contraction of that fundamental myth; it seems to me that here Bultmann overlooks the fact that the development of the cyclical cosmology had to be grounded in a positive evaluation of the cosmic pattern that was repeated throughout all time, that is, that it presupposed the specific relation to nature of the late Stoa.

Jewish apocalyptics contains no cosmological interest of this sort whatsoever; rather it compensates for the failure of the historical expectations of a nation by prophesying a fulfillment beyond history. It is a theodicy that vindicates the Old Testament God of the Covenant by devaluing the innerworldly history of the people to whom His favor was supposed to have been assured. No Hellenistic cosmology could take over this function of world devaluation. But in Bultmann's context this objection does not alter the fact that expectation of an apocalypse, as compensation for an interest directed at the world and at history, can itself only be 'worldly.' Still, these imaginings remain too distant and expansive to take on an immediate significance for the life of the individual man, a significance that influences and alters his behavior. This kind of significance results not from the contraction of the world cycles into one but rather from the further contraction of that one cycle into the lifetime of the generation that is told of the final events. This transformation into an 'immediate expectation' [Naherwartung] radicalizes both the exhortative and the normative urgency of the doctrine; it creates the horizon for the kerygma.

Let us pose the question differently for a change. Let us ask not what was originally 'unworldly' about Christianity but what the term "unworldly" could even have meant originally. Definition is necessary here because the Platonic/Neoplatonic concept of transcendence has
superimposed on genuine unworldliness the spacial schematism of an extraworldliness. We are bound by this superimposed schematism even in our understanding of the concept of secularization: What can be secularized (made worldly) is only what claims by virtue of its descent or specificity to be extraworldly. The schematism of transcendence presupposes a dualism of decision between simultaneously existing possibilities, intentions, directions. The unworldliness of the initial biblical situation implies a different schematism: An interest in the world is not just put in question by the presence of an alternative; rather it is robbed of all meaning because no time remains for the world. Only the fact that one cannot rely on a natural end of the world is sufficient to exclude the dominant naturalistic note that is implicit in the cyclical myth of the world process. But the world concept does not already lose its ‘cosmic’ character because the total process is assumed to occur only once, so that every event is unique. The sharpness of the difference lies in the New Testament’s ‘immediate expectation,’ by which the promised events of the Parousia are moved into the actual life of the individual and of his generation. Expectations that extend into the future beyond the present generation are of a different kind, not only quantitatively but qualitatively; they do not displace people into a ‘state of emergency.’ ‘Immediate expectation’ negates every type of durability, not only the world’s but also its own, by which it would refute itself. If it survives this self-refutation by means of the unnoticed reestablishment of a more distant expectation, of long-term indeterminacy, then its specific unworldliness is destroyed. In early Christian history another and a heterogeneous unworldliness, of the type of ‘transcendence,’ stood ready to reoccupy the vacant position.

So it is not the contraction of the cosmic cycles to a single one but the presence of the crisis of that one that creates what even apart from all theological interpretations is clearly ‘unworldly’ in the New Testament. Nature and history are equally affected by it. Acute ‘immediate expectation’ tears the individual free even from the historical interests of his people and presses upon him his own salvation as his most immediate and pressing concern. Assuming that this is the ‘last moment,’ demands can be made on every individual that are inconsistent with realism regarding the world and that would have the reverse of survival value were the world to endure. If one takes this to be essential to the original core of Christian teaching, then it has
nothing to do with the concept of history, or it has only one thing to
do with it: It makes an absolute lack of interest in the conceptualization
and explanation of history a characteristic of the acute situation of its
end. Self-assertion then becomes the epitome of senselessness. In the
subsequent history of Christian theology, people did indeed work with
heterogeneous ideas and conceptual means, but the logic of Christian
thinking drove it once again to deprive self-assertion of meaning
through the absolute intensification of concern for salvation. This will
be shown, in connection with the end of the Middle Ages and the
initial situation of the modern age, in part II.

Precisely then where the genuinely specific character of New Test­
ament eschatology can be grasped, its untranslatability into any concept
of history, however defined, is evident. There is no concept of history
that can claim identity of ‘substance’ with immediate expectation. Even
if one were to say that it was a new intention toward the future,
as the dimension of human fulfillment, which was introduced by the
“historicization of eschatology,” that would directly contradict the funda­
mental process of the “contraction of the allotted time.” After the
Babylonian exile, the Jewish idea of the apocalypse was able to reduce
the impact of disappointed historical expectations by means of a more
and more richly elaborated speculative picture of the messianic future.
‘Immediate expectation’ destroys this relation to the future. The present
is the last moment of decision for the approaching kingdom of God,
and he who postpones conversion so as to put his affairs in order is
already lost.

The accommodation with the facts of the world that persisted in
existence simply was not accomplished by projecting into the future
what according to the promise should already have happened. On
the contrary, the “historicization of eschatology” in St. Paul, and even
more clearly in St. John, takes the form of a proclamation that the
events that are decisive for salvation have already occurred. It is true
that St. Paul still foresaw a final judgment, but ‘acquittal’ before the
divine tribunal was already granted to those who by baptism and faith
could subsume themselves in the death on the cross and thus lose
their sinful identities. Saint John takes the next logical step of saying
that the judgment itself has already occurred and that the believer
already possesses ‘life,’ the ultimate gift of salvation. Thus the tendency
in dealing with eschatological disappointment was not to explain away
the delay, to reintroduce indefiniteness, but rather to relocate the
events that were decisive for salvation in the past and to emphasize
(what was now only) an ‘inner’ possession of certainty deriving from that past. The future no longer brings something radically new, the triumphantly intervening victory over evil; rather it provides scope for the artificial transformations and speculative evasions that were needed in order to reconcile the inherited testimony of ‘immediate expectation’ with the unexpected continuance of the world and time.\(^5\)

The eschatological future had not only become indefinite; it had also lost its connection with the blessings of salvation that had already been conveyed to redeemed mankind. Consequently the basic eschatological attitude of the Christian epoch could no longer be one of hope for the final events but was rather one of fear of judgment and the destruction of the world. If the original community of believers had still called for the coming of their Lord, very soon the Church was praying *pro mora finis*, for a postponement of the end.\(^6\) The concept of history that could be constructed from this basic attitude is at most one of an interval of grace, not of an expectation directed toward a future in which it seeks fulfillment. The final events become God’s secret proviso vis-à-vis history, which serves not so much to place human consciousness before its decision for or against its maker as to justify God for not excepting the Christians from the manifestations of His anger against the heathen, and thus making the Christians pay the price of the desired continuance of the *genus humanum*, the human race, in which the elect and the rejected are still treated alike.

Early Christianity found itself in what was, in view of its foundational documents, the difficult position of having to demonstrate the trustworthiness of its God to an unbelieving surrounding world not by the fulfillment of His promises but by the postponement of this fulfillment. “Since He has fixed the eternal judgment after the end of the world, He does not carry out the separation presupposed by that judgment before the end of the world. In the meantime He is the same both in kindness and in anger for all of humanity.”\(^7\) In order to demonstrate its usefulness to the surrounding world, which, while it is a source of affliction, is also itself afflicted, the ancient Church ‘secularizes’ itself into (takes on the worldly role of) a stabilizing factor. At the same time it ‘organizes’ its worldliness internally, most obviously in the Church’s jurisdiction over its individual members, which Tertullian calls “the highest anticipation of the Judgment to come.”\(^8\) The prayed-for interim of grace for the world fills itself with surrogates for absolute righteousness, which is not thereby prepared for but rather rendered
superfluous as far as the force of the need for it is concerned. And Tertullian is no exceptional case. Karl Holl added to his essay on "Tertullian as a Writer" the handwritten marginal note, sounding almost disappointed, "No apologist hopes for an early return of the Lord!"

If one wished to characterize the process I have outlined as one of "secularization"—even though historically it does present itself in an unexpected place—then in any case it would be not the secularization of eschatology but rather secularization by eschatology. Its motive power could then be that the new intensity of the aspects of the world whose readmission was unhoped for had to contribute to the renewed interest in the world. Franz Overbeck wrote that to the Church, the end of this world seemed near only so long as it had not yet conquered a piece of it. But this conquest came too late to repress "immediate expectation," to compensate for the great disappointment. It must have been the other way around: The energy of the eschatological "state of emergency," set free, pressed toward self-institutionalization in the world. But this does not falsify Overbeck’s statement of symmetry: "As long as the Church possesses this piece, it will continue to be interested in the continued existence of the world; if the last piece is ever really endangered, then she will join her voice in the old cry again."

In spite of recurring waves of eschatological-chiliastic excitement, the Middle Ages carried on the tendency of taking the edge off of the biblical testimony of expectation of the end with allegorical interpretations, transposing it into expansive long-term speculations, and recasting the declarations of an impending salvation into a system of the internalization of what had already been effected and ensured and turned over to the Church as an inexhaustible store of mercy for it to administer. Added to this was the way the doctrinal unit called eschatology was divided up: For the Middle Ages there was both a cosmic and an individual eschatology. This split made it inevitable that man’s interest would be absorbed by the question of his own ‘last things.’ The late doctrine of a special judgment for each deceased person at the moment of his death gave to the Last Judgment at the end of time the role of a finale that could no longer really affect the consciousness of the individual. The dimension of the future and of hope, of which secularization theorems speak as a model to be taken over by the modern age, is no match in its pallor for the wealth of
realistic images of the saving deeds in the past. That does not justify making every aesthetic realism into a secularized descendent of Christianity’s Incarnation; but means of representation were unquestionably developed in relation to that remembrance, not in relation to hope (more nearly in relation to fear).

In the Christian tradition, paradise was never attractive; it was accepted as part of the bargain because it meant the avoidance of its opposite. This does not yet make the negation of the negation, or the negative dialectic, into a product of secularization. But it suggests the invaluable historical advantage of being able to say that the Messiah has not yet come. What has already been can only be disappointing. The chiliastic enthusiasts of both sacred and worldly peripeties have always understood that. The Messiah who has already appeared can only be treated dogmatically; one must be able to specify exactly who he was, how he identified himself, what he left behind him. The harmonization of what had already come about with what was still to come was the early Christian way of combining the advantages of unfulfilled messianism with the certainty of faith in an absolution that has already been promulgated.

Even if one could identify a genuinely biblical substance throughout the functional transformation of eschatology up to the threshold of the modern age, one would still have to inquire about the criterion of the unilateralness of the removal in order to secure the necessary precision for the asserted process of secularization. It must be admitted that the substantival formula “the historicization of eschatology” artificially avoids specification of who it is that historicizes eschatology, if it does not historicize itself. But it is precisely the quintessence of the state of affairs we have described that no foreign or external factor is at work here employing the authentic substance of eschatological ideas for its own purposes; on the contrary, eschatology historicizes itself—not, however, by transforming itself and continuing in a false ‘incarnation’ [Scheinleib] but rather by enforcing the reoccupation of its position by heterogeneous material. Here one gets into linguistic ambiguities. Certainly it can be said that the embarrassing situation of eschatological disappointment allowed the claims ‘of this world’ to come into play. There are forms of expropriation in which the surrender of substance, in anticipation of its removal, takes on the appearance of a free decision. Hermann Zabel has urged against my catalog of the criteria of secularization that the element of unilateral removal
was absent even in certain actual historical legal proceedings where the Church spontaneously secularized some of its property. Even if one is not prepared to grant in advance the omnipotence of material interests, one will still have to investigate in each particular case whether the situation of the surrender was not characterized by either acute or chronic coercion, which is still the case if it was a matter of prudent anticipation. In relation to the process of the early Christian “historization of eschatology,” one might choose the formulation that the pressing or coercive situation of unilateral removal by a ‘worldly’ power arose solely through the persistence—inadmissible according to the gospel announcement—of this very world in existence. But the historian must go one step further: What the term “world” signifies itself originated in that process of ‘reoccupying’ the position of acute expectation of the end. Only now does it become necessary to digest the fact that it was the created world that in the eschatological announcement was reduced to the status of an episode and doomed to destruction. Only the great Marcion could resolve this dilemma—dualistically, and thus mythically. The dualism between the sphere of salvation and the created world was so unavoidable that it had to appear even in the orthodox systems, though mitigated by the allegorization of the counterpower as a political entity, as in Augustine’s twofold civitas [city of man, city of God]. Only after two legal subjects have come into being can the history of transfers of property in the strict sense begin, in which there will be both genuine and false gifts (and thus ‘sacralizations’) just as there are genuine and false secularizations. That one of the two institutions present in the world is henceforth explicitly designated as “worldly” is only the expression corresponding to the other’s conception of itself as “not of this world.” But the reverse of this relation does not hold. Thus the possibility of talk of secularization is conditioned by the process that established ‘worldliness’ in the first place. There was no ‘worldliness’ before there was the opposite of ‘unworldliness.’ It was the world released to itself from the grip of its negation, abandoned to its self-assertion and to the means necessary to that self-assertion, not responsible for man’s true salvation but still competing with that salvation with its own offer of stability and reliability. This true ‘creation of the world’ [Weltwerdung] is not a secularization (‘becoming worldly’) in the sense of the transformation of something preexisting but rather, as it were, the primary crystallization of a hitherto unknown reality.
Secularization as an encroachment already presupposes the historically perfected demarcation of the agencies responsible for salvation, on the one hand, and for welfare, on the other, and presupposes the possibility of transposing the accents assigned to each of them as well.

The worldly power that is pictured as operative in the process of secularization is for its part, and as such, just as much a product of the original inadmissible persistence in existence of the world, which could not remain what it had been before, as was its self-described “unworldly” counterpart. This fact removes the suggestion of an almost Gnostic dualism from the rivalry of powers that is presupposed in the concept of secularization. The identification of autonomous reason with the worldliness that originated in this way is a hasty interpretation, and no doubt one that is attributable to a desire to subject reason to the demonizing effect of the antithesis.

But if it is not ‘demonic,’ it certainly is overextended. Modern reason, in the form of philosophy, accepted the challenge of the questions, both the great and the all too great, that were bequeathed to it. It is not the autochthonous and spontaneous will to knowledge that drives reason to overexertion. The pretension of an absolute new beginning suffers from an appearance of illegitimacy on account of the continuity that derives from its inability to shake off inherited questions. The modern age accepted problems as set for it that the Middle Ages had posed and supposedly answered but that had only been posed precisely because people thought they already possessed the ‘answers.’ For this phase, where the canon is being expanded to include new problems, Nietzsche’s thesis that one hears “only the questions to which one is in a position to find an answer”\(^{12}\) is correct; but it does not hold for the subsequent epoch, which cannot simply discharge the unanswered balance of its inherited questions with the admission that it is not a match for them. The continuity of history across the epochal threshold lies not in the permanence of ideal substances but rather in the inheritance of problems, which obliges the heir, in his turn, to know again what was known once before. Every attempt at resignation with respect to the unknowable then meets with the reproach of being ‘positivist,’ or whatever other catchword for that reproach may be convenient at the moment.

Thus, as we know, the modern age found it impossible to decline to answer questions about the totality of history. To that extent the philosophy of history is an attempt to answer a medieval question.
with the means available to a postmedieval age. In this process, the idea of progress is driven to a level of generality that overextends its original, regionally circumscribed and objectively limited range as an assertion. As one of the possible answers to the question of the totality of history, it is drawn into the function for consciousness that had been performed by the framework of the salvation story, with Creation at one end and Judgment at the other. The fact that this explanatory accomplishment exceeded the powers of its characteristic rationality was not without historical consequences.

Thus the formation of the idea of progress and its taking the place of the historical totality that was bounded by Creation and Judgment are two distinct events. The idea of 'reoccupation' says nothing about the derivation of the newly installed element, only about the dedication it receives at its installation. If one wishes to speak here of an alienation or expropriation, a reinterpretation or overinterpretation, then its object was not the theological substance of eschatology in its late, medieval forms; rather what was laid hold of was the independently generated idea of progress, the authentic rationality of which was overextended in the process. As an assertion about the totality of history, including the future, the idea of progress is removed from its empirical foundation in the extension of the reality accessible to and manageable by theory and in the efficiency of the theoretical methodology employed for that purpose, and it is forced to perform a function that was originally defined by a system that is alien to it. The transformation of progress into a faith encompassing the future requires not only that it should be a principle immanent in history—that is, that it can emerge from the reason that is operative in individual human actions—it also requires that this principle should in fact be active and continue to be so. Even Auguste Comte's law of the three phases of history responds to the pressure to explain history as a whole by projecting a totality that from the perspective of the third, "positive" phase (in which after all this schema is proclaimed for the first time), and in the context of its critical restrictions, is no longer at all possible. This sort of philosophy of history perpetrates the contradiction of excluding itself from the rational criticism that it assigns to itself as the characteristic of its historical standpoint. Hegel's philosophy of history too is a later, retrospective attempt to rejoin the Enlightenment's model of history to the Christian conception of history and to relate them in such a way that the identity of the reason realizing itself in history can still be
seen to be confirmed by a subterranean constancy of the realized ideas. To the extent that the philosophy of history continues to be fixated on the definition of an overall structure of its object, it is burdened by no longer realistically fulfillable obligations toward the persisting ‘great questions.’

One element did not play an important role in the early formation of the idea of progress: that of the intensity of the process, of acceleration. As soon as the new undertakings visibly began to exceed the dimensions of what could be accomplished in one generation and its immediate future, the question of speeding up the theoretical, the technical, and so far as possible even the moral processes had to become a matter of interest to those participating in and affected by them. This acceleration not only gave rise to and reinforced expectations; it also produced uneasiness, mistrust, negative utopias, fear of the future, visions of downfall, and so forth. But that does not lead to the limiting case of an accelerated running out of history that could efface the difference between the idea of progress and eschatology in such a way that the attitude to the future once again corresponds to the “belief in an imminent radical change in world history,” that is, represents a secularized millenarianism. There are no grounds for saying that this acceleration is “in the first instance an apocalyptic category, which represents the shortened interval before the advent of the Last Judgment,” and that this category was “transformed” after the middle of the eighteenth century into a “concept of historical hope.” When Luther, according to Reinhart Koselleck’s quotation from his “table talk” of 1552, takes exception to Melanchthon allowing the world a further endurance of four hundred years, and for his part insists on the biblical abbreviation of this term in the interests of the elect, then the difference is manifest between abbreviation of the world’s remaining time and acceleration of the process that for the first time is supposed to make it pleasant to remain in the world. The biblical expectation, which Luther shares, of the shortening of the apocalyptic period, itself no longer has the unambiguous character of joyful expectation of the end that is brought still closer but exhibits instead a desire to decrease fear of the terrors to come. The significant evidence of ‘secularization’ here is on the side of Melanchthon, who is encouraged to speculate on the extended duration of the world by the fact that its end after all no longer affects the current generations and allows the modus vivendi with the world to continue as an advan-
tageous one. Melanchthon’s four centuries do not contain the secularized theological element of abbreviation of the final times; rather they serve to exclude the reality of the end from consciousness and to direct attention to the possibility of assigning a higher value to time, and making fuller use of it, by compressing what occurs in it. It is precisely the disproportion between the natural lifetime and the emerging technical requirements of the modern program of progress that provides the rational motive for acceleration once the other course, which had been envisaged at an earlier date, that of adapting the duration of the life of an individual to the dimensions of the new world by means of the art of medicine, had proved to be impracticable.

The history of the factors promoting acceleration, which has yet to be written, should not restrict itself to the appearance of expressions of an increased tempo but should rather explore the earlier phase of the experience of impatience with the slowness of the process, and of both resignation and summoning up of courage with regard to progress’s seemingly ever greater consumption of time.

**Translator’s Notes**

a. “Dialectical theology” refers to the theology of Karl Barth and his followers. The “demythologizing” of the kerygma is Rudolf Bultmann’s project.

b. “Historicism,” here and throughout this book, is not what Karl Popper baptized with that name (in *The Poverty of Historicism and The Open Society and its Enemies*): the “holistic” claim to have found predictive “laws” of history. Instead, it is simply the endeavor of historical scholarship—especially since the early nineteenth century—to interpret any individual historical phenomenon as having a specific character that in each case is the product of a process of historical development rather than of a ‘spontaneous generation’ or a transcendent intervention (or of the repetition of eternally ‘given’ forms, archetypes, or whatever). This is the usual meaning of *Historismus* in Germany, the common core of the “historicisms” analyzed by Ernst Troeltsch, Karl Mannheim, Friedrich Meinecke, and Benedetto Croce. The “long campaign of historicism,” in this sense of the term, is inimical to ideas of ‘authentic ownership’ inasmuch as it always seeks out earlier ‘sources’ or ‘influences’ that have produced the phenomenon in question through a process of development.

c. The author is referring here to his theory, adumbrated in the two previous paragraphs and presented at greater length in part I, chapter 6, of the continuity of history as a system of “positions” (in one respect, of “questions”) that are “reoccupied” (with new answers) after changes of epoch.
Making History So As to Exonerate God?

If we define progress for once not as an increased quantity of goods but as a reduced quantity of ‘bads’ in the world, we can see more clearly what really differentiates the modern concept of history from the Christian interpretation and why, in the perspective of the latter, the former had to be illegitimate. The objectionable element is not the postponement by history, and dissolution in history, of a concept of transcendent salvation but rather the disruption of the function of a theodicy that operates with the argument that man is responsible for all that is bad in the world. According to the exemplary conception developed by Augustine, the physical defects of the created world are simply the just penalties for the evil that proceeded from human freedom. The inevitability of this train of thought in Augustine’s actual situation lay in the fact that it made it possible for him to avoid the Gnostic dualism of good and evil world principles. To be sure, the converted Gnostic had to provide an equivalent for the cosmic principle of evil in the bosom of mankind itself. He found it in inherited sinfulness, as a quantity of corruption that is constant rather than being the result of the summation of individual faulty actions. While this sinfulness is inherited, it is at the same time a disposition to increase the actual evil and thus continually to reduce the chances of the good being realized—a negative concept of ‘progress’ that Kant would be the first to reverse. Augustine’s explanation of the bad in the world as the result of human wickedness, as a species-wide quantity, made it necessary for any subsequent notion of progress that would undertake
to diminish the bad in the world also to establish man's ability to lessen his culpability by his own efforts. The idea of progress, as was to become evident much later on, requires a reversal of the causal relation between moral and physical evils; it is founded on the assumption that in a better world it would be easier to be a better person. But as had been laid down in Paul's Epistle to the Romans, death came into the world through sin, and consequently the reverse could not be said—that man sins because he must die.

Hans Jonas has correctly related the possibility of the idea of progress to the position that is the antithesis of the Pauline/Augustinian doctrine of grace, namely, Pelagianism, which he characterizes as the "leveling of divine grace into an instructive power working toward progress in the whole of human history and increasingly bringing men to the consciousness of their freedom and responsibility for themselves."

But to infer from this that the idea of progress has after all been traced back to a Christian origin would be mistaken. For though it is true that Augustinianism, and above all its late-medieval extreme forms, excludes the possibility of the conception of progress, it should not be assumed that Pelagianism represents the intratheological alternative to this position. It would be more correct to say that the naturalism of mere divine assistance holds to the young Augustine's doctrine of freedom without his Gnostic trauma but consequently also without the function of theodicy—unless one were to regard it as a variant way of vindicating the Creator that the defects of His Creation are eliminated in the course of time by the zeal and diligence of His creatures. If one looked in the modern philosophy of history for an equivalent to that Pelagian position with its opposition to the Augustine who was reconverted by the Epistle to the Romans, that equivalent would be Lessing's Education of Humanity.

'Theodicy' first became a literary reality under that name in the work of Leibniz. But although Leibniz did influence the development of the modern age's concept of history by his establishment of the positive uniqueness of the individual, this was not a result of his Theodicy. Nor could it have been. For in this work any tendency toward a philosophy of history is excluded precisely because it asserts the world's quality of being the best of all possible worlds. This leads to an optimistic statics of insurpassability, which denies man any significance in relation to the production of a 'better world.'
An essential characteristic of Leibniz’s argumentation, by which he is distinguished from Augustine, is the integration of the bad aspects of the world into the design of the Creation. Even the God who is to be vindicated by His work can Himself generate physically bad things to the extent that they are unavoidable in the accomplishment of the optimal overall goal. There is no longer any relation of retribution between these bad things and human actions. Leibniz’s theodicy characterizes the bad things in the world no longer in moral terms but rather in instrumental ones. Leo Strauss saw the element of ‘secularization’ precisely in this, that not only has providence lost its mysteriousness for reason, but at the same time the claim to absoluteness of the divine laws has been overlaid by the justification of evil means by the grandeur of the overall end. The Theodicy paves the way for the modern concept of history to the extent that it demonstrates the rationality of absolute ends by the model of divine action. “In proportion as the providential order came to be regarded as intelligible to man, and therefore evil came to be regarded as evidently necessary or useful, the prohibition against doing evil lost its evidence. Hence various ways of action which were previously condemned as evil could now be regarded as good.”

Is the absolutism of ends the bridge by which the secularization of the concept of providence into the concept of history was accomplished? The Theodicy is anything but a theological work; it could not even be the secularization of such a work, for one unmistakable reason: The vindication of God is, for Leibniz, the means of securing the most radical principle of the autonomy of philosophy that could be conceived of, the principle of sufficient reason. There is only one possible application of this rational principle: Given the assumption that the best of all possible worlds has been realized, one can in principle deduce the answer to any conceivable question. This motive can be seen, for example, when Leibniz, in opposition to Newton, justifies the idealization of space and time with the argument that because of the homogeneous indistinguishability of their parts, they exclude rational explanations of actions that involve location in space and time. Everything is aimed at the goal of realizing the omnicompetence and independence of reason. And it is difficult to avoid the impression that this project was bound to succeed—if it had not been for the earthquake in Lisbon, Voltaire’s ridicule, and Kant’s demonstration that this in-
vestiture of reason could indeed establish the autonomy of theoretical, but not of practical, reason.

Finally Odo Marquard has attempted to apply Hegel’s understanding of his philosophy of history as ‘theodicy’ to the interpretation of the idealist philosophy of history as a whole. The latter supplies a solution to the problem of theodicy by radicalizing human autonomy in such a way that by means of it, following Augustine’s schema, it can accomplish the “radical demonstration of God’s innocence.” Does acceptance of this thesis mean that the richest and most ambitious version of the philosophy of history that we have before us is really secularized theology after all? Marquard does not employ this concept. But for him also the motive of theodicy provides the answer to the question whether there is “after all perhaps even a theologically plausible and honorable motive” for idealism’s “radicalizing autonomy, that is to say, human freedom over against God—in the extreme case even to such an extent that talk of God must cease.”

The occasion for and the accomplishment of this kind of theodicy can indeed be gathered from the example of Kant’s discovery of the problem of antinomy, and of the means of overcoming it, in the Transcendental Dialectic. The discovery that reason brings about its own greatest self-deceptions in obeying its knowledge drive surpasses even Descartes’s genius malignus [malicious spirit] because it no longer uncovers only a hypothetical consequence but rather the reality of the immanent movement of reason. But at the same time the intensification of the demonstration relieves God of responsibility, the God Who in His absolute sovereignty could still have been Descartes’s deceiving spirit, whereas Kant in the transcendental turning of his critique of reason not only sees but also has us overcome the source of deception in the rational subject itself. Though initially all that man takes upon himself here is the ‘blame’ for the theoretical aberrations of his uncritical use of his reason, still this could at the same time have presented itself as a formula for relieving God of responsibility for the tortures of history. One should not forget here that since Augustine’s turning away from Gnosticism, the concept of the ‘bad’ in the world had been displaced and continues up to the present to be displaced continually further and further: The bad aspect of the world appears less and less clearly as a physical defect of nature and more and more (and with less ambiguity, on account of the technical means by which we amplify these things) as the result of human
actions. To that extent, the philosophy of history already reflects a situation in which man suffers less and less from the defects of nature and more and more from the productions of his own species. That would have to produce a new variety of Gnosticism and, no less necessarily, a new conception of revolt against it. Following Marquard, the idealist philosophy of history would perhaps not be a secularized theology in its content and formal structure, but it certainly would be in its function. It would be a theology that expresses itself, out of concern for the vindication of God, as an anthropology, or better, as Marquard puts it, a “theology that prevents itself consistently and throughout.” Happily I do not have to discuss here the question whether the philosophy of history is the cunning of theology practiced through theodicy, in which theology makes use of its dissolution into anthropology (as affirmed by Feuerbach) only for what is after all a more thorough and final exoneration of its God. The remaining question, then, is whether dependence on theodicy as a central motive would be the indirect secularization of an originally theological idea. This question cannot be lightly passed over, if only because the connection Odo Marquard asserts is at least as plausible as the thesis of the expropriation of eschatology. Marquard shares the skepticism I advocate in regard to the “usual derivation of modern philosophy of history from the Bible’s eschatological conception of the future,” but at bottom not because ‘secularization’ alleges too much substantial identity with theology but rather because for him it exposes too little of the genuinely theological function of this philosophy. For Marquard too, secularization becomes an appearance, which as such can be functionally explained: The philosophy of history would be, as it were, ‘indirect theology,’ which speaks again and again of man, so as not to tarnish the image of God—like someone who constantly avoids a particular topic of conversation because he knows that any word from him on that subject could give an indication of something that he wishes to avoid suggesting in any way. Theology is not a stage in the transformation of anthropology; rather it is the reverse: Philosophy’s talk of history and of man is the perfected final phase of theology, in its humanly most ‘refined’ form as theodicy. Phenomena of secularization would then be due to a “methodical atheism ad maiorem gloriæ Dei [to the greater glory of God],” which would be nothing less than “what may be the only promising form of theodicy.”
My objection focuses on the—if not material, still at least functional—identity of theology and theodicy, to the extent that the latter makes an appearance in the form of the philosophy of history. The principle of autonomy, precisely if it is to be understood as a historical principle, can never be sufficiently radical to carry the burden of total responsibility that its function as theodicy would require. The philosophy of history never justifies the world as the created world but only as a world still to be produced. Marquard himself defines the philosophy of history by one characteristic only: It "proclaims a world history with the single goal and end of universal freedom." But precisely if freedom is the goal and the end, it cannot be the means to provide what is supposed to be provided here: the absolute scapegoat for absolute goodness. After all, the only reason the schema functions for Augustine is that the single original and then inherited sin was committed precisely under conditions of perfect freedom and hence can carry with it total responsibility; mankind as the subject of the philosophy of history, which works itself free through history and out of it, has this freedom only as an idea, and thus at any given time the full blame that has to be allocated cannot yet be assigned to it. If philosophy of history, in the form of theodicy, is supposed to rescue God's goodness, then it must deny His omnipotence. This insight, which Voltaire arrived at in his critique of Leibniz, is probably atheistic; not, however, in the paradoxical sense proposed by Marquard but rather in a destructive sense. For the defects of divine omnipotence are the possibilities and necessities of human self-empowerment in history. The question of who bears the responsibility pales into insignificance in the face of the question of power. Where power is absent, there cannot be responsibility either.

Voltaire's quasi-theodicy of finite power is destructive because it does not satisfy the one interest that the modern age can have in a theodicy: an interest in the establishment of reliability. Of course omnipotence is not reliable as such, but only omnipotence is capable of reliability. In the modern form given it by Leibniz, theodicy is already outside any theological function; it does indeed belong to the "protest of the Enlightenment against the God of will and His potentia absoluta [absolute power]," but that is not the same as the assertion that in theodicy it is "no longer the 'merciful God' but rather the 'righteous God'" Who is thematic. In fact the Enlightenment's interest in theodicy is certainly not primarily related to the question of righteousness; its
problem is that of a reliability that, going beyond the Cartesian veracitas [truthfulness], provides a guarantee of the autonomous lawfulness of the world process, undisturbed by miracles. The proof of the impossibility of a proof of God's existence became possible for Kant at the moment in which the lawfulness of natural phenomena no longer needed to depend on this guarantee because it was supposed to be demonstrable as a transcendental condition of the possibility of nature. Here lies the connection that Marquard seeks between the Transcendental Dialectic and the problem of theodicy in the modern age.

Modern theodicy is an 'indirect' advocacy of human interests. If this thesis is correct, then a philosophy of history that arises from theodicy cannot be the 'indirect' advocacy of theological interests; it cannot be 'the continuation of theodicy by other means.' Even if the idealist thesis of autonomy were the vindication of a God Who did not indeed create the best of all possible worlds but Who instead equipped man with the compensatory capacity to improve continually the quality of the existing world, then this vindication would still only give rise to renewed reflection on history, in regard to the question whether its course does in fact show man to be a compensatory creature and does free his author from the suspicion of not being sufficiently reliable in honoring the autonomy of man and his world. But this suspicion leads not so much to methodical as rather to hypothetical atheism, which regards history as the sum total not of man's effort to exonerate God but rather of the demonstrated—and bearable—possibility of doing without God. Without keeping its name, Marquard has reduced the secularization thesis to its most extreme and most effective form: What remains is no continuity of contents, of substance, of material, but only the naked identity of a subject, whose survival through changes in clothing and in complete anonymity, against all importunities, both gross and subtle, is assured. Theology's incognito role as the theodicy in the philosophy of history is the perfection of Docetism. Marquard has described it as the cunning of my reason—so it is at least that of reason in some form—that with the functional model of history, I provided the secularization thesis with the only possible chance of defending itself, once (and because) the theses of identity and theorems of continuity in history turned out to be untenable—in other words, still, in spite of everything, a philosophy of history once again, although it is precisely in the philosophy of history that the modern age miscarried, and by the philosophy of history that
it was put at risk “as in the pursuit of a supposedly risk-free speculation”: “The philosophy of history is countermodernity.” It would show lack of respect for an important train of thought to play Marquard’s statements of 1965 off against those of 1973—who would not know more accurately since then what can be produced through supposed transformations of theology? But I may be allowed to express my discomfort at being made the tool of a cunning of reason in that I supposedly prepared the final and most stabile refuge for the secularization theorem while I was still attacking Marquard’s anonymous identity of theology in the theodicy of the philosophy of history. The thesis that it is a functional reoccupation that creates the appearance of a substantial identity lasting through the process of secularization is meant to explain phenomena of tenacious obstinacy, not to mitigate or to legitimate them. It is true that Marquard seems to incline toward the thesis that the modern age could only have succeeded if it had broken with the expectations and eliminated the residual needs that had been bequeathed to it. I can formulate this sharply as follows: Modernity could only have succeeded and defended itself against countermoder­nities if it had really begun just as absolutely from scratch as Descartes’s program prescribed. But this program too, as will be shown in part II, is only the answer to a provocation, and the answer was to become absolutist because the provocation was absolutist. But then modernity would be bound to miscarry because the very idea of beginning it was already involved in the functional continuity of provocation and self-assertion, and therefore in its origin ‘antimodern.’ This sort of paradox is unavoidable when one sees even in the functional model of history the cunning of reason in its determination to become a philosophy of history once again.

I want to get at the root of this difficulty that Marquard causes himself and me. I think I have found it in a much earlier context. Marquard wrote in 1958 that there are two conceptions of the disappearance of the theological definition of reason: the theory of lib­eration and the theory of the Fall; but perhaps, he wrote, this disjunction of liberation and apostasy is not exhaustive. Perhaps these alternatives can be overcome by “attention to genuinely theological motives for the emancipation of reason.” And then there follows a sentence that as a premise makes it possible to deduce even the reinterpretation, so much later, of the functional model of history as a counterm­odern salvage attempt: “Emancipation is neither liberation nor apostasy when
theology itself provokes it." Here Marquard is inventing the cunning of reason that a decade and a half later he will find in the functional model. For it is only an artifice to want to see neither the achievement of freedom nor the Fall in an action because it was provoked by theology itself and received not only its logic but also its consecration from that source. Of course if one imputes to the self-assertion of reason a need for an external sanction, then one will only be able to seek that sanction in the agency that made the self-assertion necessary. To explain a phenomenon by referring it to a provocation is not to justify it. Talk of the "legitimacy" of the modern age makes sense only to the extent that that legitimacy is disputed.

Translator's Notes

a. This account of Augustine's doctrine of free will is presented at greater length in part II, chapter 1.

b. Of the Critique of Pure Reason. [Marquard's first book was entitled Skeptische Methode im Blick auf Kant (Freiburg: Karl Alber, 1958).]

c. This phrase is a variation of Hegel's famous "cunning of reason," according to which 'reason' accomplishes purposes in history that its 'rational' human agents do not intend.

d. For a general statement of this 'model' see part I, chapter 6, paragraph 3ff.
The considerations presented up to this point have been intended to contribute to deciphering a methodology for the application of the category of secularization in historiography. This attempt to extract a more precise meaning from a term hitherto mostly used with an innocent confidence that it must mean something has caused a number of its users to step forward and protest that that was not what they meant by it. My question in return is not so much what in fact they did mean by it as what would have to have been meant by the term "secularization" to make it capable of the productivity it has been thought to have in the comprehension of historical relations. The methodological burden of proof that I have laid out may not be immediately convertible into theoretical performance; such difficulties are found in the methodological history of all historical disciplines, whose source material was not laid down and conserved with an eye to the satisfaction of theoretical interests. Much that methodology would lead us to anticipate discovering will have to remain obscure here. But in regard to the secularization theorem it is possible nevertheless to gain an overview as to whether the high expectations that were suggested by preliminary conjectures and brilliant aperçus can ever be consolidated into well-founded judgments. And it still seems more like a case of terminological metastasis. The prospects for acquiring more secure insights must be tested carefully in cases where what appears to be such a productive expression is used as though it represented a long-recognized state of affairs.
The suggestion of secularization was not ‘cooked up,’ after the modern age had long enjoyed undisputed standing, in order to accuse it of and exact recompense for its “cultural debt.” The availability of the category of secularization for ideological employment is not a result of the cunning—already invested in that category—of any reason or (for that matter) unreason. There is such a thing as the possibility of mobilizing implications after the fact, and the fact that the use of the expression “cultural debt” in this context can be documented is a symptom of this, and no more. The insinuation of the primordial trickery of priests was one of the weaknesses of the Enlightenment because it thoughtlessly ignored the background of needs underlying the phenomena and the institutions at which the Enlightenment’s critical attack was aimed. The superficiality of this sort of reckless exposure of supposed hidden backgrounds should not be repeated by a rationality of humane consideration.

Even if the relevant phenomena do not satisfy the criteria we have developed—the criteria of identifiability, authentic ownership, and unilateral removal—and if consequently their character as ‘secularizations’ must be explained as an appearance, not a reality, still this appearance has a real foundation, a demonstrable role in a historical logic. The only reason why ‘secularization’ could ever have become so plausible as a mode of explanation of historical processes is that supposedly secularized ideas can in fact mostly be traced back to an identity in the historical process. Of course this identity, according to the thesis advocated here, is not one of contents but one of functions. It is in fact possible for totally heterogeneous contents to take on identical functions in specific positions in the system of man’s interpretation of the world and of himself. In our history this system has been decisively determined by Christian theology, and specifically, above all, in the direction of its expansion. Theology created new ‘positions’ in the framework of the statements about the world and man that are possible and are expected, ‘positions’ that cannot simply be ‘set aside’ again or left unoccupied in the interest of theoretical economy. For theology there was no need for questions about the totality of the world and history, about the origin of man and the purpose of his existence, to be unanswerable. This explains the readiness with which it introduced titles into the budget of man’s needs in the area of knowledge, to honor which was bound to be difficult or even impossible for any knowledge that did not appeal, as it did,
to transcendent sources. Its strength could only be the weakness of its heirs. If this has the appearance of a reproach, it might be compared to the reproach that Leibniz advanced against Descartes, that through the radicalness of his doubt and the questionable perspicuity of its elimination he had introduced into the world a demand for certainty, which on account of the rigor of its requirements could not be fulfilled by him or by anyone else, but which could not be revoked and rejected merely on account of the impossibility of satisfying it.

The modern age’s readiness to inherit such a mortgage of prescribed questions and to accept as its own the obligation to pay it off goes a long way toward explaining its intellectual history. There is an element of tragedy in the way in which this effort, as generous as it was hopeless, finally ends with the more or less explicit insinuation that the inheritance came about in a dishonest way. What mainly occurred in the process that is interpreted as secularization, at least (so far) in all but a few recognizable and specific instances, should be described not as the transposition of authentically theological contents into secularized alienation from their origin but rather as the reoccupation of answer positions that had become vacant and whose corresponding questions could not be eliminated. I have represented this too one-sidedly as being due to a lack of critical intensity and have not referred often enough to the importance, noted elsewhere, of ‘residual needs.’

The excessive longevity of a system of questions that extends across a change of epoch, and its influence over the answers that are possible given the premises of the new epoch, is not a phenomenon that first appears in relation to the beginning of the modern age. Christianity itself in its early days was subjected to a comparable ‘problem pressure’ in its confrontation with questions that were originally foreign to it. The embarrassment that is already evident in Philo of Alexandria and then in the patristic authors in their efforts to set up something on the basis of the biblical story of the creation that would be comparable to the great cosmological speculations of Greek antiquity, and the quantity of allegory that had to be found in order to comply with this externally imposed compulsion, show us the pressure of the ‘carry-over’ of questions to which an answer was held to be possible.

We are going to have to free ourselves from the idea that there is a firm canon of the ‘great questions’ that throughout history and with an unchanging urgency have occupied human curiosity and motivated the pretension to world and self-interpretation. Such a canon would
explain the changing systems of mythology, theology, and philosophy by the congruence of their output of assertions with its content of questions. The problematic of the carry-over of questions is above all a problematic of the epochal thresholds, of the phases of more or less rapid change in the basic rules for the procurement of very general explanations. The reproach that a theoretical system accomplishes too little for man’s self-understanding taken as a whole is less often expressed than it appears in fact to be present in the consciousness of the founders, and above all of the epigonic advocates of such systems, when they believe the time has come to undertake to demonstrate their system’s comprehensive ability to deal with problems. It is not so much the modern age’s pretension to total competence as its obligation to possess such competence that might be described as a product of secularization.

Questions do not always precede their answers. There is a ‘spontaneous generation,’ from the authority of nonrational announcements, of great and acutely active assertions such as those of eschatological immediate expectation, the doctrine of the Creation, or original sin. I have retained the expression “spontaneous generation” [Urzeugung] here, although it has proved to be open to misunderstanding. I have already tried to show, in connection with Augustine’s doctrine of original sin, the only way in which the expression can be meant to be understood: that the content of the doctrine is not determined by the systematic requirements of justifying the Creation that the converted Gnostic had to satisfy, since a different content from that of an inherited guilt could certainly have been found. The generatio aequivooca consists simply in the fact that the combination of the concept of freedom and the doctrine of original sin could be codified at this specific location into the ‘answer’ to a ‘great question’ that was yet to be accurately stated. When the credibility and general acceptance of such answers dwindle away, perhaps because inconsistencies appear in the system, they leave behind them the corresponding questions, to which then new answers become due. Unless, perhaps, it turns out to be possible to destroy the question itself critically and to undertake amputations on the system of world explanation. That this cannot be a purely rational operation is a lesson of history, if it is a lesson of anything. Even the dwindling and (especially morally) discredited mythology of the Greeks ‘prescribed’ to the nascent philosophy what questions it had to assume responsibility for and what systematic scope it had to
possess. Far beyond its initial phase, philosophy, as the embodiment of the early theoretical attitude, continues to bear the imprint of the effort to measure up to this supposed standard of its achievement and to postpone or to gloss over the disappointments that could not fail to appear. Analogies to the later secularization theorem are already found where the beginnings of science are in competition with the older offerings that they have to replace. Pliny passes on a story about Hippocrates according to which he copied down what he read on the votive tablets in the temples, where the means employed in the successful healing of sick people were indicated, and this was how he invented medicine. Jakob Brucker, the early historian of philosophy to whom most philosophers in his century owed their knowledge of the history of philosophy, introduces this anecdote and makes the double comment that Hippocrates would not have been tolerated or honored in Greece if this were true and that the anecdote must have originated from “an invention of enemies of his and of doctors in general.”

Christianity also encountered, in the Hellenistic world into which it was expanding and to which it offered its annunciation as a motive for joining it, questions that it was not originally equipped to answer and for which it lacked the conceptual equipment that it would be called upon to produce in the arguments in which it was beginning to get involved. In this situation what emerged as the basic process of adjustment to the preexisting formal system of world explanation was the conversion of what were originally values for salvation into explanatory values. This process was to prove to be irreversible, however often attempts might be made to revoke it, most radically by the theology of the Reformation in a historical situation in which the developed system of these explanatory values, in the form of Scholasticism, had entered its crisis. If this hypothesis is correct, then the Reformation’s reduction of Christianity to its value for salvation was at the same time an attempt to eliminate the ‘problem pressure’ that was the result of its early ‘secularization’ as a system of world explanation.

In acute situations of immediate expectation, the promised salvation can remain extremely undefined; everything is going to be different, and he who asks how has already lost his chance to participate. The status of the change as beyond interrogation is a result of the intolerability of the existing state of affairs. Acute eschatology is the equivalent of the obsessional neurosis whose universal effect Freud described
with the phrase, "... at last the whole world lies under an embargo of "impossibility."" Salvation then can take whatever form it likes. Only the precise demands of the Hellenistic world, stamped as it was by philosophical ideas, made it necessary to overcome the uncertainty in the formulation of the goal of salvation, which can be sensed throughout the New Testament, in favor of definitions. When one considers, for example, how deeply our tradition has been influenced by the idea of immortality, one is startled to find that this idea is not to be found in the biblical texts that originate before the Babylonian exile. But at the same time the corpus of revelation as a whole was very inadequately equipped for providing answers to the questions that were being posed regarding the recently promised "life." Greek philosophy was able, for various reasons, to specify more precisely what conditions had to be satisfied in a condition of "happiness." These conditions presented themselves to the Christian authors of the early centuries as an obligatory systematic program. No doubt any system will have to say something about happiness, but how one can talk about it will depend on very many variables in the way the formal system of positions is filled, until finally the subjectivity of the very concept of happiness becomes a systematic element. In the world of Hellenism, Christianity found its function and the scope of the answers required of it prescribed to it as an empty frame to be filled. Its claim to be heard and to take part in the competition of doctrines promising salvation and explanation of the world could only be made good by the acceptance of this function. In a certain respect it was a strong point of Christianity that it had not committed itself to certain concrete contents of salvation in its acute initial situation, because now it could formulate them for the first time. Even if what this formulation promised was a transcendent expectation, it still had to borrow its content from antiquity's philosophical definition of eudemonia: The salvation content of immortality becomes theoretical contemplation, the *visio beatifica* [beatific vision]—fundamentally a philosopher's bliss.

In the patristic formation of Christianity, for the first time a system of propositions presented itself as the *final* form of philosophy. Christianity produced this characteristic claim by formulating its dogma in the language of ancient metaphysics and claiming to solve the enigmas of that metaphysics concerning the world. The patristic authors habitually use the formula that the founder of their religion answered all the questions of ancient philosophy. Christ had brought not only
a summons and annunciation from and about another world but also the true and final knowledge of this world including all the problems de rerum natura [concerning the nature of things]. Thus the modern phenomenon (interpreted as secularization) of the reoccupation of vacant answer positions is not bound specifically to the spiritual structure of this epoch. The Christian reception of antiquity and the modern taking over of explanatory functions of the Christian system have largely analogous structures as historical processes. Just as patristic Christianity appears ‘in the role of’ ancient philosophy, so modern philosophy ‘substitutes’ to a large extent for the function of theology—admittedly for the function of a theology that on account of that process that occurred two millennia earlier is at least terminologically adapted to such substitution. Even when modern philosophy conceives itself as in the sharpest possible contradiction to its theological prehistory, which it considers itself to have ‘overcome,’ it is bound to the frame of reference of what it renounces.

Once men had begun “to know so amazingly much about God,” as the young Hegel wrote, even an atheism or a renewal of the pagan cosmos was possible only insofar as it was able to fill again the space laid claim to by what it negated. If we consider for once not Hegel, the “theologian for the sake of philosophy,” but Nietzsche’s “struggle against latent Christianity,” then we find not only that “he was unable to express the recurrence of the world of Heraclitus in any but anti-Christian language”—which might be a very superficial phenomenon of provocativeness that goes no deeper than the language employed—but, much more precisely, that “the questions that arose for Nietzsche from the ‘death of God’ were each related to the lapsing of a theological answer.” The “active forgetfulness” of which Nietzsche speaks, the forgetfulness of the child, for which he makes Zarathustra long, seems not to be easy to introduce into history. The divine art of forgetting, which is invoked in the fragments of the “Dionysus Dithyrambs,” is not the art of human history, whose irreversibility implies memory. In history the price we pay for our great critical freedom in regard to the answers is the nonnegotiability of the questions. This does not exclude the possibility that these questions derive from a human interest that lies deeper than the mere persistence of the epochal carry-over; but it does make clearer how much more difficult it is to demonstrate the universality of a human interest than simply to point to the fact that it has been able to survive a few centuries.
In regard to the origin and structure of the problems connected with the secularization thesis and the criteria of its applicability, it is instructive to observe that the notion of an original property in ideas, and the accusations that derive from it, are already employed in the polemics and apologetics that accompany the reception of ancient ideas by Christianity. To assert and defend the legitimacy of its ownership of ideas is the elementary endeavor of what is new, or claims to be new, in history; to dispute this legitimacy, or to prevent or at least shake the self-consciousness that goes with it, is the technique of defending the existing state of affairs. Early Christianity not only laid claim for itself to the legitimate ownership of its truths, by virtue of revelation, but also disputed the legitimacy of the ancient world's possession of the ideas that they had in common or that it had taken over from that world. The trick of representing the ancient philosophers as having secretly learned from the Bible recurs again and again in the patristic literature and denies even the most obvious instances of dependence by reinterpreting these as the restoration of property that had been alienated much earlier.

In relation to the Stoic doctrine, which had been assimilated to the point of seeming self-evident, that the cosmos exists for the sake of man, Ambrosius of Milan poses the rhetorical question, “Unde hoc, nisi de nostris scripturis, dicendum absensent?” [“From what source have they claimed that this must be said, if not from our scriptures?”] Augustine formulates the Christian claim quite generally, as follows: “But if those who are called philosophers, especially the Platonists, say something that is true and consistent with our faith, not only do we have no need to be afraid of this, but we may take over the property in this truth from those who are its unrightful possessors. . . . What they possess as their silver and gold they have not produced for themselves; they have derived it, as though from a mine, from the shafts of divine providence, which rules everywhere. But then they have perverted it, employing it wrongly in the service of evil spirits. When the Christian severs himself in spirit from the unhappy community of the pagans, he must take these treasures from them and use them righteously for the proclamation of the gospel.” The theft of the gold and silver vessels from Pharaoh’s Egypt is Augustine’s allegorical prototype of behavior with respect to the iniusti possessores [wrongful possessors] of the truth, already supplemented here with the fiction that at bottom the heathen themselves would have had to
Chapter 6

intend the transfer of the goods to the legitimate usufructuary. This formula of *debet ab eis auferre christianus* [the Christian should take it from them] is one of those unbelievable licenses that are supposed to justify the possessors of the truth in putting to their own use everything held by those who cannot or will not know anything of this truth. It is the prototype of the morality of the genius, of the superman, and of the functionary who serves the only truly justifying interests.

Tertullian, two centuries earlier, had linked the category of legitimacy to the question of truth even more radically. Regarding the nature of the soul, he says, it is not a question of the truth of a proposition as such but of the evidence of its origin. It would be better to remain ignorant about such a question if God did not choose to reveal anything about it rather than to learn anything about it from men who presumed to be able to grasp it unaided and in that way succeeded in taking possession of the truth.11 Evidence of legitimate ownership of the truth is demanded because the assertion of a religious revelation at the same time implies that that revelation is the sole competent authority for the realm to which it applies, since a God Who reveals something that men already know in any case, or could know, puts in question the necessity of His revelation and thus its exclusive value for His believers. For this reason alone it cannot be the case that philosophy at any time brought to light authentically and by its own means anything that had ever been ascribed to revelation. Thus there must be secularization—both the anticipatory secularization that is ancient philosophy's sacrilegious use of the contents of the Bible and the posthumous secularization that is German Idealism and the materialism that grows up under its influence.

It seems to me that in the background of the early Christian demand that ancient philosophy demonstrate the legitimacy of its possession of a share of the truth, there stands a Platonism: What is true is so by virtue of its derivation as a copy of an original truth that is identified with God. The dependence of an image on its original is already for Plato something that cannot be bracketed out and disregarded. Its status as an image must be taken into account as an internally determining element in an appearance as well as in any copy of it. This is the only way in which the derived reality of nature can be traced back at all to a sphere of absolutely intelligible realities. In the same way, in reverse, the Ideas have not only a content of absolute truth but also at the same time an implication of what ought to exist, which
motivates their duplication, materialization, conversion into nature, as can be seen in the myth of the demiurge. The early Christian authors lay claim to the truth that can be found in the ancient philosophers (and that has now been 'confirmed') in order not only to integrate it into their system as something that has now become available to everyone—as what we would call "objective" truth—but also to return it to its truth in a stricter sense of the term by reestablishing its genetic reference. Henceforth for the whole epoch of the Middle Ages, there is an authority responsible for guaranteeing the truth as well as the reality of the world, which no longer has its own obvious and immediate evidence, and never regains it.

A similar residue of Platonism is still involved in the implication of blame in 'secularization': Just as the image not only represents the original but can also conceal it and allow it to be forgotten, so the secularized idea, if left to itself and not reminded of its origin, rather than causing one to remember its derivation can serve instead to make such remembrance superfluous. The work of the historian or philosopher of history in uncovering secularizations reestablishes anamnesis and leads to a kind of restitution through the recognition of the relation of debt. Admittedly, in Tertullian's argument regarding the legitimate use of the truth, this Platonic background has already disappeared almost entirely in the legalistic style of apologetics, in the process of forensic praescriptio [exception, exclusion], which denies the opponent the formal qualifications required for entry into argument about the subject of the dispute. Thus Tertullian forbids the heretics to cite Scripture in support of their position in a dispute, since only the rightful owner may make use of an object. And legitimate ownership arises through acquisition from the hand that has disposition over the object.

Thus the connection between the concept of truth and the idea of ownership was not established for the first time in the modern age on the basis of 'bourgeois' attitudes; rather it arises from the overlapping of formal identity and material discontinuity in the epoch-making changes in our history. It is true that this connection changed fundamentally in the modern age. One of the developments that constituted this epoch produced the axiom that the legitimate ownership of ideas can be derived only from their authentic production. This is important if only because it renders the idea of a legitimate secularization paradoxical, while at the same time it gives the criterion of genuine ownership its specific importance for the first time. Intellectual
acquisition through any kind of ‘carrying-over,’ in the broadest sense, has become suspect. This also belongs in the context of the self-assertion of reason, which in this way opposes itself to the extreme emphasis on the element of divine grace in theology and its philosophic equivalents (from *illuminatio* [illumination] to *concursus* [*concursus divinus*: divine ‘coproduction’ or agreement]). Its postulate is that of the self-inherence of truth as guaranteed by its self-generation. Knowledge derived from mere teaching becomes a derivative form of a possession of truth that every rational subject is supposed to be able to appropriate to itself by itself carrying out the work of knowledge. This appropriation is radically different from every type of transfer of ownership. The appeal of the idea of ‘method’ rests on this assumption, that it makes the equipment that is necessary to the work of knowledge available potentially to everyone.

Leibniz raises against Descartes’s voluntaristic account of the truths of reason the simple objection, which, however, is felt to be decisive, that if there were such a dependence on the divine will, then even the properties of a geometrical object would hold only *velut privilegium* [by privilege]. There is a double meaning in the background of this argument: Neither would the object possess its properties by virtue of internal necessity, nor would the knowing subject possess its truths by insight into such necessity. Truth has ceased to be analogous to theology’s rule of grace. The idea of endowed and conveyable property in ideas thus loses its basis. And the accusation of illegitimate appropriation takes on an additional anachronistic quality because the process that is said to have taken place would have had to destroy the conditions under which the alienated property had its value.

Here it becomes evident that the change in the presuppositions of the idea of spiritual ownership not only has a determining effect on the criteria for the applicability and effectiveness of the historical category of ‘secularization’ but, even more radically, has a destructive impact on the possibility of constructing such a process of spiritual expropriation and debt. The claim that the use of this schema promotes historical understanding involves a premise that is foreign to the modern age’s self-understanding and that is ‘secularized’ in its own right. Reflection on history falls into this same circle of presuppositions even when it does not join in the evaluation suggested by the concept of secularization, that is, in either the regret over the loss of spiritual property or the gratification with regard to the purer essentiality of
the remainder of transcendence once it has been freed of everything that can devolve upon 'the world.' When historical understanding makes use of this category, it enters into religion's self-interpretation as a privileged access to truth. It takes over the assumption, which is necessarily bound up with the claim to have received a revelation, of a beginning that is not historically explicable, that has no immanent preconditions. This beginning introduces not only a new but also the final historical formation. Any historical self-consciousness that believed itself capable of making, or believed it had already made, another new beginning, a beginning that was supposed to constitute a 'modern age' [Neuzeit: literally, new age] as a scientifically grounded and therefore final epoch, was bound to come into conflict with this Christian claim to novelty and finality. The finality in the Christian self-conception was bound to try to assert itself against this by denying the possible authenticity of any such founding act in history and at the same time accusing it of having had to make illegitimate use of the truth that belongs to Christianity.

Let me prevent any misunderstanding from arising or persisting here: The claim that the modern age made an absolute beginning through philosophy is no more correct than the claim that the latter half of history had an absolute beginning in the events to which the Christian era traces its origin. In historical analysis, the claims of both beginnings to the status of supposedly unconditioned givens have gone up in smoke. However, these claims are not identical in nature. The philosophical program for the beginning of the modern age 'failed' because it was unable to analyze away its own preconditions. This statement is not one that is brought to bear from outside but rather is a conclusion that must be reached in order to maintain consistency with this beginning. The philosophical inception of the modern age is itself a subject for philosophy, and thus has become just as continually surpassable, where the insufficiently radical character of the Cartesian Cogito is concerned, as it is integrable into the declining Middle Ages, where the historical conditioning of its need to 'make certain' is concerned. These difficulties have served to arouse an understanding, which was still lacking in the Enlightenment, of the historical conditioning of the foundation of the institution of Christian theology. On the other hand, one must regard the secularization thesis as an indirectly theological exploitation of the historiographical difficulties that have arisen with regard to the philosophical attempt at a beginning of the
modern age. The secularization thesis makes these disturbances of the attempt to carry out something free of all preconditions appear as a sort of providential resistance on the part of what is indispensable. But the modern age does not have recourse to what went before it, so much as it opposes and takes a stand against the challenge constituted by what went before it. This distinction, which will have to be substantiated in part II, makes worldliness the characteristic feature of the modern age without its having to be the result of secularizations.

Translator’s Note

a. A process of 'bringing forth' that is equivocal (i.e., neither univocal nor analogous), in the Aristotelian sense, because it produces a new kind of entity, contrary to Aristotle's principle that "man brings forth man." A traditional term, therefore (interchangeable with "spontaneous generation"), for the original production of life from inorganic material.
Nevertheless the problem remains and reasserts itself: to understand how, in spite of this state of affairs, the idea of secularization could become plausible and even fascinating to historical thought as a possible way of understanding connections in the history of ideas. I have tried to point out the basis of the appearance of secularization in the structure of 'reoccupation.' But this is still not enough to explain the density and seeming impenetrability of the relevant phenomena. The difficulties of historical identity have other aspects besides that of question and answer. The reoccupation of a pregiven system of positions was one pressure of the change of epoch; the other was the pressure to conceal the competition that resulted from the pretension—after the phase of history following the death of Christ, which understood itself as final and unsurpassable—to be 'epoch-making' once again. It was only the launching, now, of a human finality and unsurpassability that gave the “Middle Ages” the intermediate and mediating position that is implied by the name. They were lowered to the rank of a provisional phase of human self-realization, one that was bound to be left behind, and were finally disqualified as a mere interruption between antiquity and modern times, as a “dark age.” But the new claim, once made, shrinks from its consequences, and does so especially by means of style. The early centuries of the modern age exhibit a ‘spirituality,’ or at least an aversion to the world, that is strained, often convulsive, and that sometimes—in appearance—puts everything medieval in the shade. It is above all a world of expressions that persists here. The
sphere of sacral language outlives that of the consecrated objects and is anxiously conserved and used as a cover precisely where philosophically, politically, and scientifically new thinking is being done. But the deficiency of language, the *egestas verborum* [poverty of words] of which Cicero complained in connection with putting Greek philosophy into Latin, must also be considered as a factor necessitating recourse to the traditional stock of means of expression in constructing a secular terminology. The new political theory is perhaps the most significant evidence of this process. Whether the rhetorical possibilities that had resulted from drawing on these linguistic sources were looked for in each case or only found afterward is a question that will seldom be decidable on the evidence available.

I do not regard the longevity of the linguistic elements that bear a sacral imprint as a quasi-mechanistic phenomenon of inertia but rather as an instructive and interpretable state of affairs. The reoccupation of systematic functions during the change of epoch conditions linguistic constancy in a variety of ways. Not only the great questions but also the great words require historical "preparation." This process resembles more than anything else the process of ritualization: An ingrained traditional mode of activity has lost its motivating content of ideas and thus also its intelligibility, so that the schema of the activity is available for a retrospective interpretation and integration into a new context of meaning, which in the process makes use of and secures, above all, its sanctioned status as something that is beyond questioning. In the same way the persistent linguistic element stemming from the sacral sphere also marks a position as one that is not to be disturbed and that possesses both familiarity and consecration for consciousness. But the same phenomenon has also been described as a sort of migration of an attribute that has become homeless on account of the disappearance of its original bearer. This mode of speech initially neutralizes the implication of secularization; it leaves open the question whether the uprooted attribute forces itself onto a new bearer or is drawn to a new need. One will be able to overcome the inadequacy of the metaphors that are used to describe these processes only in the favorable case where such a process can be concretely documented. The way, for instance, in which Giordano Bruno applies the attribute of infinity to the world is based on the logic of his concept of creation, which requires the equivalence of creator and creation and thus facilitates precisely this "migration" of one of the most essential attributes
of God over to the world. If anything deserved to be called secularization, it would be the way this divine attribute comes to be embodied in the world; judged by its intention, this would undoubtedly be an act of expropriation, if the difficulties that arose in the heart of Christian theology as to how to distinguish between the intradivine generation of the Second Person of the Trinity and the act of creation had not paved the way for the 'reoccupation' of the Trinitarian position of the Son by the universe to the point of making it inevitable. Bruno wanted to alienate the most powerful attribute of the Christian tradition, but what he accomplished was only a consequence of the impossibility of integrating that attribute into the medieval system.

In view of this state of affairs, can we say that in the modern age the world "takes over" this attribute from God? To begin with I would like to cite the context in which C. F. von Weizsäcker employs this expression for the secularization of infinity and the consequences that follow from it: "In modern times, the world takes over this attribute of God: infinity becomes secularized. Under this aspect it is most remarkable that our century has begun to doubt the infinity of the world. I believe that in our time a critical examination of secularization is beginning at exactly the same time as secularization is achieving a consistency hitherto unknown." This is an exemplary text for the whole syndrome of the theme of secularization. For the role of natural science in the scrutiny of secularization for which the time is supposed to have come can only relate to its once again detaching the secularized attribute of infinity from the world, and thus being in a position to make ready its restitution. Now I think that here the question arises, if it has not already arisen, whether such a restitution would really benefit the original owner. This is not so obvious as the long-standing association of divinity with infinity makes it appear.

Infinity is an element of extremely worldly metaphysics that found its way into patristic and Scholastic thought by way of Plotinus's speculations. It burdened the medieval concept of God with a quantity of paradoxes that itself can only be described as infinite. The ancient metaphysics of the cosmos was consummated precisely by the success of Plato and above all Aristotle in eliminating the problem of actually infinite space and infinitely numerous worlds. The reappearance of infinity, now in a positive form, was destructive for the medieval Scholastic system above all through its combination with the concept of omnipotence, and had to be so if only because this system was
essentially bound to presuppositions of ancient metaphysics in the form given it by Aristotle. If it were correct that the modern infinity of the universe represented a secularization of this attribute, then it would have set itself free for this transition by its work as an enzyme in the destruction of the medieval system. Not all divine attributes might have become homeless on account of the contradictions that they had produced; in the case of the attribute of infinity, however, there is no question that it had already brought about once before—in Christian dogmatics—the kind of inescapable contradictions that make Kant’s transcendental dialectic conclude with the termination of all dogmatic philosophy. Thus one will have to examine somewhat more closely what the “taking over” of infinity can mean in the context of the constitution of the modern age.

For the concept of infinite space in particular, we have the paradigmatic observations that we can make in the case of Newton and that give rise to doubt about the idea of a ‘transition’ of the attribute from one subject to another. The correspondence between Leibniz and Clarke at the beginning of the eighteenth century, with its dispute about the meaning of Newton’s concept of absolute space, leaves behind it the impression that this concept has a primarily metaphysical foundation. This impression has been strengthened by the fact that the concept of absolute space possesses no characteristic that renders it accessible to objective scientific inquiry and consequently can seem— to the modern observer, who considers superfluous whatever is not quantifiable through observations—like a foreign body, brought in from some extraneous source. Precisely because this concept of space appears as a redundant metaphysical element in the foundation of Newton’s physics, it lends itself readily to connection with the secularization theorem, all the more so as Newton gives absolute space the mysterious designation—of a divine organ of sensation. Whether the expression sensorium dei [God’s organ of sensation] in Newton is to be understood only as a metaphor or in a strict sense is precisely the object of dispute in the Leibniz-Clarke correspondence. In fact this metaphysical fitting out of the concept of space is a secondary motive for Newton, however it is to be interpreted. For it can readily be seen that absolute space, which Newton needed for the definition of the principle of inertia, is described as “God’s organ of sensation” precisely because physical infinity seemed to Newton to be in dire need of justification through
union with the Deity, as His instrument. Space, if one may put it this way, tolerated the attribute of infinity only with difficulty because as an overwhelmingly empty space it was bound to give rise to metaphysical problems. The infinite is, even and not least in medieval mysticism, more nearly an abyss than the sublimity that it was to become. In the tradition, empty space was not only abhorred by nature; it had also been the distinctive dogma of Epicurus's atomism, one which corresponded to his theology of powerless gods, if only because the idea of having an effect across this empty space was unthinkable even for an antimetaphysics. So for Newton there was a strong motive, as soon as he believed that he had to introduce absolute space into his metaphysics, for connecting it with the reality and efficacy of his God, by taking it to be the "infinite extent of the divine presence," as Kant was to put it in his *Universal Natural History and Theory of the Heavens*. Newton had stood between his need in constructing his system to introduce absolute space into the principles of his mechanics and the intolerability of any absolute other than the one absolute and had sought to mediate between them by means of the concept of the *sensorium dei*. And here it must not be forgotten that Newton's space is no longer the space of atomism because the emptiness of this space, on account of the development of the theory of gravitation, no longer had to be the abyss of inefficacy. The unity of the world could be maintained even on the assumption of a plurality of world systems. So for Leibniz also it was not the question of the compatibility of absolute space and divine power that made the reality of this space intolerable for him; rather it was the inapplicability of the principle of sufficient reason to indistinguishable locations in space. The "critical examination of secularization" would have begun here, in the controversy between Leibniz and Clarke about the reality of space, if the infinity of the world had ever been a product of secularization. But Leibniz idealizes space not in the interest of God's omnipresence but rather in the interest of reason's omnicompetence.

Incidently both Clarke and Leibniz were in the right in their dispute about Newton's formula of the *sensorium dei*. Each of them had before him a copy of the first edition (1706) of Newton's *Optics*, and yet in the disputed passage about space they did not have the same text before them. As we have only recently learned, while the first edition was still being produced or delivered Newton had the sheet carrying page 315 replaced and introduced into the text a metaphorical weak-
kening of the “divine sense organ” by means of a preceding “tanquam” [as it were]. Newton’s alarm at being forced to work with the concept of absolute space and thus to make infinity an attribute of the world had at first induced him to relativize the world metaphysically as an organ of divinity, which in its turn had doubtful consequences that caused him to retract the formula, almost at the instant of publication, into a noncommittal metaphor. The rapidity of this move to weaken the phrase seems to leave little doubt that not much profundity and perhaps even less conviction were involved in the disputed formula. This makes it so much the easier for the reader later on to fall into the temptation to import some profundity of his own and to search absolute space for traces of the dispossessed God.

As far as absolute time in Newton is concerned, we should remember that for him the physical world is just as much an episodic event in infinite time as are the systems of matter in space. For him we are separated from the beginning of the world only by the span of time that can be calculated from the Bible, as we know from his work on the chronology of the ancient kingdoms, and its end appears equally conceivable to Newton the speculative theologian in his treatise on the prophecies of Daniel and the apocalypse of John. One could almost say that the infinites of space and time do not, in themselves, imply anything about the reality of the world, and this observation also makes Leibniz’s objection to the irrational absence of proportion between the world event and the indifference of space and time very plausible. Thus Newton would not have understood why the Berlin physicist Walter Nernst became irate at the idea, proposed to him by the young physicist Weizsäcker, that for reasons having to do with energy the world might have only a finite duration. Weizsäcker interprets the physicist’s ire as the expression of his alarm “in the face of the thought that this world might come to an end.” Absolute time, differently than for Newton, had become a characteristic of the world itself. Weizsäcker sees in this experience evidence of a “deeply irrational trait of scientism”: For Nernst the world had “taken the place of God, and it was blasphemy to deny it God’s attributes.” This was a sort of prototypical experience of the evidence of the concept of secularization: Weizsäcker noticed here for the first time that “scientism contained an element that I now would call the secularization of Christian religion.” The reported scene took place in 1938, when Weizsäcker the theoretical physicist had discovered the “carbon cycle” as the source
of the energy of the stars; the exhaustibility of the energetic processes in the cosmos immediately presented itself to him as an obstacle to the infinity of the world and as an authoritative standpoint from which to criticize a "secularized" science whose result had been that in the "frame of mind" of the physicist of the previous generation "the everlasting universe had taken the place both of the eternal God and of the immortal soul." As a biographical hypothesis this cannot very well be denied. But when Nernst, according to Weizsäcker's report, objected that the idea of the universe having a finite duration was no sort of natural science because the infinite duration of time was a fundamental element of scientific thought, he did not need to secularize anything Christian for this purpose. He needed only to have read Aristotle, who derives the characteristics of his God, by a sort of ontological argument, from analysis of the concept of time; that is, while he does not express it, he does prepare the way logically—by a sort of 'desecularization'—for infinity to become a theological attribute. Aristotle considers it to be incompatible with the concept of time to conceive of its alteration, its beginning or its end; consequently time, owing to its concept and apart from any empirical considerations, required an eternal and absolutely regular measure-movement, which in its turn required a metaphysical guarantee in the form of an unmoved mover. Aristotle too would have become irate at the idea of the end of the world because that would involve what he regarded as the self-contradictory and consequently unthinkable end of time. Newton was able to think differently on this subject because for him the end of the world did not carry with it the end of absolute time, which was independent of the world.

As an attribute of progress too, 'infinity' is more a result of embarrassment and the retraction of a hasty conclusion than of usurpation. Early conceptions of progress rely, as Giordano Bruno's does, on the finite model of the ages of man and the growth of experience and maturity that their succession brings with it, or they make the projected scientific progress terminate in a state of systematic completion, as in Francis Bacon and Descartes. In contrast to this, the idea of infinity [Unendlichkeit: literally, endlessness] is initially a mode of resignation: the nonarrival of any evident state of maturity, of the completion of theoretical knowledge and practical norms based on it. Significantly, it is Pascal who first speaks of the infinity of progress. But it is precisely for Pascal that infinity in space and time signifies not the 'rendering
worldly' of a divine attribute but the epitome of metaphysical renunciations and the ambivalence of man between his greatness and his misery. In the fragment of a preface that he wrote for a *Traité du vide* [*Treatise on the Void*] in 1647, Pascal connects the metaphor of the human life span with the idea of an "homme universel" [universal man], who can be thought of as a single ideal subject extending across the sequence of generations, "comme un même homme qui subsiste toujours et qui apprend continuellement" [like a single man who subsists forever and learns continually]. This prepares the way for the basic thought that man was made for infinity: "N'est produit que pour l'infini." This anthropological definition does not harmonize well with the metaphor that compares history to an individual growing to maturity and fulfillment at the high point of his life, then aging and dying. Infinite progress renders perpetual only the first half of the overall process depicted by the organic metaphor: "... tous les hommes ensemble y font un continu progrès à mesure que l'univers vieillit, parce que la même chose arrive dans la succession des hommes que dans les âges différents d'un particulier" [All men together make a continual progress in accordance with the universe's growing older, because the same things happen in the succession of men as happen in the different ages of an individual]. In Pascal's language infinite progress is not the movement that would compensate for the difference between the finite and the transcendent infinite and would finally, after all, secure for the totality of mankind what it denies to the individual. Rather, this infinity in process is the painful actualization of the unalterable disparity between the status of a point, which is all that anything finite possesses vis-à-vis the infinite, and the destiny of man, which finally, despite the fruitlessness of his exertions, allows him by a process of grace to participate in the transcendent infinite, the need for which he comes to know through his experience of the infinitude of progress.

Pascal's conception makes it clear that it is precisely the rationality of progress that withholds the attribute of infinitude from history, inasmuch as man finds his vocation for the infinite to be unfulfilled in history. The whole of humanity, the *homme universel*, is after all only a fictive subject of history. "Humanity as a whole," Goethe wrote to Schiller on February 21, 1798, could indeed comprehend nature, but because humanity is "never together" in one place, nature is able to "conceal itself" from man. The hypostatizing of the fictive subject of
history as its ‘absolute spirit’ appears as a logical result of this irreducible backwardness of each individual and generation in comparison to the totality of history. Ludwig Feuerbach described this metaphysical device, by means of which the unattainable is after all overtaken, as descended from the ‘creation from nothing’ and thus as the result of a secularization, which, however, is negatively evaluated here insofar as the point of departure of the process is an object of nothing but scorn: “Our philosophers have turned the absolute nonsense of a creation from nothing, or of a being that creates the world from nothing, into the absolute spirit.” In fact, however, every speculative subject of history must be seen as compensation for the disappointment resulting from the fact that the individual does not enjoy the benefit of the asserted rationality of history, but on the contrary, this asserted rationality for the first time makes the contingency of his temporal position in an infinite process really unbearable.

Infinity is more a predicate of indefiniteness than of fulfilling dignity, more an expression of disappointment than of presumption. If the attribute had migrated after getting free of theology, at any rate it could not have done so without changing its function and forfeiting its positive quality. As an expression of indefiniteness it serves the economy and critical self-limitation of reason more than its search for a metaphysical surrogate. Descartes had still explained the capacity of human self-consciousness to conceive of itself as finite as a result of the negation of an idea of the infinite that, while it was innate, was not derivable from experience in the world, distinguishing in this way between the immanent function and the transcendent origin of the concept. In opposition to this view, Hobbes had maintained that the concept of infinity contains no positive characteristic whatsoever: “And although this word infinite signify a conception of the mind, yet it follows not that we have any conception of an infinite thing. For when we say that a thing is infinite, we signify nothing really, but the impotency in our own mind; as if we should say, we know not whether or where it is limited.” The infinite serves from this point onward less to answer one of the great traditional questions than to blunt it, less to give meaning to history than to dispute the claim to be able to give it meaning.

Our discontent with progress is discontent not only with its results but also with the indefinite character of its course, the lack of distinctive points, intermediate goals, or even final goals. The recovery of the
finitude of history by means of the idea of a final and conclusive revolution that brings the process of history to a standstill is made attractive, as an antithesis to infinite progress, by that very progress itself. The logic of this countermove is perfectly comprehensible without any need to have recourse to the instrument of secularization, whether of paradise or messianism. What matters here is perhaps less the genesis of ideas than the readiness to receive them. The idea of a final situation like that proclaimed by the *Communist Manifesto* cannot simply translate impatience and dissatisfaction with infinite progress into the demand for definitive historical action; it must also be accompanied by a theory of the possibility of such action. In this case that theory consists in the combination of the positive and unlimitable progress of industrialization with a negative progress of immiseration, which is its necessary correlate, but which in accordance with the logic of self-preservation can only be finite. The combination of the two concepts of progress, the infinite and the finite, in one conception means that they could not be products of secularization, whether of an infinity usurped by history or of an eschatology transplanted into it.

Besides, the superficial similarities obscure deeper differences. It does not matter whether a situation of paradisaic satisfaction is worldly or unworldly; the crucial question is still whether this situation is to be brought about immanently or transcendently, whether man can achieve it by the exertion of his own powers or has to rely for it on the grace, which he cannot earn, of an event breaking in upon him. Language encourages us to overlook this difference. Here, as elsewhere, it creates the appearance of secularization. There is nothing in which language is more productive than in the formulation of claims in the realm of the intangible. As Hobbes, again, put it, the most insubstantial arguments are sufficient to awaken hope, and even things that the mind cannot conceive can become objects of hope as long as they can be expressed in words.\textsuperscript{10}

While the basic principle of all hermeneutics has to be that more can be thought than can be expressed (and still more in afterreflection than in forethought), we must assume at least in the case of the concept of happiness that its historical potency is due merely to what is evoked by the means by which we express it. Kant indicated the reason for this when he laid it down that ideas of existential fulfillment cannot be objective. The fact that there is no objective concept of happiness
[objektiven Begriff vom Glück] is lucky [ein Glück] for us. It protects us from those who, on the pretense of its being objective, think that they can force everyone else to be happy. When Christian theology was confronted with the Hellenistic world’s demand that it formulate its promises more precisely, it projected the philosopher’s happiness of bliss-conferring ‘contemplation’ into its new ‘next world.’ This conception could have anticipated the later subjectivity of the concept of happiness—something that the context of the medieval system, however, did not permit. What was created was a concept of happiness that could not be disappointed by concrete experience; hence the possibility of the reoccupation of the position of a concept of fulfillment that was originally immanent to the world and bound up with the ideal of the life of theory. Even a radically altered conception of individual and social existential satisfaction could formulate, not indeed its content, but the urgency of its claim in the same language in which this had been done previously. The constancy of language is an index of a constant function for consciousness but not of an identity of content.

Translator’s Notes


b. Anschauung: ‘thoughtful observation,’ the nearest modern term to theoria.
The reoccupation that is the reality underlying the appearance of secularization is driven by the neediness of a consciousness that has been overextended and then disappointed in regard to the great questions and great hopes. The decisions that were once made outside this world in the absolute acts of divinity and are now supposed to be accomplished in and through man, as moral, social, and political actions, did not, as it turned out, permit a successful transition to self-disposition. But even apart from its significance for historical explanation, the persistence in language of a stratum of expressions also has the consequence that what had already become metaphorical can again be taken literally. Such misunderstandings have their own kind of historical productivity.

Certainly it would be an exaggeration to say that the absolutisms of political theories all result from this process of taking secularized stylistic means literally. It would be equally plausible to suggest that for the consciousness of people at the time, the language of theological absolutism served only to bring the cause of political absolutism into the sphere of what was familiar and sanctioned and hence to be accepted fatalistically. Here I would no longer speak of the "Trojan horse" of a stratum of expressions;* this demonizes the natural disposition of traditional linguistic means into a cunning of the reason employing them, which cannot be asserted without stronger evidence.

There is no need at all for such artful analyses when one bears in mind that theological absolutism had provided the 'experimental'
demonstration that it was humanly unbearable in the political effects of the multiplication of its religious denominations. While Thomas Hobbes, in the middle of the seventeenth century, could still proceed from the assumption that the unity of a state religion, as a way of neutralizing the effect of religious energies on political reality, was not only possible but also enforceable, by the end of the century Pierre Bayle already saw religion as the state’s insoluble problem. This insight led Bayle to the postulate, which he alone articulated, that only a state made of atheists could be a good and a satisfactorily functioning one.¹ While it is true that Bayle’s argument influenced Hume, Gibbon, and Feuerbach, for the interpretation of the historical process it is only an illustration of the mirror-image correspondence of political to theological absolutism. In fact, what happened was that the intolerability of the factionalization of absolute positions within the state was counteracted by the transfer of the category of the unconditional friend/enemy relation to the conflicts between the national states that were in the process of integrating themselves. This was why it could become a special feature of the modern age as seen by historians that the acuteness of an internal crisis could be overridden by the absoluteness of an external one. This procedure belonged among the tools of political practice up to the moment when the settlement of external crises began to put in the shade anything of which internal crises were capable in terms of lethality, and thus disqualified itself as an alternative. But the process of overriding internal conflicts by external ones had had the consequence that the conflicts that had become absolute in the religious schisms could be subordinated to, and even made useful for, the primacy of interests that in their turn laid claim—above all through the consecrating effect of sanctioning² attributes—to represent the absolute. The symmetry of the development of internal conflicts between absolute positions and the setting up of an absolute agent may be describable as an “inducing” process but hardly as the transfer of specific attributes from the one realm to the other. The point of departure of this process had been defined by the absurd situation that Christianity’s claim to the status of an absolute had become a politically tangible reality for the first time in the extremely confined space of the plurality of its denominations. In this situation, the surrender to the state of privileges previously reserved for religion was more nearly a necessary renunciation than a coerced removal, if Hobbes’s account of the rationality of the contract of subjection is
supposed to have any reference to reality at all. For the phenomenology of worldliness it may not matter whether that worldliness came into being through self-surrender or through removal by a foreign agency, but for the consciousness of legitimacy that is possible in the resulting situation this makes all the difference. I have been criticized on the grounds that “questions of legitimacy are essentially foreign to science,” that science is exclusively concerned with (and that in fact I am too little concerned with) the truth. Even if historians had not always concerned themselves with questions of legitimacy to the extent that they appear as determining elements in the historical process, the use of that concept would in any case be secondary here in relation to the concept of secularization; and in regard to the alternatives the latter sets up, the only question that arises is the question of truth or falsehood.

Three centuries after the national state took on the pseudomorphous qualities of the absolute authority, it becomes evident that the projection of the category of enmity onto the relations between states is no longer a viable procedure, and even its further intensification in the all-encompassing antithesis of the East/West dualism has only been a short-lived interlude. It is not impossible that this may cause internal conflict to take on a new and (this time) nondivertible intensity—unless it turns out that the experiment of absolute authorities has been played through to its conclusion. When it is no longer possible to believe that the decision between good and evil is going to occur in history and is immediately impending, and that every political act participates in this crisis, the suggestiveness of the ‘state of emergency’ [Ausnahmezustand] as the normal political state disappears. Expectations of unlimited self-sacrifice and of the total summoning up of strength and possessions lose their conjuring power to the extent that they can no longer appeal to the absolute character of the perils to which the state and the form of life of its citizens are exposed. The end of the primacy of the political can be seen in the widespread assertion of its omnipresence. For that primacy does not consist in the fact that everything is political but rather in the fact that the determination of what is to be regarded as unpolitical is itself conceived of as falling within the competence of politics—analagously to the earlier theological determination of what would be left to the ‘worldly’ authority as its sphere of competence.
The proposition that "all the significant concepts of the modern doctrine of the state are secularized theological concepts" was first laid down by Carl Schmitt in 1922. Both in the factual assertion that it contains and also in the deductions that it inaugurates, it is the strongest version of the secularization theorem. What is remarkable, methodologically, about Carl Schmitt's "political theology" is that it finds any value at all in this secularization nexus since (as it seems to me) it would have been more natural, in view of the intention of this "political theology," for it to establish the reverse relation of derivation by interpreting the apparent theological derivation of political concepts as a consequence of the absolute quality of political realities. The recourse to the sanctioned vocabulary of theology would be an expression of an acute concern to make comprehensible the exigencies that it was meant to help express. For that there can no longer be any such realities and exigencies is the position antithetical to Schmitt's, a position which he sees as the result of the Enlightenment: "The rationalism of the Enlightenment repudiated every form of the exceptional case." For the Enlightenment, the repudiation of the 'exceptional situation' [Ausnahmezustand] was primarily related to the laws of nature, which, no longer conceived as legislation imposed upon nature but rather as the necessity issuing from the nature of things, could not allow any exception, any intervention of omnipotence, to continue to be possible. The idea of the equality of men before the law was constructed, as was the idea of the inviolability of a constitution, by analogy to this idea of the law of nature, with its complete freedom from exceptions. It is undoubtedly true that the contours of the reality of the state become obscured to the extent that what it has to guarantee is taken to be a rational matter of course.

From this point of view it is certainly correct to say that an emphasis on limiting cases and exceptional situations insists on a function of the state that must take as its point of departure the failure of the Enlightenment; but that need not necessarily mean that it has to go back to the species of concepts that preceded the Enlightenment and repeat that species in its 'secularized' form. It seems to me, then, that what lies behind the proposition that the significant concepts of the modern doctrine of the state are secularized theological concepts is not so much a historical insight, as Carl Schmitt asserts when he explains that these concepts were "transferred from theology to political theory," as it is a dualistic typology of situations. Consider, for example,
the proposition that "the omnipotent God became the omnipotent lawgiver." If this assertion were correct, then the other could not also hold, according to which after the failure of the Enlightenment the conservative counterrevolutionary writers attempted "to support the personal sovereignty of the monarch ideologically by means of analogies drawn from a theistic theology." Analogies, after all, are precisely not transformations. If every metaphorical borrowing from the dynastic language treasures of theology were 'secularization' in the sense of transformation, then we would immediately stand before a mass of products of secularization that would have to be entitled "Romanticism."

In this situation the choice of linguistic means is not determined by the system of what is available for borrowing but rather by the requirements of the situation in which the choice is being made. When Carl Schmitt characterizes De Maistre's political philosophy as the "reduction of the state to the element of decision, and consequently to a pure non-reasoning and non-discussing, non-self-justifying absolute decision, that is, a decision created from nothing," then this is not the secularization of the *creatio ex nihilo* [creation from nothing]; rather it is a metaphorical interpretation of the situation after the revolutionary zero point. The revolution itself had made its appearance in historical disguise, using the rhetoric of the great traditional legitimations—which are not necessarily a vehicle for substance—in order to perform "the task of [its] time in Roman costume and with Roman phrases, the task of unchaining and setting up modern bourgeois society." In relation to the subject of secularization in particular, it is important to observe that in making their history, it is possible for men to use the gesture of a *creatio ex nihilo* 'Romantically' and in such a way as to establish historical continuity; and on the other hand, it is possible for them to use historical mimicry in the service of innovation. "And just when they seem engaged in revolutionizing themselves and things, in creating something that has never yet existed, precisely in such periods of revolutionary crisis they anxiously conjure up the spirits of the past to their service and borrow from them names, battle cries and costumes in order to present the new scene of world history in this time-honored disguise and this borrowed language." Accordingly, what underlies the phenomena of linguistic secularization cannot be an extensively demonstrable recourse to theology as such; rather it is a choice of elements from the selective point of view of the immediate
need, in each case, for background and pathos. The Revolution needed not only a reservoir of political expressions but a pagan one; its strongest effects, indeed, were achieved in the nakedly laconic style of the great statements typified by the secularization decree of the National Assembly in 1789: "Tous les biens ecclésiastiques sont à la disposition de la nation" [All church property is at the disposition of the nation]. It is quite plausible that the Restoration could only see itself here in the role of a *creatio ex nihilo*. This functional way of viewing the matter makes it improbable that the process of secularization can be divided into phases following the analogy of Comte's schema of the three stages.6

Is "political theology" only the sum of a set of metaphors, whose selection reveals more about the character of the situations in which use is made of them than about the origin of the ideas and concepts that are employed in dealing with such situations? In a book entitled *Politische Theologie II. Die Legende von der Erledigung jeder Politischen Theologie* (Berlin, 1970), Carl Schmitt has undertaken to resist "the legend that all political theology has been definitively disposed of." The most important question that arises in relation to this reopening of a subject first raised half a century earlier is the question whether the interpretation of "secularization" that is employed has changed or remained the same. What is perhaps the most instructive testimony relating to this question is located in a footnote: "All my statements on the subject of political theology have been the assertions of a legal scholar about a systematic structural kinship between theological and juristic concepts that obtrudes itself both in legal theory and legal practice." This formulation reduces the secularization thesis to the concept of structural analogy. It makes something visible—and is consequently by no means without value—but it no longer implies any assertion about the derivation of the one structure from the other or of both from a common prototype. When, for instance, the monopolization of power by the state or by a particular political authority is said to be structurally comparable to the theological attribute of omnipotence, then this now relates only to the coordination, within a systematic context, of positions that are distinguished by the fact that they both carry the universal quantifier "all power...." But is this already sufficient to justify talk, on the side of political theory, of a "political theology"?

Nor is the development that can be seen in the great example of Hobbes—the deprivatization of religion as the mark of the new 'omni-
presence of politics—something that might have been done by theology 'through politics.' This can clearly be seen when Hobbes finds as the basis for a public religion only the lowest common denominator of Christian confessionalism, the more laconic than expressive formula that "Jesus is the Christ."94 This sort of theology corresponds functionally, though not of course in the names and words that it employs, to the techniques that Voltaire employed in propagandizing for tolerance with the recommendation that we not take theology in general (and thus also the differences between theological doctrines) too seriously, and that we defend God's goodness by no longer asserting His omnipotence. The implication of the functional interpretation is that Hobbes already meant the same thing, though he did not say it. For Carl Schmitt, conflicts of the sort that Hobbes extirpates (rather than settles) by reducing them through the harmonizing formula (which is just as political as it is theologically insignificant) to the lowest common denominator of a public religion—"extirpates" because what is decisive is not the content of the formula but rather the decree that promulgates it, which the content only makes it easier to put into effect—such conflicts, for Carl Schmitt, cannot be reduced to opposing substantial poles. Militancy is not a function of substance. I do not know whether the following statement is also the legal-theoretical assertion of a legal scholar, but for the problematic of secularization it is very significant: "A conflict is always a contest between organizations and institutions in the sense of concrete orders, a contest between 'competent authorities' [Instanzen], not between substances. Substances must first have found a form, they must have organized themselves, somehow, before they can even confront one another as agents capable of a contest, as parties belligérantes."95 Thus secularization cannot be the result of a withdrawal of substance either; it is, again following the model of Hobbes's thinking, the integration of the religious interest into the public interest for the purpose of reducing the number of authorities 'taking part' in consciousness. The principle that there is no such thing as a conflict between substances is fundamental to the conception of a "political theology": the latter's job is to distill out what can then be decreed, so that it can be made a punishable luxury to want to keep for oneself something more as the realm of competence of [private] conviction. It is not a secularized theology but rather the selection from theology of what will be tolerable in the world, which then in its turn can be given out as the norm governing the content of what
is decreed. Conflict disappears for the almost scandalously simple reason that there cannot be two absolute authorities, even if, since Gnosticism, there has been the paradigm of two absolute substances. Truth belongs on the side of substance; it cannot be altered at the level of authorities, though it can indeed (to the extent that it is not publically disruptive) be integrated and thus made less dangerous as something to which appeal could be made to justify insistence on private autonomy. To that extent truth is not functionalized, but neither does it become a legitimizing power: *Auctoritas, non veritas facit legem* [Authority, not truth, makes the law], but precisely not *Auctoritas facit veritatem* [Authority makes truth]. The old *consensus omnium* [consensus of all] is no longer the criterion of truth because the teleology of human reason manifests itself in it but because in view of the particularism of interests and convictions, the possibility of agreement represents something like their solid and indispensable core. Since worldliness is a form for the reduction of antagonistic positions, the title of a “political theology” becomes the equivalent of that which does not indeed become worldliness itself but guarantees its continuance. It is the summation of the premises of self-assertion, and hence designates as an absolute enemy anyone who asks for even a supposedly harmless addition.

At this point a terminological difference can be instructive that came to light when Carl Schmitt objected that I did not deal at all with the “legitimacy” of the modern age but only with its “legality.” The idea that underlies this correction is that the rationalism of the Enlightenment is a sort of code of reason, from which what was ‘lawful’ in the epoch would be ascertainable, without allowing the contingency of this system’s validity to be exposed. I understand this criticism very well: Legitimacy for Schmitt is a diachronic—historical or horizontal—relation of foundation, producing the inviolability of systems of order out of the depths of time, as it were, whereas legality is a synchronic structure, read vertically, which supports a finding by its relation to a norm, a norm by its relation to a higher-level norm. By this logic the modern age would be legitimate if it was still the Middle Ages, though of course continued ‘by other means.’ The objection that under the title of legitimacy, what I was concerned about was only legality, puts in question the status of the book’s problematic and its thesis as historical. As a criticism this could hardly be stronger.
But the legitimacy of the modern age that I intended is a historical category. It is precisely for that reason that the rationality of the epoch is conceived as self-assertion, not as self-empowerment. It is very different, on the one hand, to say that a rationalism has no need of historical justification, that it constructs itself autonomously from within itself and is indifferent to the conditions prevailing at the time when it is put into effect—which only corresponds to its self-definition—and, on the other hand, to insist that the doubtful and in fact disputed claim made by this rationality to have substituted a standardized process for the contingency of history has a specific historical function of self-assertion. Here, I think, Carl Schmitt has not done justice to the argument when he says, “Its immanence, which directs itself polemically against a theological transcendence, is nothing but self-empowerment.” Legitimacy becomes a subject of discussion only when it is disputed. The occasion for talk of the legitimacy of the modern age does not lie in the fact that this age conceives of itself as conforming to reason and as realizing this conformity in the Enlightenment but rather in the syndrome of the assertions that this epochal conformity to reason is nothing but an aggression (which fails to understand itself as such) against theology, from which in fact it has in a hidden manner derived everything that belongs to it.

In regard to what reason can accomplish, the occasion for its undertaking these accomplishments can be a matter of complete indifference; but in regard to what it does in fact accomplish, the radicalness of requirements and challenges, of disputes and problematics cannot be ignored. Self-assertion determines the radicalness of reason, not its logic. An extreme pressure toward self-assertion gave rise to the idea of the epoch as a self-foundation—which is simply not to say a self-empowerment—a self-foundation that emerges from nothing. It must seem paradoxical to Carl Schmitt that the legitimacy of an epoch is supposed to consist in its discontinuity in relation to its prehistory, and this paradox prevents him from thinking that anything else could be at issue but mere legality vis-à-vis a hypostatized reason that decrees positive laws.

Here is the heart of the difference between us: For Carl Schmitt, the political theorist, secularization is a category of legitimacy. It gives access to the depth dimension of history for the benefit of present moments endangered by their contingency. It produces historical identity, and here it matters little that this occurs precisely ‘by other means.’ The products of secularization are epitomized in ‘political
"theology" itself, the designation of which, however integratively it might have been intended in relation to the tradition, really only veils the fact that what is meant is 'theology as politics.' It is almost inevitable a priori that a juristic positivism must ally itself with the historical factor that puts the contingency of positive institutions beyond the reach of observation. This is why decisionism derives its relation to legitimacy from the negation of voluntarism—because voluntarism is, as it were, the institutionalized instability of absolute power, while decisionism 'lives' from the fact that the 'decisions' have always already been made, that they appear in the form of historical authorities [Instanzen], just as for Hobbes the contract of subjection can never be one that is yet to be sealed but is only one that is inferred to have gone before. However much positivisms tend to behave as if they were unhistorical, their logic requires one again and again to establish connections with a ground that is beyond question. This is what makes the secularization theorem attractive for the 'decisionistic' political theorist: What has the appearance of illegitimacy when seen from the point of view of the participants holds a promise of legitimacy when seen 'from a higher point of view.'

Carl Schmitt has complained that I gave "an inducement to misunderstandings" by deciding to "lump together" his theses on secularization "with all sorts of muddled parallelisms of religious, eschatological, and political ideas." This reproach is justified. It was the second (1970) Politische Theologie's working out of the conceptual differences in relation to 'legitimacy' that made clear for the first time what had been the basis of the preference for the concept of secularization in the first (1922) Politische Theologie.

But perhaps one can or must go yet one step further. From the point of view of all kinds of requirements for legitimation, not only did rationalism make a disturbing and destructive entrance, but when the ground had been cleared and leveled, it proved to be sterile as far as new conceptions were concerned. The meagerness of what was left as a plan of construction in the wake of the great critical accomplishments of the Enlightenment left to Romanticism the sublime opportunity for a creatio ex nihilo. Carl Schmitt sees this not as the result of a failure of the Enlightenment but rather as the unexpected form of what rationalism, following Descartes's program, had originally claimed for itself but had been unable to carry out. For Schmitt also characterizes the concept of history employed in The Legitimacy of the
Modern Age as one that implies, instead of a creation from nothing, "the creation of nothingness as the condition of the possibility of the self-creation of a perpetually new worldliness." But this book's concept of rationality is neither that of an agency of salvation nor that of a creative originality either. On the analogy of the principle of sufficient reason [Prinzip des zureichenden Grundes: Leibniz], I would like to entitle this concept that of a sufficient rationality [einer zureichenden Vernunft].

It is just enough to accomplish the postmedieval self-assertion and to bear the consequences of this emergency self-consolidation. The concept of the legitimacy of the modern age is not derived from the accomplishments of reason but rather from the necessity of those accomplishments. Theological voluntarism and human rationalism are historical correlates; thus the legitimacy of the modern age is not shown as a result of its 'newness'—the claim to be a modern age [Neuzeit: new age] does not as such justify it. Consequently my use of the word "legitimacy" cannot "simply turn on its head" its classical use, by designating this time, contrary to every rule, "a justification based on newness, instead of a justification based on duration, antiquity, historical extraction, and tradition." It is true that in part II of this book an attempt is made at presenting a 'historical' justification accomplished by other means than appeal to quantity of time and to continuity. If it turned out to be possible to produce historical arguments as well for the rationality of the rationalism of the modern age, this would, in view of the whole structure of the argument, not amount to a demonstration of any competence beyond that required by the modest finding of self-assertion.

The connection between the concepts of secularization and legitimacy has been made clearer by Carl Schmitt's counterargument, and precisely by the way in which he has recently cast obscurity over his theory's need for the secularization pattern as an 'expedient' in the context of the question of legitimacy. Here one must not lose sight of the difference between rationalism and voluntarism, insofar as it comes through in the philosophy of history. Rationalism has the advantage that it can base its mode of operation on impersonal 'mechanisms,' that is, it need not rely on rational subjects—even of the 'world spirit' [Weltgeist] type—and their rationality alone. Even Darwinism is still a derivative of rationalism: It causes perfection to be produced with the dependability of a blind mechanism. Voluntarism is necessarily dependent on a subject, be it only a fictional one. Hence
it requires 'persons,' be they only 'legal persons.' Decisionism cannot function without a 'sovereign,' be it only a metaphorical one. Thus this position in political theory has a need for metaphor, and it connects that metaphor to its problematic of legitimacy by means of the assertion of secularization. In fact, though, what this dogmatics requires from the old theology is only a single element, with which it takes its stand against every form of deism and pantheism: that of the absolutely sovereign God-person. The feat of deducing from the necessity of will in the state the necessary existence of the willing person had already been attempted by Hegel. He made the "will's abstract, and to that extent ungrounded self-determination in which finality of decision is rooted," be embodied as the "absolutely decisive moment of the whole" in one individual, the monarch, so that the initially abstract will can "consolidate" itself and thus gain a concrete content in history.\textsuperscript{11}

Hegel himself compared this inference from the concept of that which "has an absolute beginning in itself" to the existence of this latter, "which reabsorbs all particularity into its single self, cuts short the weighing of pros and cons between which it lets itself oscillate perpetually now this way and now that, and by saying 'I will' makes its decision," with the "ontological" proof of the existence of God, and no doubt found the incomparable dignity of the argument confirmed by this comparison.\textsuperscript{12} But precisely this reference to the argument of Anselm of Canterbury makes it impossible that this train of thought could contain an element of secularization. For the medieval inventor of the argument himself distinguishes between the God of his proof, than Whom nothing greater can be thought, and the God of his revealed faith, Who is greater than anything that can ever be thought. In other words, Hegel’s appeal to the ontological argument cites what (if it succeeded) would be the showcase example of the kind of rational accomplishment of which every conceptual realist can only dream: to infer from a concept the existence of the thing corresponding to it. But Hegel does not thus by any means implant a key element of the Christian tradition in idealism. For legitimacy does not come from the uncaused beginning, the necessity of which is supposed to lie in the concept, either; rather it comes from that "consolidation" that fills the abstract with concrete contents.

The ontological deduction of the existence of the sovereign is a device that Carl Schmitt does not imitate, if only because the absolutism of sovereignty prohibits arguments even about its concept: "About a
concept as such there will in general be no dispute, least of all in the history of sovereignty. . . ." In any case an ‘ontological’ argument could hardly take a ‘limiting case’ concept as its point of departure since there is no authority competent to decide ‘who decides on the existence of a state of emergency.’ This difference from Hegel’s argumentation, which although it operates with the concept of the will is entirely rooted in the rationalism of the ontological argument, enables us to understand Carl Schmitt’s ‘need’—admittedly, an unfulfillable need—for secularization. The extent of this difference is the extent to which ‘political theology’ is intended as theology. Because a person is required, there must be secularization to produce him, and indeed to produce him from the resources of the very tradition to which the concept of a person belongs as an indubitably autochthonous element. One has to be surprised, in any case, that among the many recorded instances of the secularization thesis, the concept of a person plays no special role, indeed hardly appears at all. But in the case of Carl Schmitt the reservation is necessary that the bearer of what is ‘in the highest sense decision’ can be a person only in a metaphorical sense—and must not be one literally because at the same time that he provides the capacity for decision, the ‘person’ must also provide legitimacy for the decision. ‘Political theology’ is a metaphorical theology: the quasi-divine person of the sovereign possesses legitimacy, and has to possess it, because for him there is no longer legality, or not yet, since he has first to constitute or to reconstitute it. The enviable position in which the ‘political theologian’ places himself by means of his assertion of secularization consists in the fact that he finds his stock of images ready to hand and thus avoids the cynicism of an open ‘theological politics.’

It was the utopian Campanella who first described Machiavellianism as the result of Aristotle’s having promoted the idea of religion being ‘tantum politicam inventionem’ [only a political invention]. The historical attitude has made Campanella’s imputation superfluous. The assumption of secularization allows the ‘political theologian’ to find ready for use what he would otherwise have had to invent, once it turned out after all not to be something whose existence could be deduced.
Translator's Notes


b. The term "sanction" itself embodies, etymologically, the process of transition that the author is discussing here. It derives from the Latin sanctire, to render sacred or inviolable, and (hence) to ordain, decree, or ratify.

c. In legal and political theory, *der Ausnahmestand* denotes what we usually call, in English, a "state of emergency," that is, a situation that cannot be dealt with by normal legal processes and requires that extraordinary measures be taken.


e. *Selbstermächtigung*: giving oneself authority. This term (which, as will be seen, was applied by Schmitt to the author's conception of modern rationality) implies a self-willed refusal to submit to the historically established process whereby authority is conferred. To those who are steeped in this sort of terminology, then, it has the connotations almost of a 'seizure of power,' the antithesis of political/legal 'legitimacy.'

f. *Dezisionismus* is the doctrine, promoted in Germany by Carl Schmitt, that legal validity resides ultimately in decisions rather than norms. (These decisions are of course normally thought of as the decisions of 'competent authorities,' identified as such by reference to norms, but there can be no authority competent to 'decide' who is the ultimate decision maker—who is the 'sovereign?')
In the realm of expressions suggestive of possible secularizations that can be subjected to the methodical analysis that I have recommended, we are undoubtedly dealing also with rhetorical effects and hyperboles. The complex of “political theology” that has just been analyzed bears the marks of secularization as a specific intentional style. One reads in Carl Schmitt that “the ‘omnipotence’ of the modern lawgiver, of which one is told in every textbook of public law, derives from theology in ways that are not merely linguistic.” Hearing this assurance, one may hesitate: not merely linguistic? Then the same would hold for the stage god that Carl Schmitt introduces in order to characterize the ultimate concepts and arguments of the literature of public law as they relate to the character of the interventions of the state, which it carries out “now like a deus ex machina deciding by way of positive legislation a controversy that the free act of juristic knowledge was not able to resolve in a way that was generally acknowledged to be correct, now as the benevolent and compassionate agent who demonstrates his superiority over his own laws through pardons and amnesties.” Thus this lawgiver can even be a deus ex machina as long as he is not himself the “monteur [setter up] of the great machine” since this metaphor is reserved by tradition for the Enlightenment’s retiring divine sovereign. It is a matter of establishing a rhetorical distance, where in order to avoid the metaphor of the mechanism, with its fixed historical associations, even the reduced level of seriousness of the metaphor of the theater is acceptable: To the observer from a
distance, the total picture of the contemporary conception of the state
presents itself as "a great cloak-and-dagger piece..., in which the
state acts under numerous disguises but always as the same invisible
person."

This example shows how in the broad field of the linguistic phe­
nomena that could provide evidence of secularization, each case requires
the methodical protection provided by an analysis of its function. Talk
of the "omnipotence" of the lawgiver is itself clearly a 'power play'
of political theory, for which an allusion to the strongest possible point
of comparison is almost automatic. Secularization as an intentional
style consciously seeks a relation to the sacred as a provocation. A
considerable degree of continuing acceptance of the religious sphere
in which the language originates has to be present in order to make
possible such an effect, just as 'black theology' can only spread its
blasphemous terror where the sacral world still persists. In the Middle
Ages mysticism and courtly love worked together, lending back and
forth the linguistic treasures and the rules of heavenly and earthly
love. For the most part, if one considers only the most magnificent
source—the Song of Solomon—content was only being brought back
from the sacral language that the profane had earlier turned over to
it; but an element has been added that makes the theft and carrying
over seem daring and risky. This daring skirting of the boundary of
the permissible is itself one of the forms of proving love, and also part
of the linguistic gesture (a means of impressing an audience) that
returns again and again in the various forms of secularization: the
presumption of doing what has never, for any other purpose, been
dared but is nevertheless undertaken in this unique—and thus
'absolute'—case. The symmetry of erotic elements in mysticism and
mystical elements in eroticism need not plunge analysts into depths
of obscurity; though it may not yet be a matter of limiting concepts,
this certainly is a case of skirting the limits. The Middle Ages had
found that just about every content was capable of spiritualization,
and thus had opened up a wealth of expressive possibilities, of which
anything could partake secondarily that seemed to need and to be
capable, perhaps no longer of that spiritualization, but still of the
obligatoriness that went with it.

The phenomena of linguistic secularization extend all the way from
the conceptual function of resolving the problem of an acute lack of
means by which to express a novel state of affairs to the rhetorical

function of evoking effects along the spectrum between provocation and familiarity by means of an emphatic display of the terminology's marks of derivation. Nietzsche was reaching for the most incisive formula of usurpation imaginable when he made the "I am that I am" [Exodus 3:14] into the utterance of an invalid who suffers precisely from being the person that he is. The self-designation of Yahweh is put in the mouth of the diametric opposite of the self-identical pride of life: "I am who I am: how could I ever get free of myself?" For another example, one would only have to trace the use or misuse of the nomenclature of Christmas in order to have before one the affective ambivalence of such 'quotations.' For Heinrich Heine, Shakespeare, whose dramas he wants to call "the worldly gospel," was born "in the northern Bethlehem that was called Stratford-on-Avon." But also: "Zweibrücken was the Bethlehem where the young freedom, the saviour, lay in its cradle and bawled the world's salvation." At almost the same time Goethe, who had been reading Galileo, wrote in his diary that Newton was born in the year in which Galileo died (which, in spite of calendar confusion, is still not quite correct) and added, "Here lies the Christmas Day of our modern times." Somewhat earlier, in his revision of Zelter's article on Haydn's Creation, Goethe had described the composer's birth as follows: "Finally there appeared unannounced, on the border between two nations, in the manger of a wheelwright's shop, the new Wunderkind, born into earthly poverty, who was to deliver our art from leading strings and from foreign systems of form...." More than half a millennium earlier the Hohenstaufen, Frederick II, whom Nietzsche was to describe as the first European to suit his own taste, in a letter written as an excommunicated heretic in August 1239 to his native town of Jesi on the borders of Ancona had chosen the defiant and haughty formula that this town, "where our divine mother brought us to light," was "our Bethlehem." Precepts of rhetorical daring make the result of linguistic secularization, from allusion to frivolous comparison, a basic element of literary style. The notion of 'renaissance' also belongs here, which frequently makes literary appearances in the vestments of sacral ideas of rebirth and the related cult symbols. The point of such acts of daring may be exhibited in an anecdote that we are told about Francis Bacon: In the garden of the earl of Arundel, who had on display a large number of ancient statues of nude men and women, Sir Francis comes to a
sudden halt and proclaims his amazement with the exclamation, “The resurrection.”"10

An objection has been lodged against my association of this Bacon anecdote with the rhetoric of secularization: “Perhaps what speaks here is not at all, or not only, a rhetorical daring that is conscious of its use of a frivolous equation as a technical expedient, as Blumenberg imagines, but rather genuine disconcertedness.”11 A fine and welcome correction, if there was need of one. But then follows a further definition of the context of that “disconcertedness,” which is supposed to be kept open as to what Bacon might have felt: “Who knows whether at this moment the ancient world’s ‘being,’ at rest in itself and perfect, did not dawn upon Bacon in a Christian perspective: in the eschatological image of mankind resurrected and awakened to its perfection.” But that is too fine to be true. Bacon’s recovery of paradise is not connected with a resurrection of any kind. The identity of the hypostatized subject of science, in which individuals and generations are completely dissolved, is at the same time the identity of a mankind achieving the future perfection of domination over nature. There was no need to assure justice for those whose decease preceded that perfection. Bacon’s idea of paradise is not eschatological, because it is pagan. It presupposes a strict symmetry in history: The future reproduces the beginning in the form of the parasitica domination of nature by means of the sole power of the word. Because Adam had given the beasts in paradise their names, he was able to call them by their ‘true names’—and “call” for Bacon is the equivalent of “command.”12 Bacon has entirely separated his idea of paradise as man’s exercise of power through the word from the tradition of the ideal of theory as the highest fulfillment, and from the tradition of the next-worldly visio beatifica [beatific vision] that was derived from that ideal. His paradise is closer to the undercurrent of magic, and would be the secularization of that, if it had need of secularization. Now all of this may not alter my critic’s view of the scene in the garden of Arundel; but Bacon’s language, with its repeated use of the medium of artificial secularizations, should give him food for thought—above all the conversion of the terminology of the novissima tempora [newest times]: The final times of the prophecy of Daniel have become the ‘new’ age [die ‘Neuzeit’: the modern age] that for us is the final age—and the German translator J. H. Pfingsten renders this as the “neueste Zeiten” [newest times].13 Of course, “Even where irony is involved, Christianity’s rep-
ertoire of images can still be taken seriously.”¹⁴ Bacon does that too, especially for a public for which the code of the prophecies is ‘broken’ in a new way; but the description of these stylistic means as rhetorical—and, in that character, as provocative or trust inducing—does not impugn their seriousness in relation to their repertoire of images. Such repertoires are interchangeable, and Bacon also uses the old topos [themes] of autumn and the world’s growing older, not, however, in the sense of an anticipation of winter and death but rather in the sense of the phase of the year and of life that brings with it ripeness and the harvest. His concern in the application of both the biblical prophecies and the metaphor of organic growth to his own times is to make the accumulation of new discoveries and inventions appear trustworthy and promising as symptoms of the state of the world as a whole.

Both the self-conception of the artist and the theoretical interpretation of the artistic process by means borrowed from theology, all the way from creation to inspiration, have been abundantly documented. The discovery of the capacity for creativity is part of the self-articulation of modern consciousness, however much it may initially have been connected with the formulas (used initially with a pious intent) of the alter deus and deus in terris [second god, earthly god], which had served at first as hyperbolical paraphrases of the biblical idea that God made man in His own image. ‘Invention,’ which under the rubric of inventio in the traditional rhetoric was only a part of the process of the linguistic transmission of thought (first its accidental, then its methodically directed unfolding and exploitation), becomes the essence of the artistic process and the criterion by which its products are to be evaluated, as, for instance, when Scaliger and Sidney assign preeminence in the art of poetry to epic poets and dramatists because their activity most closely resembles the model of divine creation. But the later opposition to this aesthetic ideal itself still requires the register of a secularized language—thus, for instance, when Marcel Proust, with his “poésie de la mémoire” [poetics of memory], rebels against impotence in relation to the past and against the mere “mémoire des faits” [memory of facts] in order to proclaim the unsurpassable station and the absolute responsibility of the aesthetic act not only as memory but also as the final court of judgement: The artist makes of his work not only a piece of the highest reality but also the “true Last Judgment.”¹⁵ It would be a mistake to think that the idea of art, of its seriousness and
its existential significance, was produced at some time or other by a transformation of the dogmas of creation or judgment. But these concepts certainly do designate claims to meaningfulness and finality that had remained empty after the disappearance of the theological substance and that were both capable and in need of corresponding 'reoccupations.'

Some of the most comprehensive testimony to the aesthetic potential of secularized language is offered by Jean Paul’s School for Aesthetics. It exploits the language of the Christian tradition in every possible way and according to every rule of art, from rhetorical ornament to playing with blasphemous frivolity. Jean Paul discovers the ironical disposition of this terminology as a means by which to expose finite facts by comparison with the infinite ideal. Such consciousness of utilization means that any suspicion of a significant immediate relation to a source is bound to be mistaken.

Creation and incarnation are Jean Paul’s favorite metaphors for the poetic process, not only in order to assign a higher metaphysical value to it but also to exhibit its insuperable embarrassment face to face with its absolute prototype. The poet is bound neither to the imitation of nature nor to a norm of his motivation; he, who “like a god, poses his world on the first day of creation without having further reason than that of the omnipotence of beauty,” may also “repeat the free creative beginning even in the middle of the work, where nothing old is answered for or set aside.” The first chapter of a novel is the “omnipotent or ‘aseity’ [underived or independent existence] chapter.” The poet’s relation to the inner laws of his creations resembles God’s relation to man’s freedom. The epic “spreads the enormous whole before us and transforms us into gods contemplating a world.” In contrast to the dramatist, the epic poet has at his disposal “the infinite abundance of possible worlds.”

But the poetic metaphor wants only to be taken at its word, not made into a concept; otherwise it would lead into the “annihilating idealism of philosophy: ... we are not made to have created everything.” It is true that metaphors are “linguistic incarnations of nature into humanity” and “transubstantiations of the spirit” and as such are expressions of the process in which nature “for man is forever caught in the act of becoming incarnate as man”; but at the same time this metaphorical accounting for metaphor contains something of the annihilating idea of humor, which means to expose, by the use
Chapter 9

of secularized language, an infinite discrepancy: "When man looks down, as theology did in the old days, from the supernal world to the earthly world, then the latter seems to drag along, small and futile; and when he measures the small world, as humor does, against the infinite world and sees them together, a kind of laughter results which contains pain and greatness."20

Poetry as incarnation means for Jean Paul not only the elevation of the natural to the realm of the ideal but also the constant exhibition of how the ideal cannot be realized. This ambivalence is meant to be deposited in the products of linguistic secularization. "Poetry, like everything divine in man, is chained to time and place and must always become a carpenter's son and a Jew."21 On account of this ambivalence, the judgment of good and evil devolves upon the poet in his work of idealization: "The poet—even the comic poet—cannot take any real character from nature without transforming it, as the day of judgement does the living, for hell or for heaven."22 Both humor and wit have their locations in this metaphor of the Last Judgment.23

The poet in the role of judge—that is, to be sure, already a modification of the Enlightenment's metaphors of judgment, which saw reason in the position of the judge. The element that induces such metaphors of judgment is the common theoretical and aesthetic end product of the 'verdict,' whether of fact or of taste, toward which reflection orients itself: Lichtenberg saw in the Enlightenment's primacy of reason the reversal of the Inquisition, especially in its anti-Copernican activity: "The class of people by whom reason was so often subjected to inquisition now in the reverse order fully fulfils itself and its contemptible procedures brought before the inquisition tribunal of reason. Of course the ultimate punishment assigned to them will not be chains and dismal dungeons but what will nevertheless be an irksome obligation for them—the obligation to become wiser."24 It is subjects of theory and lapses in theory that are judged before the tribunal of reason. For Lichtenberg the moral subject is withdrawn from the purview of public judgment, and his passionate rejection of 'physiognomy' is based on a defense of the protection that bodiliness furnishes for the ego. It is not the secularization but rather the reversal of the basic idea of eschatology: The world exists only thanks to the impossibility of passing judgment within it. "If God made known men's secrets, the world could not continue."25 From reason's judgment over rational processes two radically different paths lead onward: one to
history and art as the new tribunals, the other to the transformation of reflection into sitting in judgment of oneself. As a stylistic means of making self-representation credible, a linguistic form has been developed that is meant to provide a literary equivalent for the absence of reservation that religious thought ascribes to God's knowledge and understanding of man. The prototype of Augustine's *Confessions* is not sufficient to explain this phenomenon. Augustine still believed that God knew more of the human soul than it knew of itself and consequently that God's judgment could not be anticipated by self-representation. Thus when Rousseau consciously imitates Augustine's *Confessions*, that is not a legitimation of autobiographical recklessness by appeal to religious and literary authority; rather it is a rhetorical reinforcement of the credibility of reckless self-disclosure: "I have unveiled my inmost self even as thou hast seen it, O Eternal Being."

Rousseau does not merely appeal to the divine judgment as the last resort that will ultimately verify his claims; rather, in his literary self-revelation he takes under his own direction the revelation of man before God. The forum of mankind, to which his confession is addressed, does not just temporarily and metaphorically take the role of the judge; the decision that he requests from this tribunal replaces the appeal to the Last Judgment, which loses its essential relevance once a verdict has been brought in by what is now the final court of appeal: objectivity. Rousseau expressly emphasizes that the time when the divine judgment takes place has become a matter of indifference to him—the trumpet may sound whenever it likes. Self-knowledge has become the equivalent of divine knowledge, the subject's liberation from subjectivity, and its truth quite simply the naked truth. Iconologically it is significant that the book has changed its position in the judgment scene; whereas in the entire apocalyptic literature it is represented as the book of the sins of mankind, which is kept before the throne of God and opened before the assembled world of men, in his case Rousseau writes the book himself and bears it, as he says, in his hand before the tribunal with these proud words (which are also significant in the sequence of the objects referred to): "This is what I have done, what I have thought, what I was." Linguistic secularization has become an instrument of the literary sensationalism of undisguised self-presentation and of the vindication to which it lays claim. No distinction of the relative precedence of moral or aesthetic judgments has yet been arrived at. Half a century later, in Ludwig Feuerbach,
the productive subject decides only on the literary immortality of his thoughts, not on his own immortality: "In writing man holds the final judgment over himself, over his ideas and sensations; here he separates the sheep from the goats, consigns some to eternal oblivion and nothingness, others to eternal life." 26

Probably nothing in the terminology of aesthetics is as instructive in regard to the problematic of secularization as is the concept of a 'symbol.' This relevance is not only due to the diversity of its aesthetic aspects and transformations but is already present in the potential that the term "symbol" brings with it from its prior history. It is true that before Goethe this term had as yet no specifically aesthetic significance, and in theology, particularly in the Protestant doctrine of the sacraments, it played a narrowly defined role in a technical language. This semantic narrowness corresponded pretty accurately to the initial situation in the word's history, and no doubt also in factual history. Freud has pointed out that in magical behavior the symbol comes into existence by being 'appointed' to serve as an image, no doubt originally as the result of an incapacity to make a realistic image of the object affected (or to be affected). The profane history of the word shows that the inability to create an adequate image is revalued positively as signifying also the impossibility of such adequacy. Kenneth Burke says that the status of a word as symbolic consists in the fact "that no one quite uses the word in its mere dictionary sense." 27 The way in which a constant reference to an identical object can be established, despite the impossibility of depiction, is exhibited in the profane history of the 'symbol' as the credential of a person who makes himself known by the possession of an improbable sign produced by a process of accident: half a tablet, whose broken edge precisely fits the other half and identifies its possessor as a legitimate agent for a legal transaction or as the bearer of a mandate. Of course the object endowed with this significance need not always be so unspecific; the sema [sign] can bring with it and retain its own characteristic meaning, and by its history it can obscure the fortuitousness of its adoption for its present role. But the difference between a symbol and an image or a metaphor or an allegory always consists in the symbol's unspecific adoption, in its being understood as a result of an agreement, an alliance or an antecedent relation of hospitality as a support for resulting rights.
It was natural that theology, in elaborating the idea that was basic to both of the covenants of man with God, should hit upon this instrument that lay ‘ready to hand’ as a means of making known and identifying those who have a part in the covenant relation and in the associated rights to salvation. Circumcision in the Old Testament, the breaking of bread in the New Testament, were signs of the covenant, which assured one of divine benevolence and the community of initiates. The institution of the sign by the party who proposes the covenant is the manner of origin of the sacraments, and also of the articles of belief by whose avowal the sworn initiates into the mystery and those entitled to salvation recognize one another. The sign represents the absent God, of whom no image may or can be made.

Logically, then, the need to appropriate the term “symbol” for the terminology of aesthetics appears when the ideal of imitation is suppressed. From the technical embarrassment caused by one’s inability to imitate, or from the sacred prohibition that does not allow one to imitate, there emerges the aesthetic dignity in which one goes beyond the simplicity of mere mimesis to creation. That the term could be employed against the ideal of imitation had little to do with the significance it had acquired through its history within theology; in the cases of Lessing, Winckelmann, and Herder, one can assume that its original meaning was at least perceived along with the accretions. Whether or not that can be demonstrated, in any case the term “symbol” still had enough of its original formal function to be capable of the new ambiguity and thus of the employment that it was to have in aesthetics. An ideality that no longer holds to the Platonic correspondence of originals to images but rather is aimed at what is not represented in reality has to make itself dependent on the exclusiveness of the symbol. For the new definition of the aesthetic object that wanted and had to turn away from the traditional definitions and classifications, “symbol” presented itself as a term that, while it did derive dignity from the sacral phase of its history, had not acquired any additional meaning that would be important where it was now needed—except perhaps for the spread of indefiniteness, which continues to the present day to make the ‘symbol’ the terror of its struggling interpreter.

Our critical considerations concerning the methodical caution and material differentiation that are advisable in connection with the category of secularization have at the same time led us quite a distance
away from the vicinity of "topos research," whose problematic borders closely on that of the secularization thesis. Both the former and the latter presuppose the existence of constants in the history of ideas, and thus are based upon a substantialistic ontology of history. So the simultaneous appearance of "topos research" and the secularization thesis is hardly accidental. Our concern here is not at all to advocate another ontology of history in place of a substantialistic one; on the contrary, our purpose is only to set over against the unquestioned preference accorded to a certain implied philosophy of history the possibility of other lines of inquiry that it does not allow for. Here a philosophy of history (insofar as such a thing is still at all possible) will always have to take epistemological considerations into account to the extent that it has to maintain access to the historian's repertoire of questions. Thus in the case of "topos research," it must certainly be accepted that the establishment of constants is an entirely rational procedure; but at the same time it must be recognized that this procedure always involves a renunciation of possible knowledge, a renunciation that cannot simply be accepted as inevitable. Given the kind of cognitive capacity we possess, anything that cannot be further reduced or inquired into has the status of a contingent fact. The fascination that the natural sciences find in the possibility of discovering and employing constants is not due to their making natural processes more comprehensible for us but rather to the way in which they increase the reliability with which they enable us to analyze events. This satisfaction is exaggerated when it is interpreted, as it was for the first time in ancient atomism, as meaning that because constants bring the theoretical process to a halt, they must also be identical with the sought-after principles, complete knowledge of which would explain everything that happens. Precisely where science believes it has hit upon—or requires itself to reduce phenomena to—'atoms' in the broadest sense of the term, it turns out that the expected satisfaction fails to appear.

In the natural sciences there is at least the reward I have described in return for the end to further interrogation that results from the discovery of constants; in the human sciences the production of constants must be understood to be a theoretical resignation without any corresponding gain. It is perfectly possible that insurmountably contingent facts may be arrived at; what concerns us here is not this kind of constraint but rather the expectation with which it is met: that with
the standstill of the theoretical process, the need for theory would be satisfied. This is the source of the weakness of substantialistic preconceptions in the theory of history. "Topos research" belongs to the tradition of assuming eidetic preformations, which begins with the ancient theories of the elements, atoms, Ideas, and forms and continues through 'innate ideas' to dream symbolism, archetypes, and 'structures.' Each time we try to resist the excessive multiplicity of a historicism of mutually incomparable facts, our history threatens to contract into the simplicity of something that is always the same, as though all that mattered was never to allow understanding to satisfy itself.

The result of our reflections on secularization as a stylistic technique can be summed up in Schleiermacher's aphorism: "Christianity produced language. From the very beginning it was a genius that raised language to a higher power, and it still is. . . ."27 The phenomena of secularization derive to a large extent from this linguistic genius, from the familiarities that it produced, the transferable material that it left behind it, and the residual needs that are associated with its materials. Lichtenberg imagined this in one of his contributions to the Göttingisches Tagebuch in consciously secularized language as the pagan morning prayer of a natural scientist in praise of the "great sense of security" that he owed "only to the degree of insight into nature which he had achieved. . . . What if one day the sun should not return, Amintor often thought when he awoke in a dark night, and he rejoiced when he finally saw day dawn again. . . . Also, this inner recognition of order was nothing other than just this order itself, including the one who was observing it; and therefore it was always the source of his highest spiritual pleasure."28 The Kantian conceives of the mental calm conveyed to him by nature's regularity as the work of his own reason but calls the act of bringing it consciously to mind his "reconciliation with God." The language and the ritual are secularized, the concept and the subject of science occupy the traditionally designated positions: "Generally many biblical expressions appeared in his speech. In this connection, he said that it was nearly impossible to tell the same history of the human spirit without at times hitting upon the same expressions and that he believed we would understand the Bible better if we studied ourselves more. The shortest way always to live up to its sublime teachings would be to try once to reach its purpose in another, independent way, paying due regard to time and circumstances."
The totality of the phenomena that give rise to consideration of secularization as a historical category, and whose possible broadening lies in the formula that speaks of an “objective cultural debt,” can be interpreted on the basis of a reversal of the relation of debt. At this point this is only a hypothetical suggestion, whose validity cannot be determined on the basis of the material relevant to ‘secularizations’ alone. The arguments of part II are also indispensable for that purpose. This hypothetical proposal is based on the volume of expectations and claims—unsatisfied, disappointed, and made insistent—that a religion of the universal historical stamp of Christianity produces and leaves behind it. In his Philosophy of Money, Georg Simmel advanced a theory of the way in which vital needs become independent, even outliving their fulfillments, so that from a longer-run perspective they are simply unfulfillable. Thus, he says, through Christianity man, who had hitherto always had a relative value, and consequently one that could be translated quantitatively into exchange and money values, had acquired an absolute value—a magnitude of pretension that, while it does propel the process of reality continually forward, can never be realized in it. The idea that everything could someday be as though Christianity had never existed is in no way involved in the critique to which we are subjecting the secularization theorem; but precisely because Christianity’s intervention in European history (and through European history in world history) penetrated so deeply, the idea of secularization also carries with it an implication of harmlessness, that at bottom, in spite of all apparent changes, things must remain the same as they were made by that intervention—so that even a post-Christian atheism is actually an intra-Christian mode of expression of negative theology, and a materialism is a continuation of the Incarnation by other means.

A religion that, beyond the expectation of salvation and confidence in justification, came historically to claim to provide the exclusive system of world explanation; that could deduce from the fundamental notion of creation and the principle that man was made in God’s image the conclusion that man’s cognitive capacity was adequate to nature; but that finally, in its medieval pursuit of the logic of its concern for the infinite power and absolute freedom of its God, itself destroyed the conditions that it had asserted to hold for man’s relation to the world—such a religion, as a consequence of this contradictory turning away from its presuppositions, inevitably ends up owing to man a
restitution of what belongs to him. What I am describing by this anticipatory statement of the main thesis of part II is not the entire history of Christianity but only its crisis at the end of the Middle Ages, which is to say, the preconditions of the formation of modern rationality.

A concept of history that resulted from appreciation of tradition has committed us to seeing obligations above all in the relation of each age to what went before it and the sources of the values handed down to it. In the process the ability to see the debt that history owes to succeeding ages has been weakened. Of course such formulations should not encourage moralizing about history but can only show how problematic it is to interpret historical connections with the aid of legal concepts. After all, the question of the legitimacy of an epoch does not arise immanently in the study of history. While it is true that one who has never before been accused of being ‘in the wrong’ can in fact be in the right, the problem of legitimacy only articulates itself when righteousness is in dispute and has to be contended for.

Indeed the problem of legitimacy is bound up with the very concept of an epoch itself. The modern age was the first and only age that understood itself as an epoch and, in so doing, simultaneously created the other epochs. The problem of legitimacy is latent in the modern age’s claim to carry out a radical break with tradition, and in the incongruity between this claim and the reality of history, which can never begin entirely anew. Like all political and historical problems of legitimacy, that of the modern age arises from a discontinuity, and it does not matter whether the discontinuity is real or pretended. The modern age itself laid claim to this discontinuity vis-à-vis the Middle Ages. Consequently the continuous self-confirmation of its autonomy and authenticity by science and technology is brought into question by the thesis that “the modern world owes its uncanny success to a great extent to its Christian background.” The extent of the success determines the extent of the injustice committed by forgetting, denying, or not wanting to recognize its true preconditions.

The terms “forgetfulness of Being” [Seinsvergessenheit] and “repression” [Verdrängung], deriving from very different sources in the thought of our century, represent a common underlying circumstance, namely, that what is past and forgotten can have its own sort of harmful presence. The idea of secularization belongs in this context too, within which its function becomes intelligible. If the modern age was, in its historical substance, a product of secularization, then it would have
to understand itself as the embodiment of "what 'in reality' ['der Sache nach'] should not exist." The formula makes it clear that it is not meant to convey a moral rebuke; but neither is it meant to be a mere historical finding that one could simply let pass, like the determination of the individuals responsible for wars in the ancient world. That "objective cultural debt" belongs, more than anywhere else, to the type of situation to which the rubric of "the undealt-with past" is applied. I have said that the category of secularization contains at least a latent ideological element. This formulation has brought me the odium of an 'unmasker of ideology' [Ideologiekritiker], which is not at all to my taste. For it is precisely the kind of 'cultural criticism' derivable from the concept of secularization, which hands out "guilty" verdicts in its search for the most distant possible object to which to attach responsibility for a feeling of discontent with the present, that ought to be called to account for irresponsibility in relation to the burdens of proof associated with what it presupposes.

Besides their potential for being cited as grounds for blame, besides their implication of a category of guilt, conceptions of illegitimacy like that of secularization also recommend a therapy for acute discontent that would involve a broad-scale conscious 'working through' of past circumstances. Talk of the "undealt-with past" has concentrated in recent decades on the sins of omission of what has now become the generation of the fathers—in fact it has concentrated (increasingly) less on those who set the machinery of destruction in motion than on those who neglected to destroy it in good time or to prevent its schemes from being implemented in the first place. One should not fail to notice how such structures of reproach become plausible: They are integrated into a familiar schema, which through its capacity for variation continually gains in apparent conclusiveness.

I need only remind the reader how, beginning with his first ethnological application of psychoanalysis, Sigmund Freud constructed history-wide objective relations of guilt, from the murder of the father of the primeval tribe in Totem and Taboo (1912) to the hypothetical murder of the religion founder in Moses and Monotheism (1939), of which the presupposition—long ago inferred from the histories of individuals—is that "each portion which returns from oblivion asserts itself with peculiar force, exercises an incomparably powerful influence on people in the mass, and raises an irresistible claim to truth, against which logical objections remain powerless. . . ." Freud traced the
Christian idea of original sin, as an expression of a historically undealt with and growing consciousness of guilt and "as a precursor of the return of the repressed content," back to the murder of the primeval father. At the time when Christianity was establishing itself, the disposition to accept a doctrine of original sin had taken on worldwide dimensions: "The sense of guilt of those days was very far from being any longer restricted to the Jewish people; it had caught hold of all the Mediterranean peoples as a dull malaise, a premonition of calamity, for which no one could suggest a reason. Historians of our day speak of an ageing of ancient civilization, but I suspect that they have only grasped accidental and contributory causes of this depressed mood of the peoples."

At the same time that Freud was working on his essay on Moses, Edmund Husserl was working on what was likewise to be his final work, The Crisis of the European Sciences and Transcendental Phenomenology, in which the proposed diagnosis and therapy for the "crisis of European humanity" rests on the same premise, that past generations have been guilty of neglecting crucial steps required by rational candor and that the present can only regain health by means of a thorough analysis of these malignant defects. For a final example of the recurrence of the schematism of this type of theory let me mention Max Weber's thesis of the historical origin of capitalism from Puritanism. While the response of historians to this thesis was predominantly negative, that of theologians was predominantly positive, for the latter perceived the thesis through the medium of a self-denying affirmation of responsibility for Christianity's eschatological complicity, which did not hesitate to verge on a magical negation of the world. In considering the prevalent openness to theories of 'capitalism,' one cannot fail to notice not only that there always seems to be a need for a causal formula of maximum generality to account for people's discontent with the state of the world but that there also seems to be a constant need on the part of the 'bourgeois' theorist to participate in the historical guilt of not having been one of the victims. Whether people's readiness to entertain assertions of objective guilt derives from an existential guiltiness of Dasein vis-à-vis its possibilities, as Heidegger suggested in Being and Time, or from the "societal delusion system" of Adorno's Negative Dialectics, in any case it is the high degree of indefiniteness of the complexes that are described in these ways that equips them to accept a variety of specific forms. Discontent is given retrospective self-evidence. This is
not what gives rise to or stabilizes a theorem like that of secularization, but it certainly does serve to explain its success. The suggestion of a distant event that is responsible for what is wrong in the present—a suggestion with which the secularization theorem also presents us—is (not the only, but) an additional reason why the category of secularization is in need of a critique.

Christianity arose from a self-surrender, in that it “equipped itself with a theology only when it wanted to make itself possible in a world that, strictly speaking, it denied.” Theology itself is, in Overbeck’s significant use of the term, “nothing but a piece of the secularization [Verweltlichung: rendering worldly] of Christianity, a luxury that it permitted itself but that, like any luxury, was not to be had for nothing.” The logical consequence of this state of affairs is that theology tries to understand the self-surrender of which it is the result as the external removal by which an “objective cultural debt” [or “guilt”: Schuld] is established. When Overbeck, in his “Polemical and Peacemaking Book,” describes the most extreme case of the loss of the original world-denying attitude, in other words, the perfection of secularization, he still thinks of Christianity “as the religion of which one can make what one likes.” For Overbeck the theologian, whose subject was the end of theology, it was his theological colleagues who had driven Christianity into the absurd position of an impotent substrate; but it is as clear as daylight that they could not put up with their most radical insider’s assignment of the responsibility for this state of affairs. To that extent the secularization theorem, insofar as it can be understood on the basis of theological premises alone, is (in its position in history) something in the nature of a final theologumenon [theological dictum] intended to lay on the heirs of theology a guilty conscience about their entrance into the succession. The intransitive grammar of the talk of “transformation” allows a specific subject to be interpolated at any time, which at least blurs the logic of self-surrender. Not only does the secularization thesis explain the modern age; it explains it as the wrong turning for which the thesis itself is able to prescribe the corrective. It would be the exact reverse of the claim that the young Hegel had described as the task of the critique of religion in his time: “Despite earlier attempts, it has been reserved for our times especially to claim as man’s property, at least in theory, the treasures that have been squandered on heaven; but what age will have the strength to insist on this right and to take actual possession?”
But this idea too, that man only has to retrieve from transcendence what he has projected into it, contains the unquestioned presupposition of substantial contents that can appear now on one side of the hiatus, now on the other, and regarding whose original ownership a critique would again have to arrive at a conclusion. But these alternative assignments of original ownership provide no orientation for historical comprehension. "The only thing that has a history," wrote Ludwig Feuerbach in 1830, "is a thing that is itself the principle of its alterations, that underlies all of its alterations as an omnipresent essential unity, and the alterations of which are therefore internal, immanent, determined by itself and identical with itself. The stone that travels from the hand of a beggar to that of a king, from America to Europe and from there to Asia, still does not have a history...."

It is not only ideas of unilateral guilt that become questionable without the support of substantialisms. The administration of justice in history, or what is looked upon as such, also becomes more difficult, harder to seize in striking images. Two diary entries, not far removed from one another in time, may at least indicate this state of affairs. On July 18, 1840, Sören Kierkegaard wrote in his journal, "One day the moment arrived at which mankind said to God, like the son to the father in the gospel: Come on, share with us, let us have the inheritance that belongs to us." On November 18, 1846, Varnhagen von Ense noted, "In their departure from doctrine, into the world, the Christians forgot and left behind—no doubt also abandoned as too cumbersome—most of their property, and continued under the name only, which of course is easy to carry. Honest, well-intentioned people have snatched up the lost packs and bundles and carry them panting after the Christians, but the latter pay no attention to their cries, thinking they have everything that belongs to them. Rousseau, Pestalozzi, Fichte, Saint-Simon, every new theory—socialism, communism—all are only trying to restore abandoned Christianity!"

Translator's Notes


b. See translator's note b to part I, chapter 8.

c. Die unbewältigte Vergangenheit. This is an expression that has often been used in Germany in the last three decades to describe, in particular, what is seen as continuing failure to come to terms with the "Third Reich."
d. *Die Legitimität der Neuzeit* (Frankfurt: Suhrkamp, 1966), p. 73. There the author defined an “ideological element” as an “interest that is foreign to theory but can be actualized in the context of the definition of the objects of theory.”


f. *Fremdentzug*: the third “characteristic feature” in the author’s model of the process of secularization, as given in part I, chapter 2.
II

Theological Absolutism and Human Self-Assertion
Among the weapons with which the legitimacy of the modern age is attacked, the idea of secularization is only one. Its effectiveness depends especially on the fact that the potential attack that it embodies need not be made as explicit as a demand for restitution. It allows all sorts of soft modulations of its claim. There are less indirect statements, harsher anathemas. In the application of the category of secularization, it is admitted, and has to be admitted consistently, that the modern age is an epoch of an original character; it is only denied that this is on its own account, by virtue of the rational authenticity it claims for itself. The plausibility so broadly conceded to the category of secularization (even by those whose attitude to its implications is disinterested) rests clearly enough on two things: It appears to do justice to the high degree of individualization of all the components in our historical consciousness; and making a moderate use of its consequences, it requires nothing like a ‘return to the origin,’ but merely an acknowledgment of dependence.

A more massive and direct attack is made through applying the sorts of categories that are meant to exhibit the epoch as a failure of history itself, as simple regression. Naturally the range of defenses that the elementary claim of the new secured for itself by appeal to the authority and validity of what had been before provided plenty of evidence for charges that it was a mere pagan reaction. But hardly anyone can still be inclined to join in the Renaissance’s misunderstanding of itself as a reappearance of the old and thus a return to the inalienable norm. For the constitution of the modern age, it is not
the Renaissance that is exemplary; on the contrary, it is the opposition encountered by the fundamental Renaissance thesis of the unsurpassability of ancient literature, from the seventeenth century onward—indeed, even before it was learned how little the ancient world had been understood by those who promised to renew it. That the modern age is neither a renewal of the ancient world nor its continuation by other means no longer needs to be argued.

More on target than the accusation of a relapse into paganism is that of a relapse into Gnosticism. The Gnostic trauma of the early centuries of the Christian era is buried deeper than the trauma of the bloody persecutions that contributed to the glory of testimony to the new faith. He who says that the modern age "would be better entitled the Gnostic age" is reminding us of the old enemy who did not come from without but was ensconced at Christianity’s very roots, the enemy whose dangerousness resided in the evidence that it had on its side a more consistent systematization of the biblical premises. Independently of the question whether the description of the modern age as a renewal of Gnosticism is representative of the full range of the attempts to contrast it as a Christian heresy to the substance of Christianity, the Gnosticism formulation deserves some consideration as the most significant of these attempts, and the most instructive in its implications. I am not particularly interested in determining what the author in fact meant by this phrase; even if like most culture-critical commonplace it was only dropped in passing—which, however, I do not suggest was the case—it would still have to provoke reflection in view of what it can contain. The problem with which we are occupied derives contour from it.

The thesis that I intend to argue here begins by agreeing that there is a connection between the modern age and Gnosticism, but interprets it in the reverse sense: The modern age is the second overcoming of Gnosticism. A presupposition of this thesis is that the first overcoming of Gnosticism, at the beginning of the Middle Ages, was unsuccessful. A further implication is that the medieval period, as a meaningful structure spanning centuries, had its beginning in the conflict with late-antique and early-Christian Gnosticism and that the unity of its systematic intention can be understood as deriving from the task of subduing its Gnostic opponent.
The problem left unsolved by the ancient world was the question of the origin of what is bad in the world. The idea of the cosmos, which dominated classical Greek philosophy and was the basis of the preeminence of the Platonic/Aristotelian and Stoic tradition, determined that the question of the bad would receive a secondary, systematically peripheral position. Ancient metaphysics is not even cosmodyicy, justification of the world, because the world neither needs nor is capable of justification. The cosmos is everything that can be, and the Platonic myth of the demiurge guarantees that in the world the potential of everything that could be and of every way in which it could be is exhausted by the reproduction of the Ideas. The crucial systematic juncture is at the point where, in the process of the world's formation, rational planning and blind necessity, archetype and matter collide. This juncture is bridged by a highly characteristic metaphor: Reason brings necessity under its authority "by persuasion." The Greeks' belief in the power of speech and persuasion is here projected into the cosmos; the process that decides the quality of the nature that is coming into being within the dangerous dualism of Idea and matter is perceived in accordance with the model of the political. The Platonic demiurge is not omnipotent; he is confronted with matter, which he must employ in his work as a formless substrate of unknown origin; he must rely on the power of the reason to which he has delegated his work. The danger to which the process is exposed at this point is not felt in the text. There remains a residue of undefined incongruity,
and on this rests the entire burden of the explanation of the fact that in this world there are also bad things.

However, in the tradition of Platonism itself the systematic shift of accent enters at this point. The fundamental Platonic equivocation, that the world of appearance is indeed the reproduced image of Ideas but cannot attain the perfection of the original, is resolved by Neoplatonism in favor of the second aspect: The world appears as the great failure to equal its ideal model. The metaphysical factor in this failure has been prescribed since Plato; it is the *hyle* [matter]. The difference between idea and substratum, between form and stuff, is increased in the Neoplatonic systems; to the *theologizing* of the Idea corresponds the *demonizing* of matter. What could at one time be conceived of as the subjection of necessity to rational persuasion, namely, the formation of the world, is now the confinement of the world soul in the womb—or better: the prison—of matter. For Plotinus the world comes into being through the fall of this world soul, which is deceived by matter and lost in it. So the world does not come into being through the power of the antidivine principle of matter alone. This distinguishes Plotinus’s system from the absolute dualism of Gnosticism. The soul’s fall into the world is an act of disorder, which still presupposes a cosmos in which everything that exists occupies the position that befits it. This order can be reestablished if the world soul reverses the process in which it ensnared itself. All of this is still within the realm of discourse laid out in Plato, even if it does, as it were, exaggerate the metaphysical ‘distances’ in the original ground plan. What is bad in the world continues to be the nonfulfillment of the obligatory order.

Gnosticism bears a more radical metaphysical stamp. Where it employs the Neoplatonist system, it is nevertheless not a consistent extension of that system but rather a reoccupation of its positions. The demiurge has become the principle of badness, the opponent of the transcendent God of salvation who has nothing to do with bringing the world into existence. The world is the labyrinth of the *pneuma* [spirit] gone astray; as cosmos, it is the order opposed to salvation, the system of a fall. Gnosticism has no need of theodicy since the good God has never had anything to do with the world. Even the bringer of salvation, sent by the good God to deliver the lost *pneuma* through knowledge, can only appear to assume a human body in order to deceive the demiurge’s watchmen. The downfall of the world becomes
the critical process of final salvation, the dissolution of the demiurge’s illegitimate creation.

This outline, which I have given here only in order to show what is really ‘Gnostic,’ need not concern itself with the broad range of speculative variants. My interest is in the challenge that this system had to represent for both the ancient tradition and the Christian dogmatics formulated on the basis of that tradition. With respect to the ancient world it disputed the status of the cosmos as the embodiment of all reality that is binding in itself; with respect to Christianity it disputed the combination of creation and redemption as the work of a single God. That there could be beneficial consequences for Christianity in the separation of God the creator from God the redeemer was grasped, with the passion that can be aroused by a theological system that is consistent in itself, by Marcion, the greatest and most fascinating of the Gnostic thinkers, who was excommunicated in Rome in 144 A.D.

The fundamental thought that underlies Marcion’s Gnostic dogmatics is, I think, this: A theology that declares its God to be the omnipotent creator of the world and bases its trust in this God on the omnipotence thus exhibited cannot at the same time make the destruction of this world and the salvation of men from the world into the central activity of this God. Marcion saw Christianity, in the process of its dogmatic formation, in just this dilemma, in view of the heterogeneous contents of its fundamental documents, which spoke on the one hand of creation and history and on the other hand of redemption and a Last Judgment. “One stands amazed,” writes Adolf von Harnack, “before the fact that Greeks were prepared to accept all of this as sacred revelation.” Marcion decided to make a radical incision. He found in Gnostic dualism the schema for the unequivocal character that he thought he could give to the Christian doctrine. The god who had created man and the world and given them a Law that could not be fully complied with, who directed the Old Testament history of the Jews in the manner of an ill-tempered tyrant, who demanded sacrifices and ceremonies, was the evil demiurge. The god who brings redemption without in the least owing it to man, whom he did not create, the “foreign god,” is seen as the essence of pure, because unreasoning, love. This divinity has the right to destroy a cosmos that he did not create and to preach disobedience of a Law that he did not lay down. Deliverance turns out to be primarily man’s enlightenment regarding
his fundamental and impenetrable deception by the cosmos. Gnosis must therefore be literally recognition [Erkenntnis]. But the deliverer who brings this recognition from its foreign source in transcendence can no longer be the son of the creator of the world and the ruler of its history. Marcion wanted a god who did not need to contradict himself by creating man in such a way that he would have to deliver him from his lost state; by laying down a Law, the impossibility of complying with which would make it necessary for him to absolve those who became guilty under it; by setting up a natural order, only to infringe on it with his own miracles—in a word, by producing a world that, in spite of his omnipotence, in the end allows the announced design of salvation to accrue only to a few men.

Marcion wanted to place his foreign God, free of the burden of responsibility for the world, entirely and without restriction on the side of man's salvation. The price of this was the attachment of a negative valuation to the Greek cosmic metaphysics and the destruction of the trust in the world that could have been sanctioned by the biblical conception of creation. The decisive contrast to the Neoplatonic system and to the other Gnostic systems lies in that the process of salvation is not symmetrical with the preceding history of calamity; it does not follow the path back to the reestablishment of an original situation, putting an end to its 'interruption.' Men do not return to their transcendent home from a foreign world, which in accordance with the order of things they should never have left, but rather—as the enthusiast Harnack puts it—"a magnificent foreign land is disclosed and becomes their homeland."5

Marcion made clear the logic that was the problem of the whole immense literature that the patristic epoch produced. Gnosticism's systematic intention forced the Church, in the interest of consolidation, to define itself in terms of dogma. Harnack has advanced the thesis that "Catholicism was constructed in opposition to Marcion."6 Taken more broadly, this corresponds to the thesis that the formation of the Middle Ages can only be understood as an attempt at the definitive exclusion of the Gnostic syndrome. To retrieve the world as the creation from the negative role assigned to it by the doctrine of its demiurgic origin, and to salvage the dignity of the ancient cosmos for its role in the Christian system, was the central effort all the way from Augustine to the height of Scholasticism. Our interest here is not in the history of this effort itself, the failure of which made it necessary to overcome
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Gnosticism a second time, but in the price that had to be paid in order to overcome Gnostic dualism within the medieval system, whose frailty must be understood in relation to that effort.

The persuasive power of Gnosticism for early Christianity lay in the universal foundation that it offered for the eschatological promise. The downfall of the world and judgment over it were supposed to be imminent, and concentration on the significance of this event as salvation presupposed consciousness that the world deserved destruction. Gnosticism gave the most plausible explanation of this presupposition. It was meaningless to pursue the questions of the creation of the world and the lord of its history when this episode was soon to come to an end. The fact that the expected *parousia* [presence, arrival: in this case, the 'Second Coming'] did not occur must have been full of consequences for the transformation of the original teachings. Here, however, we are interested only in one point: The world, which turned out to be more persistent than expected, attracted once again the old questions regarding its origin and its dependability and demanded a decision between trust and mistrust, an arrangement of life with the world rather than against it. It is easy to see that the eventual decision against Gnosticism was due not to the inner superiority of the dogmatic system of the Church but to the intolerability of the consciousness that this world is supposed to be the prison of the evil god and is nevertheless not destroyed by the power of the god who, according to his revelation, is determined to deliver mankind.

The original eschatological pathos directed against the existence of the world was transformed into a new interest in the condition of the world. The metaphysical interest in the Creation returned once it appeared that deliverance was accomplished less spectacularly in the underground of what is merely believed. The large number of patristic commentaries on the first book of the Bible, Genesis, is tangible evidence of this consequence. Christianity had to adjust itself to the rules of the game in the given and persisting world; it had to demonstrate its ability to discuss with the surrounding Hellenistic world the latter's pressing questions regarding the attitude of the new doctrine to the old cosmos. The eschatological heritage, which soon aroused not the community's hope but its fear, which motivated prayer not for the early coming of the Lord but for postponement of the end, proved to be a burden in the effort to achieve acceptance in the surrounding spiritual world. The scene is Romanesque, but not for that reason any
less instructive, when in the apocryphal *Passion of Saint Paul* the emperor Nero explodes with rage precisely because Paul holds out the prospect of the destruction of this world by fire; the fact that Nero orders the execution of Paul and the cremation of the Christians is understood as the consequence of this *kerygma* [proclamation, invocation, preaching], as giving its adherents a taste of their own medicine.\(^7\)

The settlement arrived at between Christianity and ancient metaphysics led to a new conservatism regarding the cosmos. Augustine's turning away from Manichaean Gnosticism designates the end point of a development. The conception of creation is effective in criticism even of Neoplatonism, which had provided and would continue to provide so many elements of the new system. Augustine attacks the postulate of Porphyry that the flight of the soul from the world of bodies is the goal of its striving; he who says this, Augustine objects, must apply the same reasoning to the world soul and feel himself called upon to hasten the destruction of the world.\(^8\) The Stoic formula that the world was created for the sake of man finds broad acceptance in the patristic literature, making it possible to forget that man's salvation had been expected precisely from the destruction of the cosmos. The concept of providence, although foreign to the biblical world of ideas, is assimilated as theological property and made into an essential anti-Gnostic principle.

But a result of this development is that the question of the origin of what is bad in the world becomes pressing once more, and at the same time the traditional means of solving it are cut off. Plato had not said that the demiurge was omnipotent but only assured us that he had made the world as good and as worthy of himself as he was able. Necessity, the adversary whom he had found already on the scene, had set him a limit beyond which he had no power but that of mere persuasion. The biblical God of creation had been raised to an omnipotent being, and the elimination of Gnosticism required that matter be deprived of its dualistic pregivenness and be included in the unity of the creation from nothing. The elaboration of *creatio ex nihilo* [creation from nothing] as *concreatio* [cocreation (of matter and form)] was Augustine's lasting achievement in his commentaries on Genesis. Exegesis no longer could, and no longer wanted to, overlook the fact that God, in the biblical account of creation, had expressly given each of His works the confirmation that it was good. Then where did the bad in the world come from?
The answer that Augustine gave to this question was to have the most important consequences of all the decisions that he made for the Middle Ages. With a gesture just as stirring as it was fateful, he took for man and upon man the responsibility for the burden oppressing the world. Now, in the aftermath of Gnosticism, the problem of the justification of God has become overwhelming, and that justification is accomplished at the expense of man, to whom a new concept of freedom is ascribed expressly in order to let the whole of an enormous responsibility and guilt be imputed to it.

Five years after turning away from Manichaeanism and one year after his baptism, Augustine wrote the first book of his De libero arbitrio [On Free Will]. But the thematic question of his treatise is not the freedom of the will as an anthropological and moral quality but rather as the condition under which it was possible for the just God to punish man, on account of his failings, with the bad things in the world. The premise of human freedom allows Augustine to interpret the deficiencies of the world not as an original failure of the construction of the world for man’s benefit but rather as the result of God’s subsequent intervention in His work in order to put nature in the service of justice with respect to man.

The guide to his solution of the problem of the origin of the bad (unde malum?) had already been given to Augustine by the linguistic fact that ancient philosophy had not distinguished in its language between the wickedness that man perpetrates and the bad things that he encounters. That these bad things are the world’s reflex to his own wickedness was thus already implicit in the formulation of the question. The problematic of freedom is secondary; it is promoted from outside inward, the train of thought being that the bad things in the cosmos can only be punishments if man can really be made responsible for his actions. The justice of the deus iustus [just God] is preserved as a premise, not proved as a conclusion. Belief in a just God gives access to the knowledge of human freedom and the solution to the metaphysical question of the origin of the bad; Augustine’s reasoning here corresponds to his schema of the dependence of knowledge on premises accepted in faith.

But is not freedom, if it is made responsible in this way for the bad things in the world, itself bad in its turn? Here is the gap in the argumentation through which the Gnostic demiurge threatens to force his way in again. Augustine summons up dialectic and rhetoric in
order to close this gap; the difficulties in answering this question were evidently responsible for the delay of seven years in the composition of the second and third books of the treatise on freedom. Must not even those who lead bad lives assent to freedom, without which they could not ever be good? Even he who is wicked wants at least to be able to be good; thus even for him, freedom is something that he does not wish did not exist. Freedom confirms the goodness of God and His work in every case because it wills itself; indeed it wills itself independently of its moral quality. But falling back upon the reflexive structure of the will, which wills not only this or that but primarily itself as the condition of its concrete acts of choice, only moves the problem a step further back: The will that wills itself is only free if it can also not will itself. Here rationality breaks down; reasons cannot be given for self-annihilation: "Scire enim non potest quod nihil est" [For what is nothing cannot be known].

Can man bear the burden of being responsible for the cosmos, that is, for seeing to it that God's design for His work does not miscarry? This conception reminds one remotely of Nietzsche's attempt, with the idea of "eternal recurrence," to make man sense the enormity of his responsibility for that which always, again and again, will be the way it was once. Augustine has none of this pathos of human responsibility for the world. The burden placed on man is for him only a side effect of the unburdening of his God. But Augustine would certainly never have been a Manichaean if the bad parts of the world had appeared to him merely as disruptions of the great order, as absences of beauty in an otherwise unclouded picture. In order to deserve as punishment the world as it had been perceived and evaluated by the Manichaeans, the sins of man, which take over the position of the wickedness of the Gnostic demiurge, had to be great, all too great. Even in the remorseful examination of his past life in the Confessions, Augustine found no sin that could have been measured on this scale. The balance between the condition of the world and the guilt of mankind, which he had drawn up in his early philosophy of freedom, caused him to become the theologian of the uniquely great original guilt of mankind and of its mythical inheritance.

In the very text that had convinced Marcion of the wickedness of the Old Testament lawgiver, in Paul's Epistle to the Romans, Augustine found the theological means by which to formulate the dogma of man's universal guilt and to conceive of man's 'justification' [in the
theological sense of the term] as an absolution that is granted by way of an act of grace and that does not remove from the world the consequences of that guilt. There he also found the doctrine of absolute predestination, which restricted this grace to the small number of the chosen and thus left the continuing guilt of the all too many to explain the lasting corruption of the world.

The Gnostic dualism had been eliminated as far as the metaphysical world principle was concerned, but it lived on in the bosom of mankind and its history as the absolute separation of the elect from the rejected. This crudity, devised for the justification of God, had its unspoken irony in the fact that the absolute principle’s responsibility for cosmic corruption—the elimination of which had been the point of the whole exercise—was after all reintroduced indirectly through the idea of predestination. For this sin, with its universal consequences, in the end only the original ground of everything could be held responsible—all that the massa damnata [condemned mass] had to do was to suffer the consequences.

For our present purposes the essential fact is that the later Augustine, the theologian of original sin and predestination, was to become the most important source and authority for the theological speculation of the later Middle Ages. The Gnosticism that had not been overcome but only transposed returns in the form of the ‘hidden God’ and His inconceivable absolute sovereignty. It was with this that the self-assertion of reason had to deal.

In many ways the Scholasticism of the Middle Ages travels Augustine’s path over again. Its attempt to hold the God of creation and the God of salvation together in one system rests, in the full range of its variants, on the ground plan of De libero arbitrio. And even the opposition of humanism holds to the precedent of Augustine’s spiritual biography as given in the Confessions—only it travels the path in the opposite direction: Petrarch, the reader of Augustine, is led back to Cicero and from him to Plato.

Gnosticism had not destroyed the ancient cosmos; its order survived but (nor is this the only case in which ‘order’ as an overriding value has done this) emerged as terror, from which the only way out was a flight into transcendence and the final destruction of the “cellula creatoris” [“cell of the creator”: Marcion]. The cosmos had not only changed its prescriptive evaluation, it had also lost the quality that was most important for its reliability—its eternity. On account of the
prescribed remedy of flight—the offer of deliverance against the world—schemes to alter reality in man’s favor did not constitute a live alternative. Augustine’s momentous turning from Gnosticism to human freedom preserves ‘order’ for the Middle Ages and prepares the way for the return of Aristotle at the height of Scholasticism. The price of this preservation of the cosmos was not only the guilt that man was supposed to assign himself for the condition in which he found the world but also the resignation that his responsibility for that condition imposed upon him: renunciation of any attempt to change for his benefit, through action, a reality for the adversity of which he had himself to blame. The senselessness of self-assertion was the heritage of the Gnosticism which was not overcome but only ‘translated.’

**Translator’s Note**

a. . . . des Übels. The usual English-language formula for this famous problem is “the problem of evil,” but the latter term is so exclusively a predicate of the will, of human action and its results, that this formula prevents us from appreciating the broader issue of the origin of “badness,” of what is simply not good, for whatever reason—the issue that, as the author goes on to show, is crucial both for Gnosticism and for Augustine. Augustine’s term, malum, does not prejudge the answer as our terminology (no doubt largely owing to his influence) does.
The second overcoming of Gnosticism, at the end of the Middle Ages, is accomplished under 'aggravated circumstances.' It is no longer able to save the cosmos of Scholasticism and is dominated by doubt whether the world could even originally have been created for man’s benefit. The escape into transcendence, as the possibility that is held out to man and has only to be grasped, has lost its human relevance precisely on account of the absolutism of the decisions of divine grace, that is, on account of the dependence of the individual’s salvation on a faith that he can no longer choose to have. This changed set of presuppositions brings into the horizon of possible intentions the alternative of the immanent self-assertion of reason through the mastery and alteration of reality.

A ‘disappearance of order’ ['Ordnungschwund'], causing doubt regarding the existence of a structure of reality that can be related to man, is the presupposition of a general conception of human activity that no longer perceives in given states of affairs the binding character of the ancient and medieval cosmos, and consequently holds them to be, in principle, at man’s disposal. In turn, the ‘disappearance of order’ is bound up with a new concept of human freedom. But the burden that devolves on man this time is of a different nature from the one laid on him by Augustine: It is responsibility for the condition of the world as a challenge relating to the future, not as an original offense in the past. The revalued cosmos of Gnosticism had preserved the stability of its ancient predecessors; it could only be destroyed from
outside, by the superior strength of the transcendent principle, or 'over­come' by a move toward the outside. Human hope had its vanishing point beyond the world. The reality that at the end of the Middle Ages comes to be seen as 'fact' [factum: something done or made, i.e., a contingent state of affairs] provokes the will to oppose it and concentrates the will's attention upon it. The bad aspects of the world no longer appear as metaphysical marks of the quality of the world principle or punishing justice but rather as marks of the 'facticity' of reality. In it man appears not to be 'taken into consideration,' and the indifference of the self-preservation of everything in existence lets the bad appear to him as whatever opposes his own will to live. The Middle Ages came to an end when within their spiritual system creation as 'providence' ceased to be credible to man and the burden of self-assertion was therefore laid upon him.

Thus "self-assertion" here does not mean the naked biological and economic preservation of the human organism by the means naturally available to it. It means an existential program, according to which man posits his existence in a historical situation and indicates to himself how he is going to deal with the reality surrounding him and what use he will make of the possibilities that are open to him. In man's understanding of the world, and in the expectations, assessments, and significations that are bound up with that understanding, a fundamental change takes place, which represents not a summation of facts of experience but rather a summary of things taken for granted in advance [Präsumptionen], which in their turn determine the horizon of possible experiences and their interpretation and embody the 'a priori' of the world's significance for man.

Self-preservation is a biological characteristic, and insofar as man stepped onto the world's stage an imperfectly equipped and adapted organism, he had need from the start of auxiliary means, implements, and technical procedures for securing the satisfaction of his elementary needs. But in relation to this aspect of human nature the means of self-preservation, allowing for small variations, were constant for long periods. It seems to be the case that over long stretches of his history, man has not seen his situation in the world as one of fundamental want and physical need. Rather the picture that he has made of himself exhibits the features of a being that is well provided for by nature but fails, itself, in the distribution of her goods. The problem of justice is thus predominantly posed as that of the measures taken in distri-
bution. It is easy to see that in the framework of this idea, man’s technical skills and accomplishments can only have the function of supplementing and assisting nature, of executing her ends. The destruction of trust in an ordered structure of the world oriented to man—whatever motives were operative in that destruction—had to mean an eminently pragmatic change in man’s understanding of and relation to the world. If the ‘disappearance of order’ that was brought about by the disintegration of the Middle Ages pulled self-preservation out of its biologically determined normality, where it went unnoticed, and turned it into the ‘theme’ of human self-comprehension, then it is also the case that the modern stage of human technicity can no longer be grasped entirely in terms of the syndrome of the anthropological structure of wants. The growth of the potency of technique is not only the continuation—not even the acceleration—of a process that runs through the whole history of humanity. On the contrary, the quantitative increase in technical achievements and expedients can only be grasped in relation to a new quality of consciousness. In the growth of the technical sphere there lives, consciously facing an alienated reality, a will to extort from this reality a new ‘humanity.’ Man keeps in view the deficiency of nature as the motive of his activity as a whole.

After the kind of delay characteristic of the philosophical explication of historically effective motives in consciousness, Nietzsche formulated the situation of man in the ‘disappearance of order,’ abandoned by natural providence and made responsible for himself, but he did so not in order to express disappointment at the loss of the cosmos but rather to celebrate the triumph of man awakened to himself from the cosmic illusion and to assure him of his power over his future. The man who conceives not only of nature but also of himself as a fact at his disposal has traversed only the first stage of his self-enhancement and self-surpassing in the self-assertion of his modern history. The destruction of trust in the world made him for the first time a creatively active being, freed him from a disastrous lulling of his activity.

For Nietzsche every form of teleology is only a derivative of theology: The supposed centering of the world’s meaning on man appears to him to be equivalent to the ‘providence’ that misleads man into concurring with the divine approval of everything at the creation. Asking nature for information regarding man’s destiny and fullness of power had led to the post-Copernican abasement of his self-consciousness.
"Has the self-belittlement of man, his will to self-belittlement, not progressed irresistibly since Copernicus? Alas, the faith in the dignity and uniqueness of man, in his irreplaceability in the great chain of being, is a thing of the past. . . . Since Copernicus, man seems to have got himself on an inclined plane—now he is slipping faster and faster away from the center into—what? into nothingness? into a "penetrating sense of his nothingness"?" 

Nietzsche rightly sees in the Copernican reform an attempt to save the cosmos once again, or to reestablish it; wrongly, he suggests that in its intention and primary effect this attempt was carried through at the cost of burdening mankind.

But that is not yet the full point of his critique. The induced effect on consciousness of a scientific proposition rests for him on the "overrating of truth" as science, which makes man's understanding of himself dependent on the picture of reality that he can obtain. "How can anyone presume to speak of a destiny of the earth? . . . Mankind must be able to stand without leaning on anything like that. . . ." The assumption that if not reality itself, then at least the truth about it must be useful and beneficial to man, appears to Nietzsche as the last, hard-to-recognize remainder of that teleological metaphysics, as a transformation of the "absurd faith in the way of the world," the "most crippling belief for hand and reason that there has ever been." Modern natural science did indeed arise as part of a critique of the principle of the anthropocentric teleology of nature, but for Nietzsche this does not exclude the possibility that in regard to the human relevance of truth that it presupposes, and on which respect for natural science is grounded, it has held fast to the teleological premise. Precisely by Nietzsche's enabling us to see how even the great instrument of self-assertion, modern science, stands under a residuum of the conditions whose acceptance in the ancient world and the Middle Ages had kept the will to self-assertion latent, the inner logic of the connection between self-assertion and the 'disappearance of order' becomes clear with a unique sharpness.

The final overcoming of the Gnostic inheritance cannot restore the cosmos because the function of the idea of the cosmos is reassurance about the world and in the world, because it has as its correlate the theoretical ideal and the theoretical leisure that had been associated with the idea of the cosmos from the time of the Greeks. The world cannot be made 'good' in itself once more by a mere change of sign because it would then cease to be man's irritation and provocation.
The later Nietzsche sought, through the idea of eternal recurrence, to change the function of the idea of the cosmos: The cycles of the world process were not to repeat the model of a prescriptive lawfulness in nature, as in the Stoic cosmology, but rather to raise the sum total of the consequences of human action to the role of the ineluctable lawfulness of the world and thus to charge man with absolute responsibility for the world. Theory, which contemplates the world, was to become functionless compared to the praxis that changes it. From this point of view eternal recurrence is the dissolution of self-assertion, as a still dualistic element, in the identity of human will with natural law, which makes possible the “highest evolution of man as the highest evolution of the world.” The pregivenness of nature is reduced to a minimum—to the most external, mechanistic contingency, as the “conception by which to gain the highest power”—to the substrate of what Nietzsche calls the “world construction.”

The self-assertion of reason as the epitome of the motives constituting the epoch is reduced by Nietzsche to an episode of a merely preliminary character. Natural science and the historical attitude, we are told, have exhausted their usefulness in overcoming the Middle Ages. They were still weapons that the Middle Ages had sharpened against itself, useful as means for winning a new freedom, but not themselves as meaning with which to fill that freedom. The power that the instrument has gained over the will, which it was supposed to serve, must be broken in a new turning. Like knowledge against the Middle Ages, art has to be mobilized against science. It seems to him that against historical writing and natural sciences “immense artistic powers are called for.” The function of philosophy changes; it no longer has to establish the possibility of science and to give birth to new sciences but rather “to consider the problem, to what extent science may grow: It has to determine the value!” It finds in art the power with which “to break the unrestricted drive for knowledge,” not to let “the reins of science” escape from its hands.

This whole theory interests us here only for the implications that it allows to become visible in a retrospective view of the foundation of the modern age. It was not enough for Nietzsche to legitimize resistance against a reality no longer characterized by consideration for man; man’s right then remains dependent on reality as he finds it or believes he finds it. His right should consist in imputing the least possible binding force to reality, so as to make room for his own
works. "Not in knowing but in creating lies our health! ... If the universe has no concern for us, then we want the right to scorn it."

One might think that this formula defines exactly the self-consciousness of an age that has given itself up to its technical achievements. But Nietzsche ignored this possible interpretation of his basic thought. There is no talk of technique in his writings. Technique retains the posture of self-assertion, with its dependence on theoretical truth about nature. It derives from a teleology that compensates obedience to the laws of nature with mastery over nature. Technique may have seemed to Nietzsche to be the epitome of the surrogates for the lost natural teleology benefiting man. That he passes it over in silence, that he ignores the manifest possibility of implanting in it some of his pathos of human pretension, is more instructive than if 'interpretations' could be cited.

That technique also could surpass the character of pure self-assertion, that it could not only disguise the element of need but even eliminate it in the immanence of becoming an end in itself, that it could break out of competition with nature's accomplishments and present itself as authentic reality, was still beyond the horizon of experience at the time. Hence the absolutism of art. "Only as an aesthetic phenomenon is the world any longer justified for eternity. ..."

The method employed here, that of viewing the problematic of the legitimacy of the origin of the modern age from such distant vantage points, may seem questionable. That is a result of the difficulty we are faced with on account of the difference between the historical process and its expression in documents. As Karl Marx noted in the preparatory work for his dissertation on Democritus and Epicurus, we have to distinguish "the steady forward motion of the mole of real philosophical knowledge from the talkative, exoteric, variously gesticulating phenomenological consciousness of its subject."

Gnosticism had made acute the problem of the quality of the world for man and, through the contradiction that the patristic literature and the Middle Ages opposed to it, made cosmodyicy conditional on theodicy. The modern age attempted to strike out this condition by basing its anthropodyicy on the world's lack of consideration of man, on its inhuman order. But it remained for Nietzsche to make visible the presuppositions of this justification of man by disputing them. We are concerned here only with this effect of making visible, not the dogmatics employed in achieving it—that is, with the optics, not the analysis.
The mole threw up his first hill at this point, enabling us to trace his underground route. The nature of history does not allow us to practice historical microscopy; we have to look where the structures of the process manifest themselves of their own accord.

The modern age has regarded self-preservation (conservatio sui) as a fundamental category of everything in existence and has found this borne out all the way from the principle of inertia in physics to the biological structure of drives and the laws of state building. Nietzsche sees in self-preservation only the metaphor of a rational category, the attempt to conjure up an order from (and in spite of) disorder. In accordance with the precept, “Beware of superfluous teleological principles!,” he recommends that we examine whether self-preservation can be assumed to be a fundamental drive of living things. “A living thing seeks above all to discharge its strength—life itself is will to power; self-preservation is only one of the indirect and most frequent results.”

Self-preservation for him can only be understood as a reaction to a reality that necessitates it; it presupposes that the quality of this reality is an endangering one. But the model of a relation to reality that Nietzsche wants is not supposed to depend upon a quality of reality. “There is neither order nor disorder in nature,” he wrote as early as 1868 in an essay on the problem of teleology since Kant. The replacement of self-preservation by the “will to power” is only the reversal of the thought that reality is indifferent with regard to its individual members—the result is the doctrine that life must be indifferent with regard to reality.

The elimination of the premise that the world has a particular quality for man that in effect prescribes his basic mode of behavior makes fully visible for the first time what it could mean to take things for granted in advance in a world concept. Nietzsche’s philosophy is among the approaches to a kind of thinking that removes problems by specifying the conditions under which they no longer arise. But the coup de main of putting the will to power in place of new answers, of ending the history of reoccupations by striking out the very schema whose formal constancy they presuppose, has only illuminated better what it was meant to destroy. To give oneself the history that sets one free of history, or that only endorses what is present without putting it in question, would have meant, so to speak, to secede from history and throw off its burden—which is often dreamed of, also, for instance, in the form of the pseudonymous ‘Being’ whose advent is supposed to expose an entire history as forgetfulness of it.
A Systematic Comparison of
the Epochal Crisis of Antiquity
to That of the Middle Ages

The categories that Descartes provided for the modern age to use in understanding itself, which make him the favored thinker of every account of its origin, are those of methodical doubt and an absolute beginning founded only on itself. Methodical doubt is a cautious procedure; it is meant to be distinguished from the dogmatic negation that already knows what should ultimately be rejected, and must demonstrate that; instead, it restricts itself to regarding all judgments as prejudiced until they have been proved otherwise. This procedure is supposed to be usable by anyone and at any time; the new judgments that it produces exclude the very hypotheses that would enable us to understand why this undertaking is considered necessary and is carried out at a particular point in history.

An absolute beginning in time is itself, in its intention, timeless. Reason's interpretation of itself as the faculty of an absolute beginning excludes the possibility that there could appear even so much as indications of a situation that calls for reason's application now, no sooner and no later. Internal necessity forbids external necessities from playing any role here. Reason, as the ultimate authority, has no need of a legitimation for setting itself in motion; but it also denies itself any reply to the question why it was ever out of operation and in need of a beginning. What God did before the Creation and why He decided on it—where reason was before Descartes and what made it prefer this medium and this point in time—these are questions that cannot be asked in the context of the system constituted by their basic concepts.
The absolute beginning that inaugurates history forbids itself to have a history—and that means to be not only an original positing but also the answer to a crisis. History exists for Descartes only as the totality of prejudices, or for Bacon as the system of idols, which now find their end, without this end's becoming comprehensible as a consequence of their earlier acceptance, their fall from power as a consequence of the unbearability of their rule. The characteristic features of self-assertion are concealed so as not to conflict with the evidence of a spontaneous generation; the crisis disappears into the obscurity of a past that cannot have been anything more than a background for the new light.

This self-interpretation directly provokes the countermovement of a massive historicism, to which one does an injustice if one excludes it from the rationality of the modern age. The idea of an absolute beginning is in its turn—even if it sees itself as entirely in the service of the system of rationality ultimately to be erected—no more rational than any creatio ex nihilo. The restitution of the disavowed 'historicity' is in itself not yet a movement against the Enlightenment. But the Romantic rehabilitation of the Middle Ages shows the potential that is latent in this process. The historicization of the beginning of the modern age is transformed into a gesture of reproach, with which the history of its desire not to be history is restored to the epoch, and its derivation is (as it were) imposed upon it as an obligation. The refutation of its claim to an absolute beginning goes on to cast doubt on its historical legitimacy, referring always to the claims in its self-definition and making the suppression of historical dependence an index of the sort of questionable consciousness that glosses over its unjust contents. Historicism seemed to provide an admission of neglected legal titles, which had to be feared by the epoch's understanding of itself as exhibited in the Enlightenment. Thus the apologia for the Middle Ages at once becomes the construction of a legacy, whose open neglect can only be explained by secret benefit. The historiographical recovery of the Middle Ages, which had originally been a triumph of the historiographical intellect over the distance of historical alienation, succumbs almost as a result of its own internal logic to the service of the category of secularization.

An important additional element is the narrowing of the thematic scope of historical study to the 'great centuries,' the stable substance of 'classical' formations. This selectiveness had been raised to the status
of an obvious, even exemplary, procedure in the study of the ancient world, where the idealization of a humanist canon had bracketed out whole realms of phenomena that did not belong in the picture: those of crisis, disintegration, the disappearance of supposedly timeless ideals. For this procedure, whose practitioners were satisfied to enjoy the view from one summit to another, the break between the epochs was of course unintelligible and took on the character of either pure catastrophe or pure willfulness. The beginning of the modern age, basing itself on its own internal evidence, seemed to destroy in barbaric fashion a meaningful historical context and to spring from an act of pure self-aggrandizement.

The revision of this historical picture has been under way for a long time. The focus of research interest has shifted more and more away from the markedly 'classical' phases of historical formations toward the zones of transition, deformation, and new formation. This holds for the ancient world just as much as for the Middle Ages. One may wish to speak of the low points of the historical process—but it is here that structures can be grasped that make manifest the historical movement as such. The process that is supposed to become thematic under the rubric of the "disappearance of inherent purposes" [Telosschwund] and to render the onset of the modern age intelligible as 'self-assertion' is initially questionable in regard to its specificity for precisely this and only this context. The end of the ancient world seems to be just as capable of interpretation by means of this category as is the crisis of the Middle Ages. This is why it was necessary to analyze the 'procedure' whose application to the final, Gnostic phase of the ancient world furnished the ground plan of the Middle Ages. But the difference between the aporias [difficulties] that were to be eliminated and the intensity of the questioning that had to be faced requires more clarification if we are to remove the objection that asks, Why didn't the crisis of the ancient world find its correlate in self-assertion?

Hellenism, with its scientific and technical achievements, can appear to be a sort of 'impeded modern age,' which in its very onset was thrown back by Christianity's breaking in and only got going again with the rediscovery of its texts by the Renaissance. The modern age would then be the normalization of a disturbed situation, taking up once again the interrupted continuity of history in its immanent logical sequence. The Middle Ages would again be a senseless and merely annoying intervening period in the historical process. If I turn a part
of my efforts to the refutation of this thesis, it is not because this reasoning in itself alarms me but because it conceals the singular situation of provocation and self-assertion from which springs the incomparable energy of the rise of the modern age.

I have spoken so far of Gnosticism as the final form of the ancient metaphysical system, in opposition to which patristic dogma consolidated itself. However, Gnostic speculation is not an expression of a disappearance of order but rather of the radical revaluation of an order that was in the process of petrifying. But the patristic polemic, which wants to use the positive cosmos of ancient metaphysics against the demonized cosmos of Gnosticism, nevertheless insists on a genealogy that derives the Gnostic cosmos from the disintegrating classical cosmology of the Greeks. Here one should not overlook that the dependence of the patristic version of ancient cosmology on Stoicism and its emphasis on the cosmos also involved the use of its polemical formulas, especially those aimed at Epicurus. But the arguments for these formulas had to be found, and they are instructive.

Irenaeus of Lyons traces the Gnostic dualism back to the antithesis of atom and empty space in the philosophy of Democritus and Epicurus. The world as it appears is for both Gnostics and atomists something other than what truly exists; but—and this is the distinction Irenaeus passes over—for the atomists it is composed of what truly exists, whereas the Gnostic pleroma [fullness] draws all the predicates of existence to itself and allows the world to be degraded to a mere appearance of nothing, to the demiurge's deception. More important is the asserted equivalence of the transcendent god of Gnosticism and the extramundane gods of Epicurus; what they have in common is that they bear no responsibility and care for the world—they do not even sit in judgment and dispense justice for men's deeds. A century later Tertullian named Epicurus as the grandfather (patriarcha) of Marcion's senseless and motionless god (immobili et stupens deus) and treated that god as contemptible on account of his incapacity for wrath and revenge. The contradiction is evident: the Stoic God of cosmic providence and the Old Testament God of wrath and judgment cannot both be brought into play against the Gnostic god of salvation at the same time.

The instructive value of this polemic in connection with our fundamental questions only becomes evident when we set alongside it a comparison between Epicurus's teachings and the late-medieval conception of God's sovereign freedom to do what He pleases [Wilkür-
Leibniz pronounced this equivalence. In his exchange of letters with Samuel Clarke in the years 1715 and 1716, Leibniz opposes the connection between Newton’s physics and voluntaristic theology, which seemed to him to be a necessary consequence of the assumption of absolute space and absolute time. Clarke, basing himself on this position, had rejected the application of the principle of sufficient reason to the explanation of nature. The act of creation was supposed to remain the original fact, which could not be further inquired into and rationally grounded. Leibniz entitles this the “décret absolument absolu” [the absolutely absolute decree]. Absolute space had for him precisely the characteristics that exclude a rational origin of reality; there are in it no meaningful differences of quantity and of place, so that it is an aggregate of rational undecidabilities. In the Creation there is for Leibniz only one act of mere power, the creation of matter as such. He who reduces the concept of God to omnipotence and the will that does what it pleases is logically compelled to see in matter the essence of creation and to reduce everything to matter. Theological absolutism denied man any insight into the rationality of the Creation, which is exactly what Leibniz wanted to open up in accordance with the principle of sufficient reason and by means of the idea of the God Who practices mathematics. That the world is a coherent order becomes, on Clarke’s view, a mere assertion, without consequences for human thought. Order is the side of reality that is turned away from us: “For in truth and strictness, with regard to God, there are no disorders...”

The essence of the dispute between Leibniz and Clarke is the question of how the reality of nature presents itself to man: whether it is dependable and serviceable to him or whether he is merely expected to acknowledge its orderly character without having it confirmed. Leibniz insists that the very order that human reason claims to find in reality embodies the qualities that divine reason had to give to its work. The controversy here is no longer about the problem of the arrangement of the world to suit the requirements of human life but rather about the question of the effectiveness of the human reason that has to assert its own laws as the laws of the world. The rational dependability of the world, the condition of the possibility of all theory, is the remnant of teleological order that Leibniz defends. On the other hand, absolute will, as a metaphysical principle, is the equivalent of the assertion that the dependability of the world cannot be proved and is therefore a mere fact, always subject to revocation at any time.
The high point of the dispute between Leibniz and Clarke is reached when Leibniz asserts the complete equivalence of the system of absolute will and the system of absolute accident, of voluntarism and atomism: "La volonté sans raison seroit le hazard des Epicuriens" [Will without reason would be the chance of the Epicureans]. The universe as interpreted by atomism is ruled by the principle of the identity of indiscernibles since the atoms and empty space are defined by the fact that they allow no rational action whatsoever but place reason in a position where all possibilities are indifferent, so that chance becomes the sole principle of reality. The nominalistic God is a superfluous God, Who can be replaced by the accident of the divergence of atoms from their parallel paths, and of the resulting vortices that make up the world. The concept of an absolute will is internally contradictory and consequently a chimera, a fiction.

We need not be concerned here that since the time of the Stoa the accusation of "Epicureanism" had become a polemical blow below the belt; here the term is in fact very accurately applied. Just as little do we need to concern ourselves that the position Leibniz constructed in opposing Newton did not save the metaphysics of a world order guaranteed by divine reason. The path forward from this point was determined not by the principle of this critique but rather by one of its side effects, the phenomenalizing of space and time. The instructive thing for us is not the antithesis between Leibniz and Clarke, as such, but rather the principle, employed in Leibniz's analysis, of the equivalence of nominalistic and mechanistic explanations of the world, a principle that gives us the key to the reoccupation that was effected in the replacement of the late-medieval by the early-modern type of explanation of nature.

One of the essential, though usually underestimated, phenomena of the beginning of the modern age was the attempt to reappropriate Democritus's atomistic philosophy of nature in the form it had been given by Epicurus and Lucretius. This renewal of ancient atomism prepared the way for the new ideas of matter and motion. But in spite of this function, the process is still understood merely as a piece of 'Renaissance' conditioned by the literary rediscovery of Lucretius in 1417, on account of which it has come to be regarded as a historical datum requiring no further explanation. But the mere demonstration of the presence or reappearance of a source does not explain anything. Renaissances have their genetic logic, and only the exhibition of that
logic satisfies the demands of historical understanding. The observation of Leibniz that we have cited, which he made in his argument with Clarke, discloses the structural connection between nominalism as a late-medieval phenomenon and atomism as an early modern one. Both positions regard the origin of the world as an event inaccessible to human rationality. Epicurus had assumed an *uncaused divergence of atoms* from their parallel straight-line paths in infinite space as the origin from which developed the vortices that gave rise to his worlds; nominalism could provide for all questions regarding the reason and purpose of the Creation only the Augustinian *Quia voluit* [Because God willed it].

But the *systematic* interchangeability of the two theses, which Leibniz noted, does not mean that they must be regarded as equivalent in their *historical* function as well. The primacy of the divine will, which puts rejection of the question in place of explanation, was meant to increase the binding force of the given over men; the basic mechanistic thesis, on the other hand, did indeed remove the origin of the world from the realm of what can be grasped, but it had no ‘conservative’ implications for the relation of man to nature. On the contrary, it established the material substratum of the world as something meaningless in itself, and consequently as a potentiality open to man’s rational disposition. The reoccupation that took place between the absolutes *will* and *matter* defined the world as that which is precisely not pregiven, as a problem rather than as an established state of affairs. But the question why atomism could have this significance as the successor of voluntarism, but not in its original situation in the ancient world, leads us to a recognition of the irreversibility of this reoccupation: only after nominalism had executed a sufficiently radical destruction of the humanly relevant and dependable cosmos could the mechanistic philosophy of nature be adopted as the tool of self-assertion.

This prerequisite was not present at the origin of ancient atomism. Epicurus’s philosophy is essentially a therapy meant to lessen the human uneasiness caused by natural phenomena, or, more exactly, by the inherited explanations of those phenomena. Nominalism is a system meant to make man extremely uneasy about the world—with the intention, of course, of making him seek salvation outside the world, driving him to despair of his this-worldly possibilities and thus to the unconditional capitulation of the act of faith, which, however, he is again not capable of accomplishing by his own power. After the
classical philosophy of the Greeks, the postulate of ataraxia was still possible, whereas after the theological absolutism of the Middle Ages, self-assertion had to be the implication of any philosophical system. Can these distinctions be substantiated by a comparative analysis of ancient atomism and medieval nominalism? This would lend profile to the thesis that a historical ‘answer’ like that of the modern age could not have been given to Hellenism, but only later, to nominalism. For this purpose the comparable doctrines on each side will have to be defined more accurately in accordance with their functions within each system.

For Epicurus’s gods and for the God of nominalism, there is no ratio creandi [reason for creation], no motive for bringing a world into existence. From this unambiguous shared thesis, however, radically different conclusions are drawn. For Epicurus it follows that no creation whatsoever can be assumed, since no ratio [reason] can be given for the act of creation. This is at any rate the direction taken by Lucretius in attempting to make the argument plausible: He has in mind, as a model of the rational production of a world, the Platonic myth of the demiurge with his prototypical Ideas, and in this connection poses the question where in the Epicurean system of empty space and atoms the gods could have found a model, accessible to intuition, of a world to create. The logical circle, according to which a world must have already been present from which to read off what could be created—a circle that is also present, though hidden, in the Platonic myth of the demiurge—excludes the idea of creation from the ranks of the rational principles of explanation. The origin of the world is left to chance—though to a chance that nevertheless contains its own guarantees, as will be shown.

The nominalists derive from the same initial thesis a conclusion that is extremely positive for their theological system: Because the Creation is uncaused, because it does not require a preexisting model for mere demiurgic implementation, it demonstrates the radicalness of the groundless will that is the ground of everything; it is the maximum of causality and the first in the sequence of pure acts of grace that constitutes the real theme of theology. God is not, like the Platonic demiurge, the executor of a world plan that is consistent in itself and makes its own uniqueness manifest, and whose ideal status means precisely that any rational being must recognize in it (and accordingly put into effect) the necessary characteristics of a world as such, so that productive and theoretical insight converge on this model. The nomi-
nalistic God stands with His work in the widest horizon of noncontradictory possibilities, within which He chooses and rejects without enabling the result to exhibit in any way the criteria governing His volition. Much of what He could create, He does not choose to create—for nominalistic thought, that is the difference between the origin of the world and a process of natural causality, from which the whole of the possible effect always results. 8

This conception of creation is not an incidental piece of doctrine of the Nominalist school but is connected to its philosophical center, to the denial of universals and the assertion of the priority of reality over concepts. It is easy to show this since a realist doctrine regarding concepts, which holds that they possess a binding force as exemplary entities independent of things, is demonstrably incompatible with the strict concept of a creatio ex nihilo. The universale ante rem [universal having an existence prior to things] as that which can be and is repeated at will in concrete things makes sense only so long as the universe represents a finite embodiment of what is possible. The concept of the potentia absoluta [complete, absolute power], however, implies that there is no limit to what is possible, and this renders meaningless the interpretation of the individual as the repetition of a universal. Creation is now supposed to mean that every entity comes into existence from nothing, in such a way that even in respect to its conceptual definition it was not there previously. Only in this way can the possibility be excluded, as William of Ockham argues, that God might restrict His own power by creating a particular entity, because any aspect of other concrete creations that happened to be identical in species with the first could only be imitation and repetition, not creation. Absolute power is original in every one of its creations. It does not recognize the Aristotelian distinction between definite essential form and individuality but produces only what is essentially unique. 9

But these very riches of creative abundance put human reason in the embarrassing position of having to set its economy of classificatory concepts over against the authentic reality as an auxiliary construct that is just as indispensable as it is inappropriate—in the position, that is, of being unable from the very beginning to interpret its theoretical mastery of reality as anything but self-assertion. Thus the denial of universals directly excludes the possibility that God’s restriction of Himself to His potentia ordinata [ordered, or ordained, power] in nature too could become comprehensible for the benefit of man and his
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reason. Divine spirit and human spirit, creative and cognitive principles, operate as though without taking each other into account. The gratuitousness of the Creation implies that it can no longer be expected to exhibit any adaptation to the needs of reason. Rather than helping man to reconstruct an order given in nature, the principle of economy (Ockham’s razor) helps him to reduce nature forcibly to an order imputed to it by man. God is not economical; He does many things lavishly that could have been done simply and sparingly: “Quia vult, nec est alia cause quaerenda” [The reason is that He willed it, and no other reason is to be expected]. Ockham’s distinction between the potentia absoluta and the potentia ordinata does not alleviate the situation for rationality because although it does imply that once chosen, the ordo [order] will be observed, it does not provide any access to the contents of the chosen order. The potentia ordinata is directly relevant only to the path of salvation, not to the path of knowledge. God’s ‘will’ is supposed to be accessible only through ‘revelation’—faith in salvation is not supposed to be translatable into or exchangeable for faith in the world.

While this may not be a metaphysical dualism of the Gnostic type, it is its practical equivalent ad hominem: the only dependable and trustworthy God is the God of salvation, Who has restricted Himself to His potentia ordinata, like a partially constitutional monarch, but Who, through predestination, still withholds from man’s knowledge the range over which He chooses to be dependable. It is precisely this restriction to those who are chosen that distinguishes the pragmatic dualism of the late Middle Ages from the Gnostic dualism of late antiquity because liberation from the cosmos now is no longer a divine offering open to all men and authenticated by the possession of knowledge. This time there is no consciousness of conditions under which the world could lose its significance for man. The groundlessness of the Creation is indeed dogmatized as requiring an act of unconditional submission, but submission as such is still not a condition of salvation. Escape from the world into transcendence is no longer an alternative for man himself and precisely for that reason has lost its human relevance and historical effectiveness. But recourse to intraworldly composure of the mind, to the secum vivere [self-sufficient life] of Epicurean ataraxia, is also blocked. The method of neutralizing the phenomena and the problems of nature would have been found to have lost its efficacy, if anyone had tried to apply it once more, because
its presupposition of the finite and hence completely describable possibilities of natural processes had become untenable against the background of the infinitude of divine power. The dependence of ataraxia on physics could not be reestablished. Only insofar as physics could be thought of as producing real human power over nature could natural science potentially serve as the instrument by which to overcome the new radical insecurity of man's relation to reality.

Philosophy and science, which, autonomously formulated, offered themselves as means for the removal of this uncertainty about the world, could not in themselves, as pure theory, become "the happiness of their age." Philosophy not only had to project and provide a foundation for 'method'; it had itself to become a method of assuring the material adequacy and competence of man's possession of the world. Nature could not once again be forced to the edge of consciousness, its appearances blunted and robbed of their power; on the contrary, it now became the incessantly pressing theme, which made more and more exclusive demands on theoretical attention. There was no longer any refuge in "the lamplight of the private man." Knowledge as the endeavor of an individual, as an attempt to grasp a totality of truth as the source of fulfillment, proved to be hopeless. Scientific method, as it was projected by Descartes, provided the procedural regulations for a summoning-up of incomparable theoretical energy, in whose service both individuals and generations were enrolled.

What was no longer possible, or not again possible, can be exhibited directly by a comparison with Epicurus's intention, which had been to 'humanize' the groundlessness of nature as the ground for indifference to it, to remove by means of physics the potency of the drive for knowledge that holds sway within it, and to make manifest by the same means the superfluousness of theory as theory. This difference is made especially tangible by the formulation that the young Marx gave to the basic character of the Epicurean philosophy in his dissertation: "... the interesting thing about Epicurus," he writes, is "how in every sphere he tries to eliminate the state of affairs that provokes the appearance of presuppositions as such and how he commends as normal the state of affairs in which presuppositions are covered up." While for Epicurus everything is aimed at blunting and diffusing the problems forcing themselves upon man from outside, in the declining Middle Ages the reverse is the case: Everything works to sharpen them to the most acute form. Although the intention in this, to begin
with and in the first instance, was to bring the pretension to theory to the point of inevitable resignation and thus of submission to faith, nevertheless the immanent dynamics of the situation led to the contrary result, namely, the development of the consciousness that precisely in what was supposed to be sacrificed there lay that which could not, in the interest of humanity, be relinquished.

Comparative analysis of Epicureanism and nominalism leads to another point of apparent agreement in the idea of a plurality of worlds. This idea was to become one of the essential factors in the disintegration of the metaphysical idea of the cosmos, preparatory to the modern age. And the Enlightenment will perform the thought experiment of other and different worlds especially in accordance with its function of criticizing man and his notion that he has a privileged status in the cosmos; the self-assertion of reason, it will argue, requires emergence from teleological comfort, from anthropocentric illusion. But in ancient atomism this thought could not yet achieve what it could after William of Ockham, namely, an exhibition of the world’s form as contingent and a demonstration to man, by means of mental variation of the world’s actual makeup, of its capacity for and worthiness of alteration.

When Epicurus, like other Greeks before him, speaks of ‘cosmos’ in the plural, this means that one world eidos [world form, world Idea] is thought of as being realized in arbitrarily many instances. Before Plato and Aristotle gave the sanction of metaphysics to the uniqueness of the cosmos, the idea of the plurality of worlds had arisen among the Presocratics, without yet being given the weight of a dogma. Anaximander had thought of the world on the analogy of the legal system of the Greek polis, and from this analogy there had easily arisen the idea of unities sufficient unto themselves and separated by the no-man’s-land of space. “When one leaves the polis, one comes to open country, and after a while to another polis. Thus the idea suggests itself that outside our cosmos, at a greater or lesser distance, other cosmoses are to be found, indeed an unending series of them.”

The atomism of Democritus was the first doctrine to push the idea of the plurality of worlds to the point where it endangered the idea of the cosmos itself: The atoms are not only endless in number but also in the variety of their forms, and there is no longer any reason why worlds of the sort typified by our own should emerge from the vortices of these atoms in empty space. Against this absolute fortuitousness of the beginning and the form of the world, Plato set up his
combination of cosmology and the doctrine of the Ideas, and Aristotle
deprovided the tradition with the canon of proofs of the necessary
uniqueness of the cosmos as the exhaustion of space, matter, and
forms. The Stoics perfected the identity of metaphysics and cosmology
by making the teleology of nature, as it relates to man, an expression
of the providence governing nature. But by this very outbidding of
their predecessors, they made a scandal of the uniqueness of the
cosmos: The cosmic teleology did not relate to the individual and his
claim to happiness; the evil and the suffering in the world could only
be justified by means of a teleology of the whole that was hidden and
without consideration for the individual.

This is the focus of the opposition of Epicurus, who makes this very
question of the potential happiness of the individual man the central
concern of his philosophy. A cosmos, a teleology, a providence of
which the individual could not feel assured seemed to him to be not
only irrelevant to his central question but a hindrance to a form of
life that could allow itself neither fear nor hope regarding what the
individual could expect from the world. If suffering and evil were
interpreted as elements in a 'logic' of reality, elements for which a
hidden reason, of whatever sort, had to be assumed, they would make
men the bearers of an ordained inequality of their fates and of their
share in happiness, an inequality whose supposed meaning could not
be regarded with indifference. The worlds of atomistic chance, which
Epicurus opposes to the unique cosmos with its powerful sanction,
make the external fate of each being within them appear as the result
of a constellation that is favorable precisely because it is neither 'intended' nor defined and ordained as a 'role.' Chance is the sort of
fate with respect to which indifference is possible. The assertion of
the plurality of worlds is a sort of cosmological demonstration of the
equality of everything that exists in the distribution of what can literally
'befall' each thing in the world-building falling together of atoms.
Epicurus's whole physical system passes in review the indifference of
nature to man so as to suggest to man that his indifference is, in turn,
the precondition of his happiness.

Epicurus makes use of Democritus's atomism, but he changes its
function radically; he is not interested in the explanation of natural
phenomena but rather in the liberation of man from their supposed
significance. Once again, this decisive difference between the physicist
and the humanist was stated by the young Marx in his dissertation:
Democritus employs “necessity as a form of reflection of reality,” whereas for Epicurus chance is “a reality that has only the value of possibility,” and the concern in relation to this possibility is not “with the object that is explained but with the subject that explains.” And further: “What is abstractly possible, what can be conceived, constitutes for the thinking subject neither an obstacle nor a limit nor a stumbling block. Whether this possibility is also real is a matter of indifference, because we are not here interested in the object as object. Consequently Epicurus proceeded with a boundless nonchalance in explaining individual physical phenomena. . . . One can see that he is not at all interested in investigating the real causes of objects. He is merely interested in soothing the explaining subject.”

This difference from Democritus also helps to determine the form taken by the thesis of the plurality of worlds. In spite of his rejection of the cosmos of metaphysics, Epicurus unobtrusively holds fast to those of its implications that served (so to speak) to temper the accidental character of the relations between atoms. The sheer fact that under the premises of atomism there was a world at all, not to speak of many of them, caused no difficulty for Epicurus, in spite of its improbability, because he was able to fall back unhesitatingly on a reserve of teleology. Lucretius, who in his didactic poem reports his master’s teachings with a faithfulness that was characteristic of the Epicurean school, describes it as improbable that the innumerable atoms outside our own world should not have accomplished anything. There again is the metaphysical proposition that nature does nothing in vain. But just as for Epicurus it is not really accidental that there are any worlds at all, so it is no accident what comes into being when worlds emerge from the atomic vortices. Here Democritus’s extreme destabilizing of the cosmos is retracted in favor of a reassuring dependability. According to Hippolytus’s account, Democritus had taught that the worlds differed in form as well as number and that in some of them there was neither a sun nor a moon, neither animals nor plants nor even moisture. This was the logical consequence of the endless multiformity of the atoms that Democritus assumed. Epicurus’s crucial alteration of the system of the teacher whom he disowns is the assumption of a definite, finite number of forms by which the atoms are distinguished from one another. As though it were a matter of course, then, the products of Epicurean accident resemble one another, including the unquestioned matter of course that in each of his worlds there are men.
Fundamentally—and this effect on consciousness must have been Epicurus’s overriding concern—the chaos of the atomic vortices has a reassuring dependability that surpasses the guarantees traditionally provided by the gods. But the freedom from fear that this cosmology imparts must not relapse into admiration of the world, into the original affect of a philosophy that expects the fulfillment of man’s existence to come from outside, from nature. That there is a world is not at all a remarkable fact: “Non est mirabile”; indeed, the ‘natural’—state of affairs, which manifests itself in the plurality of worlds as the ‘ease’ with which they come into being, Man does not concern himself with what is there of its own accord, and in this he resembles Epicurus’s gods, who enjoy their blissful existence in the empty space between the worlds with equally little concern for the course of natural events.20 Epicurus makes current once again the Greeks’ authentic concept of nature, which they conceived of not as a quasi-divine subject, not as a “deus sive natura” (“either God or nature”: Spinoza), not as a power standing over things, but rather as a mode of processes that proceed from themselves, of their own accord. The demiurge, the unmoved mover, the ‘world reason’ had replaced this concept of nature with a supposedly more dependable factor, which allowed the world to be interpreted according to the model of the intentional product of human action.21 The crucial fact is that Epicurus was able to eliminate and exclude from human consciousness this god laden with care for the world, this deus laboriosissimus [hardest working god], only by building into the world process certain ‘constants,’ by making chaos into a sort of ‘ideal disorder’ and thus, as Kant reproaches the “shameless” Epicurus, “really [deriving] reason from unreason.”22 In Epicurus there is no physical argument for the strict parallelism of the paths of the atoms in infinite space, and the finite variety of the forms of the atoms and of their recurrent combinations is attributed, by an absolute metaphor, to “treaties in nature” (foedera natural).23 Epicurus’s system is not free from metaphysics, but it rests on the postulate of the metaphysical minimum, which secures the world for man as a cosmos without allowing any binding force over him to result from this.

Such assurances of the dependability of nature would be forbidden to late-medieval theological absolutism. The latter was not concerned with the reality of the world and its significance for human consciousness but with preserving the full range of God’s possibilities. The world
could indeed be a demonstration of the power that had created it; but no reality, however imposing—even if it were less in need of justification than the actual one—could be proof of omnipotence. Here was the common ground of all the paradoxes of Scholasticism: It could not remove from the world anything that was essential to the functioning of the system of proofs of God's existence, but neither could it commit divinity to this world as the epitome of its creative capacity.

The internal systematic conflict came into the open in 1277, when Étienne Tempier, the Bishop of Paris, condemned a list of propositions that as a whole reflected the conclusions of the thirteenth century's completed reception of Aristotle. Three years after the death of the classic author of High Scholasticism, Thomas Aquinas, his acceptance of the Aristotelian proof of the uniqueness of the world was condemned as a philosophical restriction of divine omnipotence. This document marks the exact point in time when the interest in the rationality and human intelligibility of creation cedes priority to the speculative fascination exerted by the theological predicates of absolute power and freedom.

The theological reaction of 1277 had an effect different from the one that was intended; by denying that the created world could be the equivalent of the creative power actualized in it, it opened the sluices to a flood of new questions. The nominalistic philosophy of nature, whose methodical style was to become the free variation of all the previously valid cosmological propositions of Scholasticism, is unthinkable without the support of this decree. But one should not separate this sentence, which condemned calling into question the possibility of a plurality of worlds, from its context. It was indeed meant to exclude the doctrine that this actual world epitomizes what is possible for God; but at the same time judgment was also passed against any doctrine that a universe of infinitely many actual worlds could be equivalent to the self-reproduction of divinity. The solution that Giordano Bruno's cosmology was to give to this basic question of the late Middle Ages, a solution of which we will give an account in part IV, was excluded: The first cause cannot produce an effect that is equivalent to its own reality. The Middle Ages remained stationed between these two negations and committed to their insoluble difficulties.

To the potentia absoluta (absolute power) there corresponded an infinity of possible worlds, but no infinity of actual worlds was allowed to
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correspond to it. It was a secondary question whether only one or a plurality of these possibilities had been realized; there were important theological reasons for holding to the factual reality of only one world. But this one world could no longer be rationally justified. The principle of contradiction was the sole limitation on the range of variability of the possible worlds, which could no longer be understood as instances of an eidetically constant type. This would have contradicted the nominalistic principle that the repetition of a pregiven essential structure is incompatible with the concept of creation from nothing.

William of Ockham deals with the problem of the possible plurality of worlds, in a context which is just as significant as it is unexpected, in his commentary on the sentences of Peter Lombard. In connection with distinctio 17 of the first book of this standard compendium of Scholasticism, he had to discuss the question whether the grace of the Holy Ghost that is granted to man by God is capable of quantitative differentiation, of increase and decrease. The identification of redeeming grace with the Third Person of the divine Trinity was bound to raise this problem because the attribute of unchangeability of the divine person seemed to exclude any differentiation in the effect of its conveyance to man. The Lombard had nevertheless found a formula that enabled him to hold to the system of differentiated levels of human blessedness. The details of this construction are not of interest here, but the radical considerations associated with them in William of Ockham’s commentary certainly are. They broaden the originally narrowly conceived theological thesis into the very general statement that the operation of divinity is bounded only by the principle of contradiction.

One must call to mind what this premise means. The God Who is subject only to the logical principle of contradiction is at the same time the God Who can contradict Himself, Whose creation does not exclude the will to destruction, Who stands over every present as the uncertainty of the future, in other words, finally, the God Whose activity does not allow us to assume immanent laws and Who puts all rational ‘constants’ in question.27 The God Who places no constraints on Himself, Who cannot be committed to any consequence following from His manifestations, makes time into a dimension of utter uncertainty. This affects not only the identity of the subject, the presence of which at any given moment does not guarantee it any future, but also the persistence of the world, whose radical contingency can trans-
form it, from one moment to the next, from existence into mere appearance, from reality into nothingness. The human spirit's temporality, its being in time, becomes its crucial handicap. The philosophical penetration of these considerations becomes clearest when one perceives in them the central motivation of Descartes's experiment in doubt in the *Meditations*; this will be shown later.

The impotence of reason, as deduced by William of Ockham from the principle of omnipotence, consists in the inapplicability of the principle of economy to the classical questions of metaphysics: The nature that does nothing in vain is no longer a definition of divine activity, to which the avoidance of detours and superfluous expenditures cannot be ascribed. What is given, the actual world as well as actual grace, is never the maximum of what is possible. The thesis of the possibility of infinitely many worlds is only the equivalent of an assertion of the powerlessness of finite reason.

This was the exact opposite of the Epicurean doctrine, which was supposed to make plausible to man how the processes of the universe could be a matter of no concern to him. The concept of omnipotence excludes, paradoxically, only the possibility that God could ever make everything that lies in His power, that is, an actual infinity. Ockham could not rely here on the argument that this concept was internally contradictory, since God Himself was actually infinite. Here was the boundary drawn by the decree of 1277, which the Almighty could not cross even in order to bring about something free of contradiction, and the crossing of which by Giordano Bruno would signify the end of the Middle Ages and a contradiction to the Middle Ages. This helps to make precise the assertion of the possibility of infinitely many worlds: The Creator had a choice between infinitely many different possibilities, and the unfathomable decision at which He arrived does not commit Him; He can always create more worlds and different ones from those that He has created—but He cannot exhaust the infinite fund of possibilities without reproducing Himself. This 'position' of divine reproduction is nevertheless already 'occupied' in the theological system; it is defined not as creation but as begetting, that is, as the quasi-natural process by which the Second Person of the Trinity is brought forth. One who wanted the totality of possibilities for the world, the exhaustion of everything of which omnipotence was capable, had to make this position free; he had to contradict dogma and become a heretic. Giordano Bruno was to face this un-
avoidable consequence. And he had to conceive of the world once more as a unity, using the expression ‘plurality of worlds’ now only in a hyperbolical sense, for the repetition of elementary unities within the totality of the universe.

Thus a fundamental change in the meaning of talk about the plurality of worlds was ushered in. For the Greek atomists there was no significance in the fact that their cosmoses were located within the unity of a single empty space; this space separated the individual world formations absolutely; it was the nothingness between them and excluded all real relations. It was (at the latest) Newton’s concept of a space through which the action at a distance of gravitation operates that put an end to the unworldliness and physical unreality of space. Space becomes the ‘medium’ of the unity of the universe as the system of interaction of all the bodies in it. In his early work on the natural history of the heavens, as though with the intention of harmonizing Epicurus and Newton, Kant entitles the universe “a world of worlds” but later corrects himself with the formula “the totality of the so many systems . . . that we incorrectly call worlds.” The interest of the Enlightenment in the question of the plurality of worlds is directed, quite consistently, at the possible plurality of inhabited cosmic bodies, thus understanding ‘worlds’ as ‘earths.’ It is no longer a matter of measuring God against the full range of possibilities but rather of comparing man with what he has made of himself and of the earth, seen as it were from outside. It is not the actual makeup of the universe that is of interest but rather the relativizing of human self-consciousness, the doubt that is generated regarding the uniqueness of what man has produced as his ‘world.’ The ‘other worlds’ provide a fictive exotic standpoint for criticism, just like the realms of ‘noble savages’ in the Enlightenment’s travel romances.

It follows from this, in connection with our intended comparison of the difference in radicalness between atomism and nominalism, that the late-medieval doctrine of the plurality of possible worlds has a function completely unlike that of the atomistic plurality of actual worlds: The groundlessness of the factual world, in which man has to live, produces a more intense consciousness of insecurity than the groundlessness that Epicurus had used to negate creation as such. The questions that cannot be asked confront reason with its impotence more pitilessly than those that do not need to be asked.
Intraworldly secession into the idyll of the *kepos*, the ‘garden’ of Epicurean ataraxia, had presupposed the calm of a situation in which the problematic of the world was alleviated. The garden whose cultivation, in view of a hopeless world, was to be recommended at the end of *Candide* is a point of grim irony but is not the solution that the epoch found for its inherited problem of the quality of "the world. It was not a matter of indifference which of the possible worlds God had in fact created; but since man could not hope to fathom this decision, it had to be made a matter of indifference. The search for a set of instruments for man that would be usable in any possible world provides the criterion for the elementary exertions of the modern age: The *mathematizing* and the *materializing* of nature.

The lawfulness of an arbitrarily chosen nature—that was the aprioristic, ‘pure’ science of nature, which, to use Kant’s language, started from the “concept of nature as such” and took as its object the ultimate characteristics of a speciesless matter. For this theory, which (so to speak) anticipated the factual world, it was actually a weakness of ancient atomism that it anticipated the specificity of the phenomenal world in the specific forms of the atoms, so that it knew no ‘pure’ matter. But at the same time the postulate of pure materiality was the ideal premise of an attitude to the world that can be defined by the concept of technicity. According to that attitude, man can make what he wants of the world to the extent that it can be reduced to the characteristics of a mere substrate underlying what man constructs.

A third and final aspect in regard to which atomism and voluntarism, as systems representative of the crises of their respective epochs, are to be compared here is that of their anthropological components. Because Epicureans and nominalists—even though with differing argumentation—deny the teleology of the world, they must at a minimum dispute the privilege that the Stoics had emphatically ascribed to man, namely, that the human existential interest is taken into consideration in the whole of nature. But in his anthropology, as in the rest of his system, Epicurus is entirely uncritical with regard to his own teleological implications. One need only read Lucretius’s description of the original condition of mankind to see how strong were the anthropocentric presuppositions here, and not only by accident, but clearly in connection with the culture-critical tendency of this mythology of the primeval time.
The nature that was not created out of divine providence for man necessarily continues to owe man a great deal; it stands laden with debt before man, who is thus burdened by no responsibility for the bad in it. But this unburdening of man, which forestalls Augustine's reversal of the relation of debt, must not rob the system of its intended effect by accentuating man's concern about his own existence. Therefore the theory of the origin of culture has to emphasize that nature holds ready everything that is necessary for man. Auspicious nature is to be thanked, according to a fragment of Epicurus, "because it made what is necessary easily accessible, and what is difficult of access unnecessary." Thus the groundlessness of nature permits the groundlessness of concern because the 'cosmos' is sufficiently powerful even in chance events to let needs and givens intermesh with one another just as the forms of the atoms themselves allow the formation of meaningful, organized configurations. The logic of the materialization of the world is not pushed to its extreme, in which man's ataraxia would become impossible and everything would depend on his practical energy. But at the same time the intermeshing of nature and need is a critical principle that prevents an Epicurean from regarding nature as mere material: Necessary wants can be satisfied without great exertion and expense, and the satisfaction of natural wants does not leave much to be wished for because nature itself holds ready at hand the wealth with which they can be satisfied; only empty wants find neither measure nor satisfaction in nature. Thus, because Epicurus's nature provides man with more than it can really provide consistently with his own premises, theoretical indifference and practical unconcern can be combined.

However problematic it may at first appear, the position and rank of man in Epicurus's system cannot be defined without bringing in his theology. There has been much arguing back and forth about the seriousness of Epicurus's doctrine about the gods. The first thing to be said is that the doctrine of the gods who take no interest in the worlds is advantageous to Epicurus in argument, in contrast to an unprovable atheism. But beyond that, the form of the gods' existence is like a model of his philosophical idea of eudemonia. This is the only explanation for the fact that, according to Lucretius, Epicurus's lost work contained an extensively worked-out theology. It has the function of a positive myth that is oriented toward confirming the human capacity for happiness precisely because the gods are supposed
to be imagined in human form. Cicero has given us the shortest justificatory formula for this, which appeals to the preeminence of the human form and human nature over all others in nature: “Omnium animantium formam vincit hominis figura” [Man’s form surpasses that of every living creature]. For Epicurus the isomorphism between men and gods has the systematic significance of a metaphysical guarantee of what man can be and what he in fact achieves in the shape of the wise man. The man who perceives his possibilities and realizes them lives, as the “Letter to Menoeceus” says, “like a god among men.” And that means above all that he shares the serenity and freedom from care of the gods’ existence. The relation of men to the gods is a sort of mythical reflection, which is accomplished through pure imagery, without any interaction and with no need of knowing of the gods’ reality through experience. Here the wise man can allow himself the emotional state that he must deny himself with respect to nature: admiration. “The philosopher admires the nature and disposition of the gods and seeks to approach them; indeed it is as though he were irresistibly driven to come into contact and intercourse with them; thus it is appropriate to characterize wise men as ‘friends’ of the gods, and to characterize the gods, conversely, as ‘friends’ of the wise. . . .”

That the gods should have human form was a familiar idea in Greek myth; but at the same time the philosophical criticism of myth had found it scandalous. For here the human was at the same time the all too human; it was envy and jealousy, favoritism and capricious meddling with human destinies—the very things that brought human ataraxia and divine bliss into conflict with one another and on the weaker side gave sustenance to the emotions of fear and hope, which Epicurus’s philosophical therapy was meant to get at. Atomistic chance was supposed to give man a resting place between mythical caprice and physical necessity. It seems that for Epicurus the philosophical critique of myth had gone from one extreme to the other: The necessity that had taken the place of caprice had failed to save humanity, which was the core of the myth deserving to be saved.

So it is understandable that Epicurus firmly opposes the supposedly ‘purer’ form of Greek religiosity, the deification of the starry heavens, employing his method of neutralizing emotional states for this purpose. It is not certain whether Lucretius accurately represents Epicurus’s opposition to the stellar theology when he says that it was motivated
by the danger that the gods might return to the world, the possibility of a relapse in antiquas religiones, into the mythical consciousness of dependence on unlimited powers. In any case Lucretius seems to stand closer than does Epicurus to the 'Gnostic' suspicion that the stars could represent powers that are ill-disposed toward man. The cosmic is potentially the demonic, and for Lucretius deliverance from fear lies only in the idea that the influence of all the elements of nature upon one another is limited, that everything has its finita potestas [limited power], that the theological attribute of omnipotence possesses no reality. It is certainly important for Epicurus too to ban from man's consciousness the influence of overwhelming power; but it is independently important for him to criticize a theology that can mean nothing positive for man, that seeks the divine in the antithesis to what is human and believes that it can find this in the stars, as the region of nature most distant from human mortality and need.

Epicurus's theology is a representation of the humanly familiar, in which the similarity of form suggests the possibility of the same eudemonia. True, Epicurus's gods are immortal, but their eternal life is not a necessary condition of their happiness—otherwise happiness would be out of man's reach. Because the wise man recognizes death as something that need not mean anything to him, he reduces the difference between mortality and immortality to nothing. Here—and this too was recognized as central by Marx in his dissertation—Epicurus breaks with the "view of the entire Greek people," that likeness to a god was identical with immortality and freedom from need. "In the theory of 'meteors' [atmospheric and astronomical phenomena], therefore, the soul of the Epicurean philosophy of nature appears. Nothing is eternal which annihilates the ataraxia of the individual self-consciousness. The heavenly bodies disturb its ataraxia, its identity with itself, because they are existing generality, because nature has become autonomous in them." The naturalizing of the stars, their inclusion in the homogeneous contingency and transitoriness of the mechanism of the atoms, sets reason free from its cosmic objectivization, making it an exclusively human, no longer a cosmic, law. Consequently Epicurus fights not only against astrology, as the false relation of nature to man, but also "against astronomy itself, against eternal law and reason in the heavenly system." The linkage of reason to what is eternal, immutable, and free from need is severed.

But here atomism comes into conflict with the assumptions it had taken over from the tradition of Greek thought: Its unchangeable and
specifically formed atoms were only "the eternal" of the one Being of Parmenides, of Plato's Ideas and Aristotle's Forms, "in material form"; they were not the logical consequence of materialization itself, which would indeed have been required for the consistency of the system but not for its function. Epicurus may have believed that the reduction of the imperishable to its minimum in the atoms could guarantee the combination of physical dependability and protection of man's self-consciousness. Man's preeminence lies not in an anthropocentric teleology but in the fact that his successful existence has become the sole criterion of the functioning of the system.

Epicurus's argument, reconstructed, runs as follows:

Because the eternity of the heavenly bodies would disturb the ataraxia of self-consciousness, it is a necessary, stringent conclusion that the heavenly bodies are not eternal. . . . Here Epicurus must have seen the highest existence of his principle, the peak and finale of his system. He alleged that he created the atoms so that immortal foundations would lie at the base of nature. He alleged that he was concerned about the substantial individuality of matter. But, where he finds the reality of his nature—because he knows no other than the mechanical—in autonomous, indestructible matter, in the heavenly bodies, whose eternity and immutability are proven by the belief of the people, the judgement of philosophy, the evidence of the senses—there it is his single effort to draw them back down into earthly transitoriness. It is at this point that he turns zealously against the worshippers of autonomous nature which contains the point of individuality within itself. This is his greatest contradiction.40

A contradiction, one may add, that in the end rests on the fact that Epicurus still stands on the ground of Greek metaphysics, that he still sees the precondition of the fulfillment of human existence in a given quality of nature, and that the human form of the gods, too, is still a piece of 'cosmos' for him—of a cosmos that is not, it is true, guaranteed by a superposed Logos but rather by the atomistic substratum.

Thus it is indeed correct to say that "the decline of ancient philosophy is displayed with complete objectivity in Epicurus"; but it is equally correct to add that this decline did not lead to a transition to a new formation of the human relation to the world and of human self-understanding because the only freedom with respect to the world that man achieves in the course of this decline is "the negative movement of being free from it."41 The atomistic materiality of the world
is indeed sufficient to reassure man regarding his situation in reality, but it is not radical enough to appear to him as a plastic substrate, subject to his mastery and his power of disposition. Happiness is what is left over when nature no longer presses upon man, when it concerns him no more than it concerns the gods in the spaces between the worlds, gods who are free from care precisely because they have no power over the world. "He whose possessions are not sufficient for his needs is poor, even if he should be the master of the entire world."

The still undissolved connection between cosmology and anthropology is confirmed by the last systematic element of Epicurus's philosophy relevant here: the connection between the deviation of atoms at the beginning of a world and the human consciousness of freedom. Once again it becomes clear that man's possibilities depend upon a minimal set of metaphysical presuppositions. The initial conditions of all the processes in the universe are defined by the fact that all the atoms are traveling in parallel straight lines through infinite empty space. This basic state of affairs is characterized by an extremely rational order and at the same time by sterile unproductiveness. Only on the assumption that individual atoms can breach this 'order,' that by minor deviations from their parallel paths they can encounter other atoms and thus initiate the formation of a vortex of atoms, do the elementary bodies even come into contact, in accordance with their affinities, and finally realize a world. The 'sufficient' reason for the fact that anything at all comes into existence and everything does not remain in the eternal fruitlessness of the atoms' parallel paths is as trivial as it could conceivably be. To minimize this reason is to minimize the binding character of the world; in this respect Epicurus's philosophy is constructed in accordance with a logic strictly antithetical to that of the Stoics, who strive everywhere for the metaphysical maximum.

At the same time Epicurus contradicts the mythical dualism of disorder and order, chaos and cosmos. The perfect order of the original stuff falling uniformly through space is powerless to produce anything like a world, unless the tiny aberration enters in, which as chaos starts the playing through of possibilities. The beginning of the world is an infringement of physical necessity (principium quoddam, quod fati foedera rumpat [some beginning which breaks the bonds of fate]). This original event of cosmogony is just what man rediscovers in himself. It is his ability, as an active being, to introduce absolute beginnings into reality, his libera voluntas [free will], the will that escapes the necessity of causal
antecedents and opposes to them its own measure (*haec fatis avolsa voluntas* [that will torn free from fate]). The principle of the cosmos is realized in man himself; what made the world possible is no foreign and inaccessible metaphysical authority but the very same thing that constitutes man's independence from the world, the core of his consciousness of himself.

Far from being an embarrassment for the Epicurean philosophy, the deviation of the atom represents its central systematic principle: liberation from the world by means of explanation of the world, the identity of the minimum of physics with the maximum of human freedom. The rebellion of man against the cosmos is accomplished even here, in the most radical aspect of its foundation, through the principle and with the authorization of the cosmos itself. The living power of spirit (*vivida vis animi*), with which Lucretius in his apotheosis of Epicurus makes the philosophical savior break through the world's walls of flame and step forth into the infinite universe, is nothing but the consistent extension into consciousness of the atom's ability to be irregular, to diverge minimally from its path. The groundlessness of the world, its atomistic indifference to everything that it brings forth and eventually brings back into its unchanging material sum, is taken by man into the philosophical service of the consciousness that is free of the world. But man can do this only in such a way that he discovers that what he achieves is what was there all along, as the remainder of the original event that gave rise to the world.

Man's position in the world is seen in a radically different way by nominalism. In the patristic and Scholastic traditions, various types of answers to the question of the meaning of the Creation had arisen; however, one can recognize an overall tendency, which shows less and less acceptance of the proposition of the Stoicizing patristic authors that the world was created for man's sake. And the other answers can also be differentiated according to the extent to which man participates in the purpose of God's work.

Anselm of Canterbury, with whom the Scholastic program found its first coherent expression, took up in his major work, *Cur deus homo?* (which was completed in 1098), an idea of Augustine's, according to which God created man in order to fill up again the heavenly choruses, which had been decimated by the revolt of the angels led by Lucifer. But this myth was meant above all to explain why the redemption of fallen mankind had become necessary for God, if the purpose of
the entire work of creation was not to be unfulfilled, since all men had forfeited their right to be taken up into the ranks of the angels.\textsuperscript{47} The plausibility of this idea for the Middle Ages lay in that God was related only indirectly to an end outside of Himself; the refilling of heaven’s choirs was aimed at His own glorification. The \textit{gloria dei} [glory of God] as the embodiment of the final purposes of the world and of man served not only to formulate the mythical figure more abstractly but also to adapt it to the Aristotelian idea of the exclusive self-reference of the unmoved mover as the thought having itself as its sole object. That such an idea of the absolute and its transcendence could achieve such a sustained influence on Scholasticism can only be understood as the repression of the humanistic element of the Christian tradition by its theological ‘rigor.’ Only when the indifference of divinity toward man had been thought through to the end was theology’s immanent logic satisfied. The divinity that is concerned with, and finds satisfaction only in, itself must instrumentalize and mediate any relation to man that its will is thought to involve. In this logic, then, also belongs the modification and crucial restriction of the Stoic world formula: God did not after all create everything for man but rather for those whom He has chosen and redeemed by His grace.\textsuperscript{48}

In view of the secrecy of the divine decrees of election and rejection, this sort of teleology no longer means anything, in theory or in practice, for man’s consciousness of himself and his relation to the world. The sharper the accent finally placed by medieval theology on the topics of original sin and divine grace, the more precisely it had to differentiate between the lost paradisaic, unmediated enjoyment of the world and the hostile opposition of nature to man’s claim to dominate it in his condition of exile from that paradise. Finally, the formula that the Creator had done His work for no other purpose than to demonstrate His power omitted man entirely from the determination of the world’s meaning and approached the voluntaristic formulas that closed the sequence of development, formulas whose function was not to answer but to reject the question.\textsuperscript{49} The world as the pure performance of reified omnipotence, as a demonstration of the unlimited sovereignty of a will to which no questions can be addressed—this eradication even of the right to perceive a problem meant that, at least for man, the world no longer possessed an accessible order.

The most important consequence of the transition from a general proposition about the teleology of the world for man’s benefit to the
restricted assertion of its functioning for the benefit of those who are
predestined for salvation is that the whole problem falls under the
exclusive competence of theology, that the theses proposed for its
solution are valid only on the assumption of faith and the *potentia
ordinata* [ordered, ordained power] guaranteed by faith. Philosophy
has no access to this security; its considerations stand under the as-
sumption, rendering everything insecure, of the *potentia absoluta*
[complete, absolute power]. This differentiation of premises is indeed strictly
observed by the nominalist thinkers, but not by those who had to
exercise theological censorship over their propositions and who could
not accept the fact that the unbroken transition from the philosophical
basis to the theological superstructure had long since vanished.

Philosophy won its autonomy precisely on account of the renewal
of the ‘Gnostic’ assumption that the omnipotent God and the God of
salvation, the hidden God and the revealed God, are no longer con-
ceivable by reason as identical, and hence can no longer be related
to one another for the purposes of man’s interest in the world. The
role of the philosopher is defined by the reduction of human certainty
under the pressure of the assumption that divine omnipotence cannot
have placed any restrictions on itself for man’s benefit. In this cir-
cumscription of the role of reason, the elimination of the traditional
teleological assumptions has a prominent place. The cosmic preem-
inence of man had to be put in doubt, or at least rationally bracketed
out, because talk of a hierarchy of beings no longer made any sense.
Among the propositions of Nicolas of Autrecourt that were condemned
in 1346 and that he recanted at the public burning of his writings in
Paris a year later can be found the thesis that the precedence of one
being over another cannot be demonstrated with evidence.50

This most radical thinker deriving from nominalism drew from the
sole limitation of absolute power by the principle of contradiction the
conclusion that human certainty as well could be well-founded only
by being traced back to the principle of contradiction. Examination
in accordance with this criterion had disqualified above all the concept
of causality. With that, the Scholastic cosmos as the embodiment of
the epoch’s ideas of order had become philosophically questionable.
The question of the quality of the world is just as senseless as that of
its purpose; Nicolas of Autrecourt is able to reduce it to absurdity with
the optimistic formula that this world is the best world since it is
composed of equally perfect elements and there is no criterion according
to which one could judge another imagined world to be more or less perfect. It is easy to see that this *universum perfectissimum* has nothing to do with Leibniz’s “best of all possible worlds” since any other arbitrarily chosen world, as sheer fact, would have to receive this predicate. Since the sort of world that in fact exists is supposed to be a matter of indifference to man, it becomes equally a matter of indifference to him whether his knowledge of this world corresponds to its reality, whether what appears to him has its ground in a substance independent of perception: “non potest evidenter ostendi, quin omnia, quae apparent, sint vera” [It is not possible for it to be made known clearly whether everything that appears is true]. But this position no longer has as an alternative the ancient Skeptics’ expedient of positing the realization of human happiness without possession of the truth. For in regard to the question of what brings human existence to its fulfillment, the theological decision in favor of the transcendent status of such fulfillment remains binding, just as much as it excludes general human accessibility. And for this very reason it is neither surprising nor inconsistent that in the end Nicolas of Autrecourt retreats to a minimal theoretical position, that is, a position least affected by the thesis of divine omnipotence.

That position is atomism. The few traces of his work that have been preserved for us provide no basis on which to decide the question whether he drew on ancient tradition or his own reflections led him to reduce all alterations in nature to the changes in position of the smallest bits (*congregatio et disgregatio corporum atomalium naturalium*). Against dependence on ancient atomism, or at least in favor of its alteration in the direction of a systematically adapted minimal hypothesis, speaks the fact that for him there seems no longer to be a finite variety of specifically classifiable atoms; the appearances of nature are due exclusively to the constellations of a homogeneous material substratum. Although one cannot say that this extreme nominalist thinker formed a school and won influence, still he makes visible with solitary clarity the consequences of nominalism, and in fact in a way that is consistent with the equivalence of voluntarism and atomism asserted by Leibniz in his argument with Samuel Clarke. The radical materializing of nature is confirmed as the systematic correlate of theological absolutism. Deprived by God’s hiddenness of metaphysical guarantees for the world, man constructs for himself a counterworld of elementary rationality and manipulability.
It might be objected that precisely by its emancipation from theology, the nominalistic philosophy renounced the medieval basis capable of supporting the appreciation and proper valuation of man, that the center of gravity of the medieval anthropology did not lie in the teleological propositions deriving from Stoicism at all but rather in the biblical assumptions that, on the one hand, man was made in God's image and, on the other hand, His son became a man. If it made sense to distribute such historical censures, one would have to tax Scholasticism with its inability to combine systematically the biblical premises of its anthropology and its Christology. Scholasticism always feared the consequences of ascribing to man's maker an obligation for the salvation of what He created, and thus of seeing in the proposition that man was made in God's image something like the motive for the Incarnation.

Avoidance of the premise that God had irrevocably obliged Himself to the only creature He made in his own image, that He had committed himself to satisfying man's need for happiness, led finally to the speculative attempt to eliminate altogether the motivational connection between the Creation and the Incarnation and thus to reintroduce Gnostic dualism in fact if not in the original formulation. Not only could the world no longer be created for man's benefit, but even God's becoming man could no longer refer exclusively to man. In spite of the unambiguous formula of the Nicene creed, that God became man for the sake of man (propter nos homines... homo factus est), there emerges Duns Scotus's peculiar doctrine of the absolute predestination of Christ, which turns the propter nos homines into a propter se ipsum [for His own sake].

If human nature was destined from eternity to be united with divine nature, human history becomes irrelevant to the divine act of will, and the act of grace becomes a mere side effect of an event that would have been in order even without man's need for redemption. How far the theological absolutism of the late Middle Ages had departed from the biblical assumptions can be seen from its anxious efforts to keep the action of its God free from even the appearance of 'reacting' to man's action, to his history and his 'works.'

The biblical God, Who seemed to have involved Himself so passionately in the history of man and had bequeathed to human behavior the whole scale of great affects—anger, revenge, partiality—can hardly be recognized any more as the prototype of the God described in the
speculations of Scholasticism. In fact the God of High Scholasticism was already more the paradoxical consequence of all the ‘protective measures’ taken by Greek philosophy against the caprice of the mythical gods in their intercourse with men—except that this motive of defense had become utterly unrecognizable for Scholasticism (lost, as motives are in every sort of ‘scholasticism’) when it thought that it could recognize and make demonstrable its own God as that of Aristotle. That it would be unworthy of divinity to have the world as the sum of its interests and that in its exalted self-sufficiency and inaccessibility for everything transitory it could be occupied only with itself, while, as though entirely incidentally and without noticing what it is doing, as the ‘unmoved mover,’ it also sets the world in motion—this conception from Aristotelian metaphysics could only have been understood within the specific context of the Greek Enlightenment’s turning against mythology, the turning that Epicurus had completed (and revoked in one important point, that of its human relevance).

The Christian Middle Ages could not adopt the elements of a concept of God that had been formulated to serve in this front-line position without endangering and finally destroying the substance of the biblical idea of God, the idea of a God for Whom interest in man and the capacity to be affected by human events and actions had been constitutive. When High Scholasticism sought to interpret and systematize the biblical God with the categories of the Aristotelian ‘thought thinking itself,’ the unmoved mover, the actus purus [pure act], it had to retract each step of the divine interest in man (which, as revelation, was obligatory for it) into the closed reflexive circle of the absolute thought-of-itself and the absolute self-reference of divinity and make the facts of human history appear as too ‘trivial’ even to serve as ‘occasions’ for divine action. The divine will, which was unknown to the rationality of Greek philosophy, entered this metaphysics as an erratic principle and was adapted to its schema of self-reference. When the connection between theology and anthropology lay entirely in the willed decision that predestined the Son of God from eternity to become man, then in any case and above all this meant that man and his salvation were no longer the ground of the divine action relating to man and his salvation. For Nicolas of Cusa’s struggle, too long overdue, to counteract the internal disintegration of the medieval system, for his attempt to provide something like a mundane and human compensation for theological absolutism and the intensification of metaphysical transcendence,
and thus to give the system new consistency, the point of application had to be precisely here.

At this stage all we can show is the need for such a struggle. Its ineffectualness must then of course become a symptom of the fact that the epoch’s ‘own means’ simply were insufficient to eliminate the disturbances, distortions, and loss of balance of its spiritual structure. The prescription laid down for theology by the received Aristotelian metaphysics, that God’s basic concern in each of His acts can only be with Himself, was also the stronger principle in comparison with the basic theological propositions (unknown to genuine Aristotelianism) of the creation of the world and the redemption of man. In the perfect theocentrism toward which Scholasticism tended, Duns Scotus’s idea (just as central as it is edifying) that God’s relation to the world and to man is to be conceived in terms of love is scarcely uttered before it is bent back into the grotesque circularity of the Aristotelian schema, so that this can only be, so to speak, the detour taken by God’s self-love when He chooses from the totality of men those into whom He causes the love of Himself to flow. Such mediating of man no longer admits questioning and doubt whether in this teleology, which benefits only those who are chosen, the latter can still be glad of a precedence whose inner injustice, as a grace they did not deserve in view of those who equally did not deserve to be rejected, is not only admitted and accommodated but actually treated as an expression of the perfected absolutism of divine sovereignty.

The weakness of the logic underlying this conclusion was that it hid from itself in the propter se ipsum [for His own sake], as the principle of the theological zeal that had supposedly achieved its object, the contradiction to the propter nos homines [for our human sake], which had the binding force of dogma for the system of the epoch. The idea of creation was no longer allowed to guide man’s understanding of himself; the fundamental contradiction between creation and the provision of salvation, first recognized by Marcion and ‘resolved’ in the radical dualism of Gnosticism, had broken out again but was no longer recognized as a contradiction because of the way in which rational questioning had been rendered absurd. The incidentalness of man in God’s dealings with and for Himself eliminated everything that supported the idea that God’s creation of man committed Him, in regard to His Incarnation, to the choice of human nature as the medium of His appearance in the world. On the contrary, this problem was covered
by the standard formula of voluntarism, that He could have adopted any other nature and that He adopted this one only because it suited His pure will. This point exhibits most clearly nominalism's difference from the reassuring function of the Epicurean theology, in which the gods, as beings with human form, lead their blissful lives outside the worlds and represent this life to man as his highest possibility in the realization of philosophical wisdom.

Christian theology also contains, in the form of the God Who became man, a potential for human assurance, to realize which—if one finds the late attempt of the Cusan instructive—would have been its noblest endeavor. Here there was a barrier: The assiduous labor on both the image and the unimaginability of the divinity seemed to be capable of success only at the expense of this human substance. The basic conflict that was never admitted, perhaps was never perceived, but was latent in the Middle Ages was unsparingly articulated by Ludwig Feuerbach as the antinomy between theology and Christology. To him the baroque Count von Zinzendorf, the founder of the Moravian Brethren, appeared as a "Christian atheist" and thus the embodiment of that latent crisis, or even of its only possible solution, in accordance with which Christology cannot be anything but "religious anthropo­logy." The focus of such intensive piety and simultaneous joyfulness was the certainty "that God is one with man, and means just as well for him as for Himself"; and Christ was for him "a being corresponding to this love of man for himself," "man's own heart and being in a deified and objectified form." Nothing less than the loss of this location of man in the theological system of reference had come about during the decline of the Middle Ages: the speculative self-renunciation of "anthropological 'egoism.'"

Let us not forget that what is written here is not meant as a myth of the "objective spirit," which plays out its dialectic with and over man. But there are phases of objectivization that loose themselves from their original motivation (the science and technology of the later phases of the modern age provide a stupendous example of this!); and to bring them back into their human function, to subject them again to man's purposes in relation to the world, requires an unavoidable counterexertion. The medieval system ended in such a phase of objectivization that has become autonomous, of hardening that is insulated from what is human. What is here called "self-assertion" is
the countermove of retrieving the lost motives, of new concentration on man's self-interest.

If history, as Schiller remarked in his inaugural lecture in Jena in 1789, must give an accounting of everything man has ever "taken from and given to himself," then the theological absolutism of the declining Middle Ages can be characterized as the extreme of taking from ourselves, as a self-divestiture of all pregiven guarantees of a privileged position, established at the Creation, in the 'order' of reality. For this loss of order there could no longer be the escape and the solution of late-antique distance from the world. But man's negation of even the last physical and metaphysical 'assurances' of his role in the world, in favor of the 'logic of the "maximal God,"' allows the question of the minimum potential of his self-assertion—the minimum of a potential that had remained unquestioned in the late-antique context of involvement in the cosmos—to pose itself now in its full rigor.

The model of the trains of thought induced in this situation stands before us in Descartes's *Meditations* as the reduction of the process of doubt to the gaining of a new absolute fundament in the *Cogito* [I think—*ergo sum*: therefore I am]. The provocation of the transcendental absolute passes over at the point of its most extreme radicalization into the uncovering of the immanent absolute. What happens with Descartes for the philosophical foundation of the modern age was formulated with incomparable epigrammatic clarity by Luther in his disputation theses of 1517, in antithesis to Duns Scotus and Gabriel Biel and to the whole system of the Middle Ages, as follows: By virtue of his nature, man cannot will that God should be God; on the contrary, the essence of his volition can only be to be God Himself and not to allow God to be God: "Non potest homo naturaliter velle deum esse deum, immo vellet se esse deum et deum non esse deum."55 The God Who had never owed man anything and still owed him nothing, the God Who in Augustine's theodicy left to man the entire burden of the blame for what is wrong in the world and kept man's justification concealed in the decrees of His grace, was no longer the highest and the necessary, nor even the possible point of reference of the human will. On the contrary, He left to man only the alternative of his natural and rational self-assertion, the essence of which Luther formulated as the 'program' of antidivine self-deification.
Luther's thesis posits enmity between those who cannot be certain of an election that they can neither earn nor otherwise guarantee and the God Who is not supposed to be there for them. The absolute certainty founded on human thought itself, which Descartes seeks, is not the 'secularization' of the certainty of salvation, which is supposed to be guaranteed in faith and its *nuda fiducia* [naked trust], but rather its necessary counter-position, which is theologically demanded and (unexpectedly) legitimized by Luther's thesis. Theological absolutism has its own indispensable atheism and anthropotheism. It postulates as complementary to itself a position that does not want to be postulated in *this* way, that denies itself *this* legitimation, of being what is 'natural'—in the sense of ungraced by God—and not what is rational and humanly necessary, grounding itself in itself. Freedom winds up on the side of godless destruction; in the distribution of roles, as between election and being lost, it is assigned *naturaliter* [by nature] the opposing part. This dualism is system immanent; it can neither be understood nor accepted unless the presupposed 'naked trust' already includes the certainty of salvation, which only the chosen few can possess.

If one proceeds from the assumption that human autonomy can henceforth articulate its positive character only outside the Middle Ages, then it becomes clear that only two fundamental positions remain open to it, if it wants to throw off its supposedly 'natural' role: hypothetrical atheism, which poses the question of man's potential under the condition that the answer should hold 'even if there is no God'; and rational deism, which employs the 'most perfect being' to guarantee this human potential—the 'most perfect being' that is functionalized by Descartes as the principle of the deduction of the dependability of the world and of our knowledge of it. The double face of the Enlightenment, on the one hand its renewal of a teleological optimism and on the other hand its inclination to atheism, loses its contradictory character if one places it in the context of the unity of the onset of human self-assertion and the rejection of its late-medieval systematic role.

**Translator's Note**

a. The author introduced the concept of "absolute metaphor"—as a "carried-over" sense of a term that cannot be fully translated into or reduced to the kind of direct, literal discourse from which it is derived—in his "Paradigmen zu einer Metaphorologie," *Archiv für Begriffsgeschichte* 6 (1960):7–142. The term is introduced on p. 9.
The detailed comparative analysis of ancient atomism and nominalistic voluntarism, a voluntarism that at least in the case of Nicolas of Autrecourt shows its affinity to an atomistic physics, was meant to make clear that in late antiquity and the late Middle Ages heterogeneous attitudes to the world were induced. In Hellenistic philosophy there had indeed been various forms of man’s turning away from the cosmos and the ideal of theory, but the severity of the problem of human self-assertion had remained partially hidden on account of the continuing acceptance of the cosmic quality of reality. The overall result of Epicurus’s philosophy can be described as the recommendation of a neutralization of man’s relation to the cosmos. His atomistic physics was not meant to satisfy a theoretical interest in reality but rather to argue for the irrelevance of the physical answers to the shaping of life in the world. Here, in spite of their entirely different epistemological approaches, lay an essential similarity to Skepticism and its ideal of refraining from theoretical assertions. Physical hypotheses were meant to free the phenomenon of nature from its affective reference, and in this respect it did not matter whether a claim was made to explain the phenomenon unambiguously or whether it was to be established for every relevant explanatory hypothesis that it need not influence man in his relation to reality.

However formally similar to early modern natural science Epicurus’s method may appear to be, its function is radically different: It is not meant to objectivize the phenomena but rather to neutralize them.
The immanent intention of objectivization is toward the verification of a hypothesis, whereas neutralization is indeed meant to exclude uncertainties but not to create certainties. The ultimate epochal difference is that Epicurus does not recognize the postulate of domination of nature as the consequence of his consideration of man's situation in the world, the postulate which for both Descartes and Bacon became the essence of what is perceived as existentially necessary for man. Making men the "maîtres et possesseurs de la nature" ['masters and possessors of nature': Descartes] did not appear to Epicurus as a condition of the possibility of human existence in the world. In other words: In Epicurus's will to knowledge there was missing something that one could call the "technical implication"—what he wants is to be able to put the phenomena at a distance, not to be able to produce them.

But precisely this ancient way out, into the moderation and unmolestedness of self-possession, was closed during the decline of the Middle Ages; the pressure of putting in question had penetrated too deeply into the makeup of self-consciousness and man's relation to the world. The more indifferent and ruthless nature seemed to be with respect to man, the less it could be a matter of indifference to him, and the more ruthlessly he had to materialize, for his mastering grasp, even what was pregiven to him as nature, that is, to make it 'available' and to subordinate it to himself as the field of his existential prospects. I have been aided in grasping the specific difference in the historical presuppositions by a remark made by Heisenberg in comparing ancient atomism and modern physics: "The statements of modern physics are in some way meant much more seriously than the statements of Greek philosophy." If this is taken literally, then for the philosophical reader, who is inclined to take the claim of truth as a constant of the philosophical tradition, it is at first glance a provocative assertion; but the more one tries to grasp its possible justification, the more instructive and apt it seems to be. It really is a new sort of 'seriousness' that marks the modern will to knowledge and links it to the elementary concern for self-assertion. The characteristic liberality and nonbindingness that one notices in Epicurus's atomistic physics and that exempts it from insistence on verification is due precisely, as I meant to show, to the intactness of a 'residual order' by which the existential problematic of man remained beneficently concealed and theory did not yet need to be made graspable as the instrument
with which to make oneself master of the world. The new seriousness imposed on man by the late-medieval situation consists in the constant and unrelieved pressure of confirming a relation to the world that is established within the horizon of metaphysical conditions that leave no way out, neither outward nor inward.

The new exertion that was required in this situation was called by Descartes a *laboriosa vigilia*, a taxing vigilance. The last section of the first of his six *Meditations*, in which this expression is contained, provides at the same time the most extreme level of the doubt that he intensifies step by step and from which he derives the necessity for a new and unconditional guarantee of knowledge: this is the level of doubt that follows from the idea of the *genius malignus* [malicious spirit], that all-powerful and cunning world spirit who is intent on misleading man by appealing to his constitutional credulity—an appeal against which man can at least oppose the one effort inherent in his freedom: his ability to withhold judgment. Descartes’s *Meditations* have not only the function of presenting a theoretical thought process in which specific difficulties are removed by argument and eliminated once and for all; rather they tend to develop by exercise the habitual attitude of the *obfirmata mens* [steadfast mind], the inability to forget how the human spirit is endangered by its liability to judgment and prejudgment. The goal of this exercise is a condition of the spirit in which it makes use of its own freedom (*mens quae propria libertate utens*); it is not the beginning, posited once and for all, of a new philosophy and a new idea of science that by ‘settling’ a catalog of methodically introduced uncertainties could lay the foundation for a theoretical step forward guaranteed for all future time.

The artificial order of the stages of doubt in the first *Meditation* strengthens the impression Descartes seeks to arouse in his whole work, namely, that as though with one stroke he had easily put aside the traditional opinions and prejudices (*opinionum eversio*) and by himself had methodically created the authentic radicality for his new beginning. The heroizing of Descartes as the founding figure of the modern age has its foundation in his self-stylizing effort, in which the historical becomes hypothetical. When Hegel in his *History of Philosophy* defines the significance of Descartes for the epoch, he accepts this rational authenticity so painstakingly detached from its historical motivation: “The effect of this man on his age and the new era cannot be represented as too extensive. He is a hero who approached the matter
all over again from the beginning and for the first time constituted anew the ground of philosophy, to which it now returned for the first time in a thousand years.” The idea of a philosophy free of presuppositions, which knows that it arises autonomously from reason, was prepared by the Discours de la Méthode of 1637 and the Meditationes of 1641 in such a way that the arguments for doubt appear not as an elaboration of the historical situation of reason but rather as an experiment that reason poses for itself under conditions of artificial difficulty in order to gain access to itself and to the beginning it proposes for itself.

Within the context of this experiment of reason with itself, the genius malignus appears as a freely chosen exaggeration of the requirements that must be met by reason in finding its new ground in itself. And this formulation is indeed perfectly correct, since after all the nominalistic God is not the genius malignus; He is ‘only’ the God who does not enable man to be certain that he is not. The deus absconditus and deus mutabilissimus [hidden God, most fickle God] who is not committed to kindness and dependability except under the conditions of salvation as defined by revelation could only be taken into account philosophically as if he could be the genius malignus in relation to man’s certainty of the world. By transforming the theological absolutism of omnipotence into the philosophical hypothesis of the deceptive world spirit, Descartes denies the historical situation to which his initial undertaking is bound and turns it into the methodical freedom of arbitrarily chosen conditions.

Thus a claim was made to the absolute beginning of the modern age, the thesis of its independence from the outcome of the Middle Ages, which the Enlightenment was to adopt as part of its own self-consciousness. The exigency of self-assertion became the sovereignty of self-foundation, which exposes itself to the risk of being unmasked by the discoveries of historicism, in which beginnings were to be reduced to dependences. The weak point of modern rationality is that the uncovering of the medieval ‘background’ of its protagonists can put in question the freedom from presuppositions of which it claimed to have availed itself as the essence of its freedom.

The artificial latency of the motives in the Cartesian train of thought does not spring from anxiety about originality; rather it is itself an expression of the freedom that does not submit to the conditions under which reason has to prove itself radically but poses them for itself. For
even before reason, by means of the certainty of the *Cogito* and the proof of God’s existence,\(^5\) extracts itself once more from the abyss of its doubt, it has assured itself of its elementary freedom not to be deceived necessarily because although the equality of men in their judgmental activity is indeed threatened by the boundlessness of the will, it is also protected by the possibility of refraining from decisive judgment. Reserving assent is the first methodical step of the *Meditations*, the first conclusion that is derived from experience of the undependability of traditional and received opinion, even before the argumentation of doubt is constructed.\(^4\) The ideal of the mind free from prejudice, the *mens a praeiudiciis plane libera*, seems to Descartes, on the basis of the Stoic theory of judgment that he employs, to be realizable by an act of decision in favor of indecision; and in this man demonstrates not only his immunity from metaphysical surprise but also the power to be free of historical constraint, to begin his own history afresh at any moment he chooses.

In the *Principles of Philosophy* of 1644 Descartes not only gave this primacy of freedom (as the *cognitio prima et certissima* [first and most certain ideal] over the certainty of the *Cogito* a more precise systematic expression, but he even described the capacity to abstain from theory as the source of man’s independence from his origin—which is to say, from the ‘quality’ of his God. Whatever man’s origin might be and whatever power of deception might dominate him, there remains this minimum of freedom in the act of withholding assent.\(^5\) A god can prevent man from knowing a single truth, but he cannot himself bring about error, unless man for his part freely runs the risk of being deceived. So man is not free in that he has grounds for his action but rather in that he can dispense with grounds. Absolute freedom would be the readiness and the ability to resign all interest in truth so as not to risk error. The structure of consciousness appears both transparent and at the disposal of its possessor, so that the dimension of prejudice can be suspended. For this approach great disappointments and corrections were in store, from historicism to psychoanalysis.

Descartes painstakingly effaced and disavowed the traces of his historical background in order to constitute the myth of the radical beginning of reason. In the *Discours de la Méthode* he dated the beginning of his doubt regarding the tradition back to La Flèche and passed over his crucial encounter with Isaak Beeckmann in Breda in 1618;\(^6\) he avoided (at the least) any answer to the reproach that his *Cogito* argument
had already been formulated by Augustine, and the question of a possible dependence has remained undecided down to the present. Thus also the argument from the all-powerful God, where the possibility cannot be excluded that He might bring about the nonexistence of that which appears to man to exist, is introduced not as a liability inherited from history but as a constructed factor of uncertainty: Only the conviction of the existence of this God has the pregivenness of an "old opinion" rooted in our thinking, from which a new inference is drawn. The argument for doubt is founded, independently of theological tradition, on two sorts of experience: the experience that occasionally something seems evident to others that to me is evidently false; and the experience of my own error, which at least excludes the interpretation of the assertion of God's goodwill as implying that He must will that I should never be deceived. A divine will, then, which allows it to happen that I am occasionally (interdum) deceived, cannot contradict the attribute of goodwill—but why then should the "occasionally" not be able to turn into an "always"?

The fact that Descartes conjured up with his genius malignus an evil spirit that he could not then get rid of in a respectable and argumentatively solid fashion (as tends to be the case with evil spirits) is due to presuppositions by which he is still entirely bound to the traditional concept of reality. One could summarize these presuppositions as the assumption that reality contains an 'implication of assertion,' as though man perceived in the given world an associated claim to be that which it appears to him to be. This assumption allows it to appear possible to Descartes, at the end of his experiment, to ground the reality of the physical world in a metaphysical guarantee of its dependability. The assertoric quality of reality presents itself in the Cartesian doctrine of judgment in accordance with the Stoic schema, insofar as to the given content of a judgment an element of affirmation or denial is added, which reproduces the authentic assertoric sense that is implied in what is given.

In his marginal notations to the Principles of Philosophy, which were concluded in about 1692, Leibniz was to regard this concept of reality itself as the general prejudice that had evaded Descartes in his elimination of prejudices because it was implicit, as a hidden assumption, in his whole experiment with doubt. At the end of his analysis Leibniz not only declares the refutation of the argument from the deceiver God (Whom he entitles an exotica fictio [exotic invention]) to be a failure
but holds the argument to be irrefutable because it rests on an exorbitant demand in the very concept of reality it employs.

Leibniz asks what, after all, is meant when in Descartes’s consideration of doubt he speaks of a possible “deception.” The supposed lack of correspondence between our ideas of a nature independent of consciousness and what actually exists in itself need not be deception if it is merely one possible interpretation of these ideas that finds in them a claim to such a correspondence. As Leibniz says, there could be weighty reasons, unknown to us, for a lack of correspondence. This would have no relevance whatsoever for man since our consciousness is neither directed to nor sustained by such a correspondence. It depends exclusively on an immanent structure of harmony in what we are given. The question, then, which for the first time achieves its full clarity in Kant’s philosophy, is that of the conditions of the possibility of this synthetic structure of the given. Thus Descartes’s very concept of reality differs from that of modern philosophy in a way that makes Descartes appear not so much as the founding figure of the epoch but rather as the thinker who clarified the medieval concept of reality all the way to its absurd consequences and thus made it ripe for destruction. This does not prevent it from being the case that Descartes himself inaugurated this epochal turning with his approach to certainty through the Cogito; but he fell short of consistency at the point where he sought for a guarantee of a reality corresponding to our “clear and distinct ideas.”

I have tried to show what it means to say that Descartes transformed the late medieval crisis of certainty into an experiment with certainty, that he represented the necessity of the historical situation as the freedom of self-imposed conditions of “exaggerated difficulty.” But the experiment rests upon the presuppositions of the crisis, in that it constructively intensifies them. From the nominalists’ hidden God, to Whom man cannot appeal for certainty regarding the world because He refuses to perform any “function” for man other than that of salvation, Descartes derives the hypothesis of the deus fallax [deceiver God], the deceptor potentissimus [most powerful deceiver], Who in pursuit of his intentionally universal deception can not only intervene on the side of the objects but can also have given man himself a nature that even in regard to what it is most clearly given is capable only of error. Nominalism had largely restricted its discussions to God’s partial intervention in the process of knowledge, and more particularly to
the obligatory example of miracles, which directly presuppose the normal workings of nature for their demonstrative effect. It is certainly the case that such considerations did not originally reckon seriously with intentional deception occurring in fact but were only meant to deprive man’s cognitive relation to nature of its unquestioned obviousness and to inspire thankfulness for an unearned prerogative.

William of Ockham states that God owes nothing and cannot owe anything to any being, and neither can He do any wrong. The teleological interpretation of the human striving for knowledge does not support any claim that it should be fulfilled, or even that it should not be deceived. The argument from the natural conformity [conveniencia] between disposition and achievement, between an organ and its successful performance of its function, which had enjoyed unquestioned validity in the ancient tradition of cosmological metaphysics, became questionable when transposed into a metaphysics of creation. It would allow the prescription of a natural order to become an obligation binding on the creative will itself, something that could not be admitted by those who were zealously concerned with God’s sovereignty. In discussing the question whether it was suitable for a soul capable of cognition (anima intellectiva) to be joined to a body like the human one, Thomas Aquinas was still able to insist that such a problem must not be considered from the point of view of omnipotence but rather with regard to the inner conformity of the organ to its function. The system of this conformity also restricted the problem of knowledge: The same relation that subsisted between reason and its bodily instrumentation could also be asserted to hold between organ and object, capacity and achievement. The situation of pregiven arrangement between man and the world kept the problem of knowledge latent, however much might be said about the manner of functioning of the cognitive apparatus.

One sees immediately that the questions that have been asked since William of Ockham can be simply characterized by their distance from the ancient presuppositions. Ockham may say explicitly that he asserts only supernaturaliter loquendo [supernaturally speaking] the possibility of the miracle of the production of ideas without objects, of the cognitio intuitiva [observational knowledge] of a nonexistent object—and indeed as a perception satisfying all the relevant criteria: secundum omnen conditionem—but nevertheless the important thing is not this exceptionalness, without which Christian Scholasticism simply could not
have got along with its theological presuppositions, but rather the systematic penetration of such theses and considerations. It is only from this point of view that it becomes possible to characterize nominalism as the system of breaches of system, as the shift of interest and accent onto the miracle, the paradigmatic reduction of the bindingness of nature. It is not the power that could give rise to the world but the power that can give rise to something other than this world that occupies the speculative interest. In the context of the doctrine of creation, the real objects are from the start only secondary causal agents in the cognitive act, the act to which the creator gives an object as though by a detour through created reality; it seems like only a small and harmless alteration, indeed a simplification and shortening of the way, when the object is projected into human knowledge not from its worldly existence but directly from the original ground of its possibility. Quite incidentally, this sort of question also shows that the tendency of late Scholasticism is toward overcoming the causal mediations and indirections in the world structure of the Middle Ages and that the question of absolute power is already implicitly the question of the immediacy of its operation in every place and creature in the world.

But at the same time it can be seen that such immediacy has a primarily destructive effect on the system's security and must have this effect as long as immediacy does not mean the present realization of the whole of what is possible. The thesis that the first cause operates immediately is not new as such in William of Ockham; it had already been discussed before him, even in regard to the object of knowledge, in the Scotist school. Certainly the thought that God's operation might be through two 'channels,' and thus the possibility of man's deception, had not yet come within reach here. The phenomenalism involved in Ockham's thesis implies only the general indistinguishability of primarily and secondarily effected ideas and not the concrete imputation of a false idea of a particular object, or of an idea of a nonexistent object. Certainly this thesis, which may have been intended as a 'harmless' broadening of the concept of what God could do, first received from the censorship of fifty-one propositions of William of Ockham (by the Curia of Avignon in 1326) the accent that kept such propositions from disappearing from the discussion and fostered the assumption that there was a dimension of unsuspected uneasiness behind them. The apprehension of the censors of Avignon is directed
only at the possibility that Ockham’s thesis could also be applied to the other-worldly condition of the unmediated vision of God: Phenomenon and reality would become interchangeable even in the theological limiting case of evidence, in the bliss of absolute truth. Ockham himself provided against this apprehension in the appropriate question of the Quodlibeta: the first cause can only produce immediately the effects of the secondary causes but cannot, so to speak, replace itself. 16

This apprehension would not be particularly interesting if it did not show where a remnant of absolute certainty was for the time being still sought and needed and how distant the recourse to the absolute fundament of the Cogito, the irreducible presence of the subject for itself, still lay. In the discussions of the nominalist school the accent of interest then moved to this question: Assuming the possibility of the immediate action of the first cause on man’s cognitive faculty, what becomes of the certainty of knowledge of nature? This ‘secularization’ of the interest in certainty stands under the same theological premises as the attack on that interest: The undenied vestige of certainty in the absolute visio beatifica [beatific vision] loses its comforting function to the extent that the intensified concept of divine grace renders uncertain the attainability of this absolute evidence, or at least makes it clear that man can do nothing to earn it.

Peter of Ailly, whose influence was to extend into the following century and to reach its high point at the Council of Constance, lectured in 1375 on the sentences of Peter Lombard. In this commentary he says, in opposition to Ockham’s thesis, that for physical objects, on the assumption of God’s general influence and the normal course of nature—that is, excluding miracles—sufficient certainty is to be assumed; so there is no reasonable occasion for doubt, especially not in regard to causality, since otherwise all demonstrations in natural philosophy would be invalid (sic perirent omnes demonstrationes naturales). 17 But the argument that doubt regarding the existence and nexus of the objects of the senses is indeed possible but is not rationally meaningful can only mean that man must presuppose the presence of the conditions under which his self-assertion in the world is possible, that the radicalizing of his questions is bounded by the situation in which all questioning would be meaningless. This follows from the argument (no doubt directed against Nicolas of Autrecourt) that the denial of the principle of causality would upset the explanation of nature. Thus Walter Burleigh had already argued, in opposition to Ockham’s denial
of the reality of motion, that to deny this sort of thing is to make the science of nature impossible.\textsuperscript{18}

In this context, that can only mean that metaphysics may not make physics impossible. If, in a world no longer arranged for the benefit of and coordinated with man, knowledge of nature proves to be a condition of the possibility of human self-assertion, then the conditions under which knowledge of nature is possible must be presupposed as given, or at any rate as not open to meaningful doubt. The metaphysical foundation of the possibility of knowledge of nature seems itself to be something that on the given assumptions cannot be demanded because the desired foundation would have to be subject to the same skepticism that created the demand for it. The appeal to the \textit{cursus naturae solitus} [normal course of nature] is not teleological but rather hypothetical, in the sense of a general supposition without which no other hypothesis has any sense at all—a postulate of self-defense, which does not assert the regularity and dependability of nature but rather assumes them as the only possibility left to man. At this point in particular, one must pay close attention to the primary function that is assumed by such a hypothetical universal premise: It defines a minimal condition, which as such is certainly not yet sufficient but at least does not destroy from the beginning all prospect of acquiring knowledge of nature.

At this stage, the correlate of the nominalistic absolutism aimed at the submission and resignation of reason does not yet involve the claim to domination over nature that emerges from the \textit{history-of-Being} ['seinsgeschichtlich': Heidegger] interpretation of the modern age as that age’s pure ‘mode of behavior.’ The “history of Being” [\textit{Seinsgeschichte}] is, of course, concerned with the isolated epochal ‘fact’ that emerges from an impenetrable background and has no need of an accessible historical context. The modern epoch becomes the pure fatality of ‘forsakenness by being’ [\textit{Seinsverlassenheit}], which permits, as a direct result of failure to recognize the ground of history that is not at anyone’s disposal, the illusion that man makes history and that history can consequently be understood through the logic of the questions that man himself raises. Such an approach must either level off the difference between self-assertion and the claim to domination or else interpret the new sense (once it is acknowledged as such) of the demiurgic relation of power between man and reality as a tendency
Part II

(only now achieving adequate formulation) whose cryptic early forms can already be diagnosed in declining Scholasticism.

The “history of Being” excludes the possibility that the signatures of an epoch might be illuminated by reference to the dialogic structure of a reason that is not indeed identical with history, nor even always spontaneously ‘active’ in it, but is nevertheless ‘activatable’ by need and necessity, by *aporia* [difficulty] and exogenous overextension. The modern age as an episode of the “history of Being”—more particularly, of forsakenness by being—would bear the stigmata of domination, of the serviceability of theory for technicity, of man’s self-production, precisely not as an ‘answer’ to a provocation (bequeathed to it in whatever manner) but rather as one of the un-‘graced’ confusions surrounding the “Being” that has been withdrawn and concealed since the time of the Presocratics. In such an interpretation, it is true, the physiognomy of the epoch is not stamped by the dissimulation that, as the ‘secularization’ of the theological substance, conceals the truth of that substance; but the interpretation itself emerges unmistakably as a product of the secularization of the categories that were developed in the theology of grace. It is not that the contents of the epoch become pseudomorphs of their theological antecedent but rather that the characterization of the epoch’s position in history can only be defined as pseudotheology. This characterization gets its orientation from both the temporary and provisional status assigned to the age, as prior to a new and then perhaps final event in the “history of Being”—its turning to *parousia* [presence]—and the compellingly imposed, negative evaluation of the age, in which mythical rejection by the substitute for divinity, on the one hand, and the arrogance of the subjectivity that is a failure as far as ‘authenticity’ is concerned, on the other, make up a *single* integral state of affairs. The epoch appears as an absolute ‘fact’ [*Faktum*]—or better: as a ‘given’ [*Datum*]; it stands, sharply circumscribed, outside any logic, adapted to a state of error, and in spite of its immanent pathos of domination (or precisely on account of it) finally permits only the one attitude that is the sole option that the “history of Being” leaves open to man: submission. The absolutism of “Being” is in truth only the continuation of the medieval result by other means.

The negative idealization of the modern age in the “history of Being”—which perhaps has only one thing in common with the self-consciousness of the Enlightenment, namely, the capacity to designate
Descartes's *Cogito* as the epochal beginning that lacks any intelligible antecedents—has the methodical advantage of being in possession of an a priori typification of the epoch. What genetic presuppositions underlie Descartes's *Cogito*, in which he shows himself to be the functionary of the latest version of forsakenness by Being, is of no interest to the initiate of the "history of Being" because it remains a matter of indifference in relation to the incidence of the epochal meaning from the vertical (which need not always mean "from above"). On the other hand, it interests the historian, from the perspective of the traditional demands of his form of rationality, only to the extent that it contributes to the elimination of the mythology of the absolute beginning and withdrawal into the comforting solidity of what was there all along.

From these points of view it may seem insignificant that while the nominalistic discussion of Ockham's thesis of the possibility of intuition of a nonexistent thing does not arrive at Descartes's *Cogito*, it does anticipate his assertion of the incontestability of man's freedom not to have to let himself be deceived. In the separation of the passivity of sense perception, with which man is delivered up to the external agencies acting on him, and the activity of judgment, with which for the first time he runs the risk of error, the nominalists already saw the narrow solid ground of self-assertion.

Gregor of Rimini attempts a solution of the problem raised by Ockham of the simple sense perception of, for example, a particular color by proposing that the act of perception never justifies more than the limited judgment, "I see this color," and not the more ambitious judgment, "This color exists." The judgment that is thus reduced to its subjective basis remains unaffected by the question of the existence of the perceptual datum. So the possibility of error is localized in judgment only to the extent that the judgment asserts a state of affairs to exist that goes beyond the immanent fact of consciousness, that is, to the extent that it not only states but interprets. For the complex datum of, for instance, a man running, it is still true that God could give rise to and maintain this perception; but here again it is within the power of the subject himself to protect himself from possible error. Only if God could also help to produce the judgment about a non-existing state of affairs would deception become unavoidable. Gregor excludes this possibility, and not indeed only on grounds of the freedom of the subject, but with the express statement that divine omnipotence
is limited by the impossibility of deception: "Quia tunc deus per se et directe me falleret, quod est impossible." Thus the deception can only be indirect, as the production of a perception, since the responsibility for the error then remains with man in his, so to speak, 'over-shooting' in the act of judgment. Thus the Augustinian model of theodicy, assigning to man the responsibility for the evil in the world, is held to here also.

Gregor's basic idea, that man as a being absorbed in and (so to speak) naively interpreting the world of his senses can indeed be deceived, but not man in his judgmental capacity, was to lead to a skeptically tinged discussion of the question of the advantageousness of undisguised truth for man in Pierre Bayle's article "Rimini" in his Dictionnaire. Bayle, to whom the supposed truth content of the entire tradition appeared as a sum of contradictions, and who saw in the establishment of this contradictoriness the sovereign task of critical reason, is far from being disconcerted by the most radical application of Cartesian doubt. Should not God, he reflects, behave toward man in regard to truth just as a doctor behaves toward a sick person or a father toward his children, toward partners, that is, whom one often deceives (wisely and for their own good) but never defrauds? Would men be able to bear the truth if God gave them access to it in its nakedness? Such a reflection, which not only considers it salutary that man should be left to his ignorance but would even be prepared to regard leading him astray as a merciful act, presupposes that no constitutive relation is seen between truth and man's happiness. This connection had still been indissoluble for late Scholasticism because the definition of the blessed final state of the elect depended on it. One could indeed consider the possibility that God's sovereignty might withhold the truth from man, but not that man could be privileged and well provided for by this very state of affairs. The skeptic, it turns out, is least able to do without the assumption of an agency that provides for him, whether it be cosmos, God, or nature. For the nominalists, the path of skepticism was blocked precisely because they had destroyed this agency in their theology.

What it means to say that Descartes functions in the self-representation of modern philosophy as the founder of the new claim to certainty based on the absolute evidence of the Cogito can now be more precisely defined. By radicalizing the nominalists' potestia absoluta into the hypothesis of the genius malignus, he sharpened the doubt
surrounding certainty to such an extent that the pragmatic formulas for the self-assertion of reason, such as had been opposed to Ockham's thesis by members of the Nominalist school, could no longer be sufficient. Recourse to the absolute fundament excludes the pragmatic concession that man does not need to assume anything that would deny him the possibility of acquiring knowledge, and—if one regards it as a way of avoiding a problem that is insoluble in any case—declares it to have been a mistake. For self-assertion a general postulate would have been sufficient, to the effect that any metaphysical assumption could be ignored if it destroyed the possibility of knowledge.

Descartes forced himself to take the further step of requiring that the hypothesis of the general impossibility of knowledge be refuted, so as to win the secure ground on which one could proceed to construct the system of physics and thus in the end the morale définitive [definitive morality]. Thus Descartes did in fact fundamentally define the character and claims of modern thought, not, however, by confronting the tradition with the violence of a radical claim and a new plan but rather by making the implications of theological absolutism crucially more explicit and developing them into such an acute threat that a basis for resistance could now only be found in absolute immanence.

The fact that Descartes only retrieved, on the side of the subject and his need for certainty, what he had advanced on the side of transcendent absolutism becomes evident to us if we look once again at another tendency of nominalist defense against the theological problematizing of cognitive certainty. In Paris in 1347, forty theses from Jean de Mirecourt's Commentary on the Sentences were condemned, and thus again one of those catalogs was made manifest from which the extreme consequences of the late-medieval development can be read off as though from a chemical preparation.

Ockham's initial thesis, with which we are already acquainted, that external perceptions could be produced and maintained by the power of God even in the absence of their object, is described by Jean de Mirecourt as the usual opinion (opinio quae communiter tenetur). In order to demonstrate the consequences of this thesis, the nominalist takes the further step of deriving from the impeachment of the theoretical subject that of the moral subject as well: if God, without the cooperation and consent of the subject, can directly produce the latter's acts of perception and thus bring about error without any lapse on the part of the knowledge seeker, then He could also produce morally repre-
hensible actions, such as hate for one's neighbor and even for God, directly and without the supposed agent being responsible. The unity of the subject, whose psychic acts and capacities William of Ockham himself had already refused to regard as independent and separable (since this would have involved a mistaken realism regarding concepts), excludes the possibility that theoretical certainty could itself be rendered insecure. It cannot, without making moral responsibility equally problematic as a result, since man can no longer be sure of being the author of his actions. Here theological absolutism comes up against one of its boundaries, the sharper definition of which it itself practically demands: God can indeed produce appearances without objects, even appearances of supposed actions of the most sinful kind, but He cannot bring it about that these should constitute acts for which the moral subject can be held responsible.

From the perspective we have now reached, one can say that the introduction of the concept of freedom into the theory of knowledge is an attempt to apply the paradigm of the transcendent incontestability of morality to theoretical self-assertion. A man may be chosen or condemned in the theological sense, destined for salvation or the opposite—but no 'external' agency can make him responsible for such a destiny. No more can he be forced into a theoretical judgment that contradicts his own insight, if the theoretical act, just like the moral one, is nothing but 'the soul itself,' its modus se habendi [mode of self-possession]. Under the enormous pressure of the demands made upon it by theology, the human subject begins to consolidate itself, to take on a new overall condition, which possesses, in relation to ambushes set by the hidden absolute will, something like the elementary attribute of the atom, that it cannot be split up or altered. Absolutism reduces whatever is exposed to it, but in the process it brings to light the constants, the no longer touchable kernels.

The ius primarium [primary right], the primeval right to self-assertion, becomes comprehensible long before Descartes and Hobbes as the essence of the modern age's understanding of itself—that is, as the anthropological minimum under the conditions of the theological maximum. This beginning does not come about as the formulation of a new concept against an old one, as the constitution of an epoch after the preceding one has been broken off, but rather as the mobilizing of motives toward the definition of an opposing force, precisely while the attack is being intensified; not as the negation of the premises but
rather as a condensation under the pressure of their exaggerated power.

Because theology meant to defend God's absolute interest, it allowed and caused man's interest in himself and his concern for himself to become absolute. The position of his openness to theology's claims forced his self-concern to reoccupy it. In the theory of knowledge this concern takes the form of the critical rejection of the conception of receptiveness that is basic to the Aristotelian system. For this very receptiveness delivers man up to an absolute power of whose goodwill he cannot be sure. Jean de Mirecourt defended himself against his condemnation in two written apologies. If sensation (sensatio) and knowledge (intellectio) were only qualities (passiones) of the organ of knowledge, he argues, all knowledge would be immediately dependent on God's will since the production of a quality is that of which God is alone and immediately capable (quod deus se solo posset). That would be one elementary, and in fact Aristotelian, explanation of the cognitive process. The other is the interpretation of knowledge as an activity (actio) of the knowing subject, and if this proves to be correct, then an intervention in the act of knowing can only come about if the subject 'cooperates' as a secondary cause. The idea, with which we are acquainted from the Ockhamist controversy, that the first cause cannot (as it were) substitute something else for itself as the object of the beatific vision, is now broadened into the statement that neither can there be any substitute for the secondary cause, as far as its activity is concerned: "Nullam actionem causae secundae posset deus agere se solo...." The author, frightened by his censors, does not dare to make a categorical decision between these alternative theories of knowledge and to express his preference for the 'activity' theory of knowledge as a vera actio animae [true act of the soul]. But even through the language made ambiguous by the circumstances of censorship, he makes it sufficiently evident where his interest lies or where he sees man's interests better served. He would like to attach himself to the second point of view, he says, if he had the courage; however, the reader may choose for himself.28

The guarantee that Descartes will seek to found on the most perfect being, which he gains through his proof of God's existence, relates, however, not only to the reality of the physical objects that present themselves through our clear and distinct ideas but also, in order to deal with the full extent of the uncertainty aroused by the process of
doubt, to the propositions of logic and mathematics. This conforms to the voluntaristic presuppositions of his concept of God, according to which even the so-called “eternal truths” are decreed by a sovereign act of the divine will and are thus only valid for the world that God de facto willed. Consequently the guarantee must extend to the non-alteration of this highest decree, so that it possesses final validity for the world and for the thinking rational beings within it, once these are posited. This seems to him to be adequately guaranteed on the assumption of the most perfect being, although the world persists not as a result of the unique act of its creation but only on account of the will that confirms its existence anew at every moment. Thus everything depends upon the weak thread of the proof of God’s existence, on which Descartes hung his entire system; and at this very point he has regressed in comparison to the level reached by the late Scholastic critique of the efficacy of the arguments that were developed at the height of Scholasticism. Hence the critical equipment of his solutions does not measure up to the difficulties with which he confronts himself.

The abandonment of the ancient cosmos was completed at the moment when the distinction between possibility and reality ceased to be congruent with the distinction between reason and will, that is, when the act of the divine will no longer related simply to the existence of the world but also related to the universe of truths that hold in it. The infinite plurality of worlds is the horizon of uncertainty for the existing world and for each of its moments, if one cannot deduce from the contingency of the first act of foundation a world course that is minimally consistent in itself and constant by itself. It is evident that there could only have been one secure guarantee for this postulate of the constancy of the world’s lawfulness, namely, the coincidence of possibility and reality, the exhaustion of reason by the will, and thus the identity of reason and the will in the world ground. This path will be taken by Giordano Bruno. The nominalists reject it, and the ‘effectiveness’ of their voluntarism rests on this rejection.

Jean Buridan justifies this with the argument that God could not create an object adequate to His potency because this would imply the assertion that He cannot create anything greater and better than what He has in fact created—and this assertion of exhausted potency ‘cannot’ not be a possible assertion in regard to Omnipotence.24 The attribute of infinity destroys the possibility not only of justifying God on the basis of His works but also of giving man the security of a
cosmos that—as it was formulated for the Platonic demiurge—must be the best and insurpassable instance of what is possible as material appearance.

If, then, for nominalism the actual world could not be deduced from the premises of a world in general or from the principle of the best possible world, the radical question arose whether it was necessary or even important for man to know which of the possible world models had been realized in his world, what nature the hidden God has concealed in His creation. But that the hidden truth was a matter of indifference could not in itself signify man's happiness because (as was not the case for Epicurus) for the Middle Ages, in all their phases, no concept of happiness was thinkable that could be defined as the mere elimination of negative factors—pain, the affects, insecurity due to uncertainty. For such a concept of happiness would have made the bliss of the elect in the vision of God into a sort of superfluous addition to a situation, already sufficient unto itself, of freedom from suffering and care.

Thus the possession of truth must continue as the essence of the fulfillment of man's need for happiness; but to the extent that such possession becomes a transcendent gift of pure grace, this-worldliness may be conditioned precisely by the absence and inaccessibility of truth or may distinguish itself, through resignation vis-à-vis the identity of theory and eudemonia, as a purely preliminary condition. The freedom to abstain from categorical judgment in favor of hypothetical indecision presupposes that man does not require certainty in the sense of insight into the plan of creation and the reality lying open before God in order to assert himself in existence. The conditions of the temporal prolongation of existence can be strictly distinguished from the conditions of its fulfillment.

At the same time, the disappearance of the teleological protections that had been part of the concept of nature means that man has to adjust himself to coming to terms with a nature that is not adjusted for his benefit, so as to anticipate the inconsiderateness of natural processes and to make up for the inadequacy of their products by his own production. Hypothesis, which from one point of view is the formal expression of the renunciation of the claim to truth in the traditional sense of adequacy [adaequatio], becomes from another point of view a means of self-assertion, the potential for human production of that which nature makes scarce or does not provide for man at all. To this
kind of theory, which no longer has to provide man’s happiness im-
mediately as truth, the given reality is more than a matter of indifference
only insofar as the theory projects upon it the reality to be produced
and checks the latter, once produced, against it. Man’s existence in
the world now has only a mediated relation to theory.

The absolutism of the hidden God freed the theoretical attitude
from its pagan ideal of contemplating the world from the divine point
of view and thus ultimately sharing God’s happiness. The price of this
freedom is that theory will no longer relate to the resting point of a
blissful onlooker but rather to the workplace of human exertion. Theory
that can no longer be anything but hypothesis has really already lost
its immanent value, its status as an end in itself; thus the functional-
ization of theory for arbitrarily chosen ends, its entry into the role
of a technique, of a means, is a process subsequent to the loss of its
status as an end in itself. Only one should not allow the imputation
to be conveyed that purposes posited by a technical will must play the
primary and motivating role for the technical process. What we call
the “application” of theoretical knowledge is, as a concrete determinant
of the theoretical attitude, sterile; whereas as a secondary actualization
of an unspecific potential, it is not only established precisely through
the unadmitted disappearance of theory as an end in itself but also
serves for the same reason as the ultimate justification for the whole
expense of the cultivation of theory. Here the explicit avowals of the
power of ancient and humanistic tradition, which asserts the identity
of theory and eudemonia, are kept to one side.

The model for the new position of theory in view of the hidden
nature of the deus absconditus’s [hidden God’s] creation—which cuts us
off from the cognitive ideal of Aristotelian physics and cosmology—
was provided by astronomy, with its resignation vis-à-vis the provision
of causal explanations of the motions of the heavenly bodies and in
its conception of itself as a mere ‘art,’ the business of which was, by
means of constructive auxiliary representations, to render the unknown
and inaccessible mechanism of the goings on in the heavens sufficiently
calculable to meet the human needs for temporal and spatial orientation
in the world.

The idea that for this most sublime object the human spirit had to
make do with hypothetical improvisations was canonized in Ptolemy’s
Almagest, the handbook of astronomy that was authoritative for the
tradition. For Ptolemy the hypothetical technicity of astronomy is
due to the transcendence of its very object, not to a reservation of secrecy on the part of its author. There is no metaphysical guarantee that this knowledge can be in the strict sense a ‘science,’ whose cognitive means would be equal to their task. Man’s imagination, fed by earthly experience, is necessarily and unavoidably limited to the realm in which it originates and must have recourse to its capacity for invention when faced with what is entirely heterogeneous to that experience. The highly artificial character of the hypotheses introduced under these circumstances escapes the criterion of adequacy to the object; ‘method’ emerges as artfulness and self-defense against the metaphysical difference between its object and those of the rest of knowledge; it has the basic character of invention, compensating for a constitutional defect in man, rather than of self-measurement against the given.

Astronomy’s exceptional position in the relation of theory to the world was also familiar to High Scholasticism, and it was not leveled off by the latter’s Aristotelianism. Thomas Aquinas comments on the twelfth chapter of Aristotle’s second book On the Heavens, in which the question (the most thorny one for the geocentric system) of the order of the heavenly spheres above and below the sun, and the interconnection of what are presumed to be their motions, is discussed: In order to cope with these difficulties, Aristotle had appealed to the individual animation of each of the heavenly bodies and justified the attempt (motivated by the desire for knowledge) to follow even a narrow path in the midst of the most difficult terrain of appearances and to be satisfied with even a little certainty, regarding this as an expression more of timid restraint than of audacity. Aquinas follows him in this. But looking back on the history of astronomy and on the differences especially in regard to the positions of Venus and Mercury, he distances himself even from the prospect of a little truth. He explicitly leaves open the possibility that the actual state of affairs could be entirely different from what is assumed by astronomy. In another place Aquinas compared the inadequacy of the human spirit vis-à-vis the astronomical object with the unprovability of the theological dogma of the Trinity: as in natural science proofs can be adduced with complete certainty, so it is in regard to knowledge of the unity of God; but the capacity of reason to prove that this unity is composed of three persons can only be compared to the dim prospects for our cognitive capacity in relation to the true construction of the starry heavens.
What had been seen in High Scholasticism as the special case of astronomical knowledge is generalized by nominalism for all knowledge of nature. But this means that astronomy's interpretation of itself as technique, which Aristotle had avoided by means of his formulation of the justification of even the most minimal yield of truth and the exemplary status even of hopeless endeavor—this interpretation penetrates into the theoretical ideal. This does not yet mean that orientation and preservation of man in the world are immediately defined as functions of theory; but it does at least mean that the 'artificial' character of the statements that can be made in the knowledge of nature already moves away from the norm of science (still conceived of in the Aristotelian fashion) and approaches that of the 'liberal arts,' among which astronomy traditionally had its place. From the modern point of view, for which natural science represents scientificness in paradigmatic and fascinating fashion, this may appear disappointing; but within late Scholasticism, it tends to bring about a connection that offered itself only within the Quadrivium of the liberal arts and was already a matter of course for astronomy, namely, the possible relevance of geometry and arithmetic for physics. The process in the history of the sciences that we would nowadays describe as crucial to their becoming scientific, namely, their primary mathematization, is paradoxically prepared for by detachment from the traditional concept of science and objective adaptation to the sphere of the artes liberales [liberal arts], in which not only the mathematical equipment lay ready or could be developed but also the tolerance in relation to the truth was attainable that was excluded by the Aristotelian and Scholastic ideal of science.

That man under the conditions of theological absolutism had to live with 'less truth' than the ancient world and High Scholasticism had intended for him and imputed to him proves to be the precondition of a new definition of 'scientificness.' Diminution of the claim to truth and thus of the autonomous dignity of theory first cleared the way for the syndrome of science and technicity, of theory and self-assertion.

Here the process of the justification of man's claim to knowledge meshes with the rejection of the maximal demands posed by the Aristotelian tradition's concept of science. That concept's vulnerability now becomes evident to the extent that it had obscured the element of self-assertion normatively and withheld it from consciousness. "Science comes into being when the gods are not thought of as good,"
writes Nietzsche in a note from the year 1875. One could also propose this formulation: Science arises when man must give up wanting what is necessary for his mere existence to be sufficient to make him happy, too.
Cosmogony as a Paradigm of Self-Constitution

The process of the disassociation of theoretical efficacy from the idea of truth can also be described as a correlate of the declining anthropocentric consciousness, which is transposed from the diagram of the centripetal and thus teleological referential structure of man and the world into that of the centrifugal and thus demiurgic activity exercised by man upon the world. If the world is no longer reliably arranged in advance for man’s benefit, neither is the truth about it any longer at his disposal.

As though from a photographic negative, this connection between teleology and cognitive ideal can be read off from the decisive contradiction that Copernicus was to oppose to the development described here. He argued for going beyond the artificial function of theory in the field of astronomy itself and expressed his dissatisfaction with the constructivist tradition of this discipline by appealing to the principle that the world was intended for man. “When I had pondered for a long time this uncertainty of the traditional mathematics in connection with the calculation of the motions of the spheres, it came to seem scandalous that in spite of such painstaking investigation of the most trivial data regarding that circular motion, the philosophers had not arrived at a more dependable idea of the movement of the world’s machinery, even though this was constructed on our behalf by the best and most trustworthy Master Builder of everything.” That this monumental recurrence of the anthropocentrically assured claim to truth could take place in astronomy, of all places, was, while it had
no direct effect on the theory of science, of incomparable importance for its actual history because it was only thus that physics could be forced into its subsequent reform by Galileo and Newton. It was an episode of metaphysical contradiction, which failed to block the overall process that is our subject here because astronomy was already mathematized and was not modified in this status as an ‘art’ by the Copernican definition.

Descartes, on the other hand, drew the consequences from the ‘disappearance of inherent purposes’ [‘Telosschwund’] in the nominalist development when he pronounced the prohibition against deriving any propositions in natural science from a purpose that God or nature could have had in their productions. Man should not presume to possess insight into the intentions behind the world. The assumption of God’s infinite power means above all that finite reason cannot determine that any of its hypotheses should correspond to the actual constructive principle of nature (generalis totius huius mundi constructio). This distinction between the infinity of the principle and the finitude of reason can be characterized as a postulate of theoretical humility: “Ne nimis superbe de nobis ipsis sentiamus” [Let us not think too highly of ourselves]. This postulate is violated particularly when knowledge is assessed as though all things were made for man’s sake only, and as though consequently man could possess insight into the purposes for which they were constituted. Consistently, then, when Descartes discusses the three world systems of Ptolemy, Copernicus, and Tycho Brahe, he cannot deduce the superiority of the Copernican system from the admission that it has the advantage of simplicity and clarity (aliquanto simplicior et clarior). Only if the world had been created with consideration for man and his capacity for knowledge could it be concluded that greater intelligibility must be a criterion of reality. Thus Descartes admits the Copernican and Tychonic systems as equivalent in value, ultimately putting forward his own hypothesis as the simplest of all (omnium simplicissima), but without drawing from this the conclusion that it represents the actual state of affairs. Where truth is not to be had, there is room for the indifference of decision. In fact it is important to Descartes to introduce his concept of freedom into the process of theory construction in this way because in the range of hypothetical variation, reason protects itself against being led astray by metaphysics. The rejection of anthropocentrism prevents the human power of imagination from serving as a criterion of the real circumstances in the
world. The distance of the fixed stars from the earth, for example, even if one started from the dimensions granted to it by tradition, would already be so incredible in comparison to what man is familiar with that no arbitrary increase in that distance could increase its inconceivability, while in relation to omnipotence the distance could not be thought sufficiently great that it would be less credible than any arbitrarily chosen smaller distance. Neither from the point of view of man nor in regard to the concept of God does there arise anything like a 'natural' scale for the world. Consequently a range of free hypothetical variation opens up wherever one does not consider it possible to employ technical parameters.

What holds for space does not hold without further ado for time. Here there arise the much discussed difficulties in the interpretation of the Cartesian cosmogony, in regard to which people are all too ready to trace any unclarity to the author's fearfulness and masked anxiety under the influence of the Galileo affair. People would rather not imagine that the "beginner of the new philosophy," as Schelling entitled Descartes, could have perpetuated so much medievalism in himself and lent power to so much contradictoriness for reasons other than fear. If Descartes had really begun "to break off all connection with earlier philosophy, to erase, as though with a sponge, everything that had been achieved in this science before himself, and to rebuild philosophy from the ground up, just as though no one had ever philosophized before him," then the beginning of his projected cosmogony could indeed only be understood as the relapse of a self-terrorized revolutionary. In fact, however, according to his own assumptions, Descartes did not face the alternatives of inquisition or freedom of thought, loyalty to faith or reason, but rather the paradigm (which was realizable in this exceptional case) of a truth that, in contrast to the possible satisfactory constructions of reason, 'happens' to be known. The Bible did not in fact contain any information regarding the distance of the fixed stars from the earth; but it was not this that first made room for the 'art' of hypothesis, any more than this room would have been closed off if the deus revelatus [God of revelation], in some specific passage, had lifted the veil of secrecy from the deus absconditus's [hidden God's] physics. For 'revelations,' however indisputable their truth may have been for Descartes, lacked on account of their voluntaristic discreteness the element of the internal consistency
of a system of true propositions, which Descartes had required in the rules of his projected method.

Thus the admission of the truth of the biblical account of Creation as a prelude to his cosmogonic vision is not a cunning device of doubled truth, but neither is it a mere continuation of fideism, which presupposed that it definitely was a matter of absolute truth—even if only in the form of unconnected pieces of a hidden totality. Rather his project sprang from precisely the opposite position, where there is no interest in absolute truth (except as a luxurious surplus benefit) as long as any hypothesis is available that has an explanatory value covering the relevant range of experience. Descartes announces that he will leave the genuina veritas [genuine truth] alone (malim hoc in medio relinquere [give this up for the time being]) only to assure us immediately that there is no doubt that the world came into being in a different way than the one he will sketch, namely, as a unique and immediately complete creation. This is in accord not only with Christian doctrine but also with natural reason, which in view of God’s immeasurable power could not expect anything but a product having no need of further improvement. But the hypothesis starts precisely from the assumption that infinite power is at bottom identical with the infinity of what is possible, so that, regarding the path that it actually adopts, no certainty can be had from the result alone, and indeed no certainty needs to be had for the purposes of life (utilitas ad vitam). 8

In this section there is an important difference between the Latin version of the Principles of Philosophy of 1644 and the French version of 1647: The French text appends to the statement at the end of Chapter 44 that hypothesis has the same serviceability in life as secure truth the additional argument that hypothesis is perfectly sufficient in the use of natural causes to bring about those effects that one has set oneself as ends. 9 On the assumption of unlimited possibilities, the experimental verification of hypotheses loses its power of conclusive demonstration, but this restriction loses its significance if knowledge of nature is directed from the outset at the telos [defining purpose] of the production of the phenomenon. As an instrument of self-assertion, theory has no need of the luxury of relating its hypotheses to—and taking part in—the truth possessed by divinity itself. The involvement with technique integrates theory and the theoretical attitude into the functional complex of the immanent teleology of human self-assertion, and weakens its—until then—irreducible claim to truth.
The power to foresee events, to anticipate them, to alter or to produce them, proves to be the 'self-assertive' sense of the incipient modern science. This state of affairs is not altered by Descartes's programmatic statement that the completion of knowledge should provide the foundation of the definitive morality. Once morality has been defined as dependent on the given reality—that is, as the human conduct that is fully appropriate to the situation, that guarantees man a peaceful conduct of life thanks to the absence of conflicts with reality—then this conception already contains the conclusion that not only the adaptation of man to reality but also the adaptation of reality to man can bring about the same effect (even though this may no longer be aptly described as "morality").

The adaptation of human behavior to the reality of nature that is mastered by theory, as the essence of the definitive morality, is thus only the initial formulation of a new definition of the meaning of the theoretical attitude, a formulation that can endure as long as human action with theoretical regard to nature proves to be adequate for man's needs but that must be translated into the more pointed conception of a reality to be altered and produced in accordance with human purposes, to the extent that reality proves to be inconsiderate of man. The world must be regarded as producible if it is not certain that man can get by with what is given. Following the Cartesian program, man first of all refines his ability to enjoy nature's benefits by supplying himself with the theoretical knowledge that is a precondition of an existence in conformity with nature, but already he does this reserving the right to interfere in nature, to subjugate it as the substrate of demiurgic production.

On these assumptions, the contradiction that appeared to be contained in the introduction of the Cartesian cosmogony resolves itself. The choice of a hypothesis that, contrary to revelation and 'natural reason,' regards the world as a system gradually developing from original matter and seeks to demonstrate the possibility of this process is dependent on the intention of exhibiting the nature with which man is confronted as a sum of what can be produced, depriving it of the self-evidence of what is set forth ex nihilo [from nothing]. For this purpose it is perfectly sufficient for Descartes that it could have been this way, even if he was in fact honestly convinced that no such evolution had taken place. Reduction of the world to pure materiality is not primarily a theoretical proposition, which would have to compete
with a traditional truth, but rather a postulate of reason assuring itself of its possibilities in the world—a postulate of self-assertion.

The Cartesian cosmogony has a function that is radically different from that of the Platonic cosmogony in the *Timaeus*: There it was a matter of assuring by a myth the approximation of the quality of the cosmos to the ideal, a matter of sanctioning the existence and the intelligibility of what exists as the image of the pure sphere of what should be—whereas here, in Descartes's sketch, it is a matter precisely of reducing what exists to the mere materiality of its preconditions, a matter of the reversibility of the nexus between starting point and result, between chaos and cosmos. Descartes's concept of matter avoids the device that was adopted by the ancient atomists of building the determination of nature's form into its very origin and thus perpetrating the self-contradictory postulation of specifically formed atoms; but it also avoids the phantom of the Aristotelian primary matter, with its absolute lack of definition, which never manifests itself in physical processes and is referred totally to the complementary and equally shadowy factor of form.

How near to the characteristic qualities of myth Descartes's cosmogonic hypothesis comes, in its tendency toward the role of a pragmatic postulate, can be seen from the apocryphal 'backward' extension given to it by a discussion of the hypothesis in a famous eighteenth-century textbook of physics: "According to Cartes, before this world existed there was a lump of uncommon hardness, which God by His omnipotence dashed to pieces, and set all of its parts in motion. These parts rubbed against one another in such a way that there arose a great many little balls. . . ." This seemingly ironic overstepping of the economy of the model, by producing a prehistory of the homogeneous original matter itself, in which omnipotence finds its role after all in the crushing of the archaic atom—but precisely the role of reducing it to the substratum of the world!—demonstrates graphically the paradigmatic significance for the mode of operation of modern rationality that was to fall to Descartes's cosmogony. God must not be needed in the history of the world itself; in Erxleben's apocryphal version of Descartes, the worker of miracles and keeper of the construction plan of nature performs the great miracle of His omnipotence before the beginning of the history of this world, in order to bring about the chaos from whose grinding mill, by the self-regulation of
long-term processes, the world lying before our eyes is finally supposed to have emerged.

This passage makes it clear why the renewal of ancient atomism by, for instance, Gassendi got the worst of the competition with Cartesianism and its concept of matter and space. One can put it as follows: In the situation of man alarmed about his metaphysical insecurity, the concept of the atom that preforms the shape of the world contains, too much no longer credible reassurance, too much pregiven cosmic character. The process of the disappearance of order and teleology in nature has undergone a revaluation; what is no longer found ready as reality benefiting man can be interpreted as a possibility open to him. The widening of this horizon of possibilities occurs precisely because the process of the disappearance of inherent purposes is no longer merely accepted and (so to speak) suffered but rather is taken in hand, as a task of critical destruction, and pressed forward.

The relation of the doctrinal differences to the functions accruing to the differing positions admittedly remained mostly hidden from contemporaries. Thus Robert Boyle (1626–1691), who tried like Gassendi to make use of ancient atomism and, in accordance with the implications set forth here, exhibited a peculiar cramped combination of trust in teleology and skepticism, wrote regarding the modern reception of atomism: “Certain modern philosophers have correctly followed the example of Epicurus in that they were satisfied not to specify in each case the supposedly true, but rather merely one possible cause of the phenomena.” The instructive thing about this quotation is that it overlooks the crucial difference, which deprives atomism’s modern reception of the character of a renewal of the ancient doctrine: Epicurus wanted to specify not only one possible cause of natural phenomena but rather in each case what appeared to him to be the complete catalog of all the possible causes, since this was the only way in which he could demonstrate the irrelevance, for the condition of man’s consciousness, of the decision between these possibilities. The new atomists, just like the Cartesian, seek one hypothesis to explain the phenomenon, and indeed not in order to produce theoretical reassurance or practical indifference but rather in order to render the phenomenon itself producible independently of its real conditions in nature.

A further difference that at first remained unnoticed must be added: Ancient atomism makes its world develop from the original vortices
into a definite optimal complex of atoms and then disintegrate once more in the hail of atoms that strikes each such cosmos from outside; the Cartesian system, which ascribes a constant quantity of motion to a constant amount of matter, is caught according to its assumptions in a never concluded process, in which no given state can ever be distinguished as the definitive one. Descartes does indeed convey the impression that this development was as a matter of course directed toward, and concluded by, the condition of the world that has presently been arrived at and surrounds us, but the consistent logic of the materialization of nature has not been maintained in this suggestion. That logic implies, instead, that the total physical process, as a process of development, is never completed, nor can it be completed in any realized phase.

It was the competition between his cosmogonic hypothesis and the idea of creation that prevented Descartes from seeing the full extent of the consequences resulting from his assumptions. It was in fact not altogether so easy as it appears after the fact really to think through the consequences of leaving nature ‘to its own resources’ and to achieve some distance from what our actual experience had stabilized as eidetic typification in our concept of the world, interpreting it now as the product of a cross section at an arbitrarily chosen point of the total process. Kant, with his great cosmogonic speculation of 1755, which combined the Cartesian approach with Newton’s physics, was the first to find his way to the idea of the ‘unfinished [unvollendete] world’ and to project in it the cosmic archetype of endless progress: “The Creation is never finished or complete. It has indeed once begun, but it will never cease. It is always busy producing new scenes of nature, new objects, and new worlds.” A quarter-century before the Critique of Pure Reason, Kant sketches the monumental panorama of the endless evolution of worlds, still from the point of view of a faculty of reason that, so to speak, adopts the standpoint of divinity and identifies itself with the divine view of the world. Man appears, among the immense vortices of the self-propagating worlds, as an ephemeral episode. This whole infinite extravagance of a “world of worlds” is conceived in its relation to omnipotence, as the latter’s demonstration of itself to itself. For, as Kant observes, it would be “absurd to represent the Deity as passing into action with an infinitely small part of His potency, and to think of His infinite power—the storehouse of a true immensity of natures and worlds—as inactive, and as shut up eternally in a state
of not being exercised. Eternity is not sufficient to embrace the manifestations of the supreme being, if it is not combined with the infinitude of space.”

Kant does indeed oppose (in Der einzige mögliche Beweisgrund des Daseins Gottes [The Sole Possible Proof of the Existence of God], 1763) to Leibniz’s requirement that the actual world should be the best of all possible worlds the question “whether there isn’t to be met with, among all the possible worlds, an endless increase of degrees of perfection, since no natural order whatsoever is possible above which a yet more perfect one cannot be conceived,” but he still sees no connection between man’s history and this process of improvement. That the world is ‘unfinished’ has nothing to do with human action but is due to its having been created as a result of inexhaustible power. It is not the call of an endless task that the materiality of the world poses for man, since man’s demiurgic intervention could only interfere with the self-sufficient execution of the Deity’s self-demonstration. History does not follow from cosmogony, as long as the latter is fully governed by its own teleology. Thus it is only consistent, in Kant’s Theory of the Heavens, that man, “who seems to be the masterpiece of the creation,” finds his place in the “world of worlds” precisely where there is an already “perfected world structure,” among others still in the process of coming into being or already disintegrating, to guarantee his existence. Man does not indeed embody the significance of the whole process, but he is nevertheless involved in the culmination of the whole in such a way that the materiality of nature answers to him in particular. He sees himself faced with what is pregiven as a matter of course, which appears not to ascribe or even to leave open to him any demiurgic participation. The pre-critical Kant gives man once more—and not accidentally in the year of the earthquake at Lisbon, which put an end to the optimism of the first half of the century—an essentially contemplative role in a teleologically determined world: “All nature, which involves a universal harmonious relationship to the self-satisfaction of the Deity, cannot but fill the rational creature with an everlasting satisfaction, when it finds itself united with this primary source of all perfection. Nature, seen from this centre, will show on all sides utter security, complete adaptation.”

If philosophy, according to another Kantian saying, is “the science of the fitness of all knowledge to man’s determinate vocation,” then this latterly pre-Copernican ‘central point’ of the cosmos (of a cosmos
seen this time in its temporal prolongation as the cosmogonic process) serves primarily as a reassurance for man regarding the perfection—admittedly partial, but appearing in the foreground of the whole—of his world among the worlds, at whose most distant edges only the telescope discloses to him the predominance of what is unfinished, of still naked materiality. The cosmological illusion of a teleology centered on man remains, and it remains as an expression of a nature that, at least for man, is providentially ‘finished.’

Only the transcendental self-criticism of reason eliminates this teleological preconception as well: The ‘unfinished world’ is no longer on the way, of its own accord, to ever greater perfection, with the aim of bringing forth man at its point of culmination, who as the witness of its immanent power registers its history in the result only and does not experience and push forward the process. Progress now becomes a category with a noncosmic status, a structure of human history, not of natural development. The ‘unfinished world’ becomes the metaphor of a teleology that discovers reason as its own immanent rule that up until then had been projected onto nature. Only when the mechanism of this projection is exposed does the history of the disappearance of inherent purposes enter the phase of conscious and deliberate destruction.

The late-medieval loss of the cosmos had been more a matter of doubt or suspicion than of critique; the prohibition pronounced by Bacon and Descartes against teleological anthropocentric assumptions was more a postulate of caution, of forestalling disappointment than of rationally eradicating an illusion. It was only for that reason that the teleological arguments of metaphysical reaction could have success—even in the early Kant himself—again and again in the midst of the Enlightenment. Kant’s critique concentrated all directed, purposeful processes in man’s rational action, and this meant that the world could participate in this sort of directedness only by becoming a substrate subject to man’s purposes. In its metaphorical usage, the expression "unfinished world" no longer legitimates human action by reference to a prescribed definition and obligatory role in nature. Rather, the transcendental turning requires that the world must be ‘unfinished,’ and thus material at man’s disposal, because this is a condition of the possibility of human action.

The materiality of the world is a postulate not indeed of the moral but certainly of the technical autonomy of man, that is, of his inde-
dependence from ends supposedly set for him by nature. The cosmos of the ancient world and of the metaphysical tradition—in other words: the belief that one is confronted throughout reality with what is already 'finished' [vollendet], that all one can do is either adapt oneself to this order or violate it, determining thereby nothing but one's own happiness or unhappiness—this cosmos proves in retrospect to be precisely what Nietzsche was to call "the most crippling belief for hand and reason."

As a Romantic principle, the avoidance of evidence of completion is only the reflex in the aesthetic realm of the radical transformation of the concept of reality into the concept of an 'open consistency,' of something that remains outstanding and at man's disposal, that offers to define rather than to take over self-assertion's unending task. Talk of the imperfection of the universe—talk that has become metaphorical in that it carries over the meaning of action to the world acted upon—admittedly shares the perilous instability of all philosophical metaphor, which later can all too easily be taken 'at its word.'

A development of the idea that is instructive in this regard occurs in the thought of Friedrich Schlegel, in whose transcribed Jena lecture on transcendental philosophy the thesis "that the world is still unfinished" is explained in the following manner: "This proposition, that the world is still unfinished, is extraordinarily important in every respect. If we think of the world as complete, then all our doings are nothing. But if we know that the world is unfinished, then no doubt our vocation is to cooperate in completing it. Experience is thus given an infinite latitude for variation. If the world were complete, then there would only be knowledge of it, but no action." Onto this basic thought there is immediately superimposed the conception of the world as an organism, in which man is an organ integrated into the development of the whole. To begin with, the idea of the 'unfinished world' leads Schlegel only a little way forth from Fichte's absolutism of the deed in search of a minimum of justificatory pregivenness; but this minimum swells under the pressure of its metaphorical function and acquires the vegetative hypertrophy that is peculiar to the organic even—indeed especially—in its metaphorical application to cosmology and politics.

The metaphorical turning that is exhibited here is instructive because talk of an 'unfinished world' recognizably originates in technomorphic imagery—as, for instance, when Lichtenberg notes that he cannot escape the thought that "our world could be the work of an inferior
being that did not yet understand its business properly,” and thus perhaps “the nebulae that Herschel saw are nothing but examination exercises handed in, or perhaps still being worked on.” Only in the ‘unfinished world’ in this technomorphic sense does man see himself functioning demiurgically vis-à-vis a reality that is at his disposal (because in and of itself it is unfinished and thus open) but also exposed to the risk of a freedom that can no longer be defined in terms of objective appropriateness. The early Schlegel of the Jena lecture shuns this very consequence of the materializing of reality and takes refuge in the organic retraction of the metaphor of the ‘unfinished world,’ which then refers to the imperfection of the whole that is still in the process of coming into being and maturing. The metaphorical short circuit accomplished by the Romantic flight from exposed self-assertion into the sheltering womb of the world animal, into the warmth of organic function, becomes plausible in the context of his turning against Kant: “The reason why we speak against freedom is that it breaks up the unity of the world. For if the world is thought of as a mechanism and man as absolute causality, then the world is split, and so is reason. The split that thus comes into being is even now irreparable, and no practical postulate can bridge it. . . . It is entirely different in our theory, where the world is an organism, a nature. We do want our action to succeed; we want something to emerge from it; we do not want everything to be already foreclosed; but the mechanistic system prevents this. Our point of view also supports the importance of the moment and of the present in general.”

The world mechanism as an antithesis to which Friedrich Schlegel advances the Romantic identity of organism and freedom is of course no longer the machina mundi [world machine] of Descartes’s cosmogony and Kant’s model, whose initial conditions were defined only by matter and motion, but rather the baroque model of an automatic clockwork, whose initial condition is the perfection of the apparatus that, requiring no further intervention or contribution, determines the functioning of each of its parts. The Enlightenment had employed this model in particular in order (so to speak) to create a preserve for God, as the machinist of nature, and at the same time to eliminate the voluntaristic effects of continuing creation and of miracles. Certainly the (thus strictly defined) world mechanism did its critical—or, better, its ‘apotropaic’ [turning away, averting]—service within the totality that we call Deism, but at the same time it linked the idea of Enlightenment to a world
model whose fully designed and finished character could be repugnant and lead to opposition from a point of view that was unwilling to abandon freedom or that (in the manner of Romanticism) took its stand on organic incompleteness. Precisely because mechanization and materialization of the world had parted company, it was possible for Schlegel’s objection—that the mechanistic world would leave no room for human action—to find a footing: The perfection of clockwork, which admitted only springs and wheels, seemed to exclude any thought of criticism or altering reality. But for just the same reason the organic metaphor proved to be no alternative at all: By seeking to identify nature with freedom, it deprived man of freedom as the specific definition of his role over against reality and organized him into a totality whose construction is conceived as inscrutable.

The modern age’s will to a rationality that grounds itself is reflected in the problem of the cosmological initial situation and the choice between orienting background metaphors. Neither the image of the world organism, which was revived in the Renaissance’s philosophy of nature, nor the metaphor of the *artificium mechanicum perfectissimum* [the most perfect mechanical artifice], which was first coined by Nicholas of Oresme in the fourteenth century under the influence of the mechanical clocks then beginning to appear, could provide a satisfactory correlate for modern man’s understanding of himself and for his interest in self-assertion. The perfect world mechanism of Deism does indeed bracket God out of the course of the world and out of history after the setting in motion of His mechanical creation, and thus becomes an instrument of defense against theological absolutism; but at the same time it leaves man only the narrowly defined function of a cog in the mechanism and thus robs him of the effect of his rational self-assertion. Kant’s statement in section 86 of the *Critique of Judgement*, that “without man . . . the whole Creation would be a mere wilderness, a thing in vain, and have no final end,” still depends on one of the assumptions of his cosmogony in the *Theory of the Heavens*: the idea of pure materiality, not only as the idea of an initial situation but also as the idea of a continuing reservoir for the world process—though of course this is not meant to harness man again into an objective teleology to which he is subordinate. If matter is (as in Christian Wolff’s definition) *actionis quasi limes* [the limit, as it were, of action], then the reduction of nature to pure materiality and the diffusion of all the world’s characteristics of pregivenness constitute precisely the ele-
mentary boundary definition of reality that opens the widest possible range for human activity. It follows from this statement also that human self-assertion does not restrict itself to holding its own and fortifying itself against the late-medieval disappearance of inherent purposes; rather it keeps this process in motion, as a leveling of the pregiven world structure, in order to obtain a ‘ground level’ upon which to proceed with its rational constructions.

An impressive example of how the schema of reducing the natural process to the homogeneous diffusion of elements, as rationality’s initial situation, is transferable to the problems of the human world as well is offered by Thomas Hobbes’s political philosophy. The classical proposition that nature has given everything to everyone (*natura dedit omnia omnibus*) becomes the point of departure of the construction of political order. But viewed in terms of the context in which it originated, this proposition had an unambiguously teleological intention and belonged in this sense to the natural-law axiomatics of the Stoa. It was meant to say that nature had arranged her goods adequately in relation to man’s needs and that only their just distribution is still required in order to achieve nature’s ends. At the same time this is also a critical regulator in regard to private property, which appeared to the Stoics as a form of mistrustful anxiety in the face of nature’s ample providence. Of course, criticism of the positive legal order on grounds of the natural principle of order does not yet mean a summons to the abolition of the actual legal relations, as one can see from the case of Cicero.

Hobbes made of this axiom something radically different and foreign to its origin. As the principle of the prepolitical state of nature, the proposition not only defines for each individual his right to insist on the satisfaction of his needs and thus to integrate himself into the supposed teleology of nature, but it also designates the unlimitedness and unlimitability of his claim to everything at all that he finds within his reach. Natural ‘right’ is the absence of rights for those who do not possess the power to defend their claims or their possessions, so that anyone powerful enough to gain control of everything that took his fancy would be empowered ‘by nature’ to do so. It is the model of theological absolutism, which here is projected into the state of nature and makes each individual into a *princeps legibus solutus* [an unobligated author of laws], inasmuch as the principle valid in this sphere is the dependence of rights on power and thus, in the limiting case, the dependence of unrestricted rights on omnipotence. In man’s pre-
political state of nature, the theological ius in omnia [right to everything] becomes the ius omnium in omnia [right of everyone to everything] and thus perfect chaos; natural law gives rise to its antithesis, lawlessness.

The solution to this self-contradiction comes with the construction of the political state of law, or, more exactly, with the definition of the instantaneous transition to political absolutism in which the conclusion of the capitulation treaty is simultaneously both the assumption and the surrender of the status of legal subject. The chaos of absolute rights, not the telos [defining purpose] of right, is the argument of reason that enables it to grasp the opportunity of self-assertion (and only this opportunity) by transferring the many absolute rights to one absolute right—that of the ruler. The doubtfulness of the achieved and justified order and of the resulting concept of order does not matter because it emerges from reason's desperation [Verzweiflung], just as the Cartesian proof of God emerges from its doubt [Zweifel]. For this order there speaks only the argument of 'any order at all' [. . . is better than none . . . ], that is, a rationality so minimal that to attack it is inevitably to contradict oneself by implying a desire to return to the state of nature. This formal schema fundamentally distinguishes the modern age's approach to political theorizing from the tradition of political-philosophical ideals. The analogy to ideas in physics, which Hobbes wanted to emphasize even by the order of his treatises De corpore, De homine, and De cive [Of body, Of man, and Of the citizen], is palpable, but it no longer has anything to do with the exemplary principle that Plato had pursued with the plan of his trilogy of dialogues, the Timaeus, the Critias, and the Hermocrates: the principle of preceding the theory of the state by a theory of the cosmos. Hobbes emphasizes—in contrast to Plato—the differentiation within the analogy, the unfortunate severity of the political problem in comparison to the freedom of natural science, which by free agreement (consensio) itself advances the point of departure of its definitions, and in this is ruled only by a hypothetical imperative, whereas the initial political act (contractus) is carried out under the categorical imperative of naked self-preservation. The systematic precedence of the theory of physical nature over the theory of the social contract reverses the genetic relation of foundation since the objectivity of physical theory already presupposes the subsistence of a society that, on the basis of its assured self-preservation, can become a rational community of mutual un-
derstanding *quasi pacto quodam societati humanae necessario* [as it were, by a certain contract necessary for human society].

Political reason, which constitutes itself in the act of the social contract, does indeed come upon natural law as a preexisting circumstance, but this pregiven nature is for it nothing but the antinomy whose solution is its task, the chaos from which its creation springs. The function of philosophy, accordingly, is no longer to be the theory of the world or of the Ideas, no longer to administer a treasure imparted to man along with his existence, but rather to imitate the Creation (*imitare creationem*), to renew the original creative situation in the face of unformed matter. The zero point of the disappearance of order and the point of departure of the construction of order are identical; the minimum of ontological predisposition is at the same time the maximum of constructive potentiality. Chaos is no longer the impotent indefiniteness of the ancient *hyle* [matter]; the progress of thought at the beginning of the modern age rests essentially on the fact that one began to make assertions about the absence of order and to ascribe to that absence (without the intervention of a transcendent factor) a law of self-regulation.

Here the result is not so determined as Hobbes represents it to be: Absolutism and liberalism are based upon the same principle of self-regulation, being distinguished from one another only in their judgments of the murderousness of the initial situation and of the forces at work in it. Teleological residues are not eliminated from liberalism in particular; thus Adam Smith still makes an “invisible hand” guide the self-regulating economic order and reserves his trust for “laws of justice” that are mysteriously present in the process, as indicated in the *Wealth of Nations*: “Every man has perfect freedom, so long as he doesn’t violate the laws of justice, to pursue his own interest in his own way and to set his enterprise as well as his capital in competition with the enterprises and capitals of other men.”

For Hobbes the state of nature had been that which man found present or in which he found himself situated; but the doubt whether this could be more than a regulative and critical principle, whether the opportunity for rationality to posit itself without presuppositions had ever occurred in history, could be transformed into the maxim that this was after all also one of the prerequisites that man could only create for himself and that, by a revolutionary reduction of historical positivity to elementary anarchism, he had to create for himself,
as though to get behind his own history and reach the zero point for the *creatio ex nihilo* [creation from nothing] of a rational social condition.

The modern relation to the world summarized in the concept of self-assertion breaks down pragmatically into construction and prevention. Exact predetermination of real situations makes it possible to anticipate unfortunate circumstances and to alter them. Mankind has always known want and the distress of being hard pressed by nature; but the generalization of such experiences to an evaluation of reality as a whole has additional prerequisites, which are not already given in those experiences themselves. How the world’s deficiency of order—its structural inadequacy with respect to man’s needs—is perceived and interpreted is thus not something to be attributed to the demonstrable presence of particular physical, economic, and social conditions but is rather a matter of the anticipations that are bound up with experience.

This becomes particularly evident in the case of a motif of modern intellectual history unknown in previous epochs: the idea of overpopulation, of growth of the number of men beyond the natural living space (considered to be constant) and beyond the quantity of food (considered to be growing at a rate less than proportional to that of the population). Even before the population figures actually increase alarmingly, the fear of population growth becomes acute and the discussion of its problems becomes a compulsive theme that is never dropped entirely.

In Thomas More’s *Utopia* (1516) the problem still has a purely spatial/regional character; the possibility of the overpopulation of the utopian island is considered, but the problem is immediately laid to rest with a reference to the possible expedient of colonizing the neighboring mainland. In the *Essays* of Francis Bacon, which first appeared in 1597, the place of the natural symmetry of needs and goods has been taken by political regulation within the state, whose economic and legal instruments are supposed to keep population growth within limits that prevent it from endangering political stability. Ethical justice in the distribution of goods is replaced by political calculation. In 1642 Hobbes introduces the idea of overpopulation into his discussion, as the ultimate threat to the efficacy of moral philosophy, at a significant point. He compares philosophical ethics with geometry—not to the advantage of the former: If the moral philosophers had clarified the *ratio actionum humanarum* [grounds of human actions] somewhat, there would no
longer be any wars—with the single and crucial exception, however, caused by the increase in the number of men and their need for living space: *nisi de loco, crescente scilicet hominum multitudine* [except about space, since the numbers of men are evidently increasing].

From another side, the problem of population growth is introduced quite in the humanist style: The learned controversy whether the population had been greater in antiquity than it was at present belongs almost in the context of the *querelle des anciens et des modernes* [quarrel of the ancients and the moderns]. Thus Montesquieu believes in the decline of total population since early antiquity.²⁵ In the context of this dispute, there also occurred the foundation of theoretical statistics by William Petty.²⁶ The controversy reached its high point around the middle of the eighteenth century with the treatises by Hume and Wallace.²⁷ Hume’s comprehensively argued skepticism regarding the assumption of higher population figures in antiquity was an important argument on behalf of the thesis of impending overpopulation. In Germany, Hermann Samuel Reimarus added an unexpected argument for the continuous growth of the earth’s population, pointing out that only on this assumption could the temporal beginning of the human species in a single pair of people be proved mathematically.²⁸ But what might in this way be comforting as a means of strengthening a proposition still belonging to ‘natural religion’ nevertheless has the side effect of accentuating misgivings regarding a lawfulness with alarming future consequences: “The increase of the same” (that is, of the human species) “is grounded in its nature, and is the overall tendency; decrease in one place or another is accidental. . . .”

This idea of the autonomous lawfulness of population growth found its most influential expression for the thought of the time in Malthus’s *Essay on the Principle of Population* of the year 1798. The so-called law of population formulated here asserts that men’s increase in numbers is a geometric progression, whereas the increase in the quantity of food is an arithmetical progression. Appealing to the authority of Benjamin Franklin, Malthus considers it certain that a universal law of life has been found here, which also sets a limit to the increase of plants and animals, based solely on the given quantity of nutrition. For Malthus, the ominously widening gap between the two progressions no longer lies in the indefinite future; the threat is near—indeed it has long been palpable since the acquisition of food had become difficult. The conclusion that Malthus derives from his principle of
population is resignation in the face of the supposed law of nature, whose inhuman harshness should not be deprived of its regulative effect through preventive measures taken by the state. The transgression of the limits of existential possibility must have its full effect through the unbearability of its consequences. It should not be mitigated by recognition of a right on the part of the individual to society’s removal of his distress. But this principle of self-regulation through poverty is sterile because its optimal functioning stabilizes only the limiting case of a barely endurable proportion between quantity of food and quantity of population.

The two great ‘ways out’ of this inhuman stability conceived only in terms of the political ideal of survival—namely, evolution and revolution—were still far from Malthus’s thinking. When Charles Darwin became acquainted with Malthus’s book in 1838, he wrote, “Here then I had at last got a theory by which to work.”29 By generalizing biologically the disorder axiom of overpopulation and the struggle for existence arising from it, Darwin recognized in it the order principle of selection and the evolution of organisms driven by selection. The important consequences of this insight did not derive primarily from its theoretical explanatory value but rather from the fascinating effect of applying the schema of mechanistic world explanation to the realm that Romanticism, once again, had proclaimed to be heterogeneous, the realm of the organic, thus extending all the way to man the assurance of the ordering power of disorder, that is, of the “state of nature” in Hobbes’s sense. Hobbes’s social contract, however—the unconditional capitulation of individuals to the power that in their desperation they set up—appeared to have been a short circuit of rationality; only the prepolitical society, in which the struggle for existence could unfold, gave free reign to the law of nature, which was no longer a mere stabilizer.

But what we are discussing here is not an inexorable sequence of historical development. Darwin—and still more the “social Darwinism” that was imbued with Darwin’s ‘applicability’ to human society—believed that they had found the sole logical consequence of Malthus’s insights. There were, however, other approaches. The foundation of agricultural chemistry—that is, the theory of artificial fertilizing—by Justus Liebig in 1840 revealed that Malthus’s dual progressions could not only be disputed as ‘law’ but could also be conceived as a reality alterable by improved technique. Technique is a product of human
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impatience with nature. The long periods of time that Darwin required for the tiniest steps of evolution may indeed have made the great waste of nature, its huge expenditure of individuals, suffering and death, appear in a new light of significance; but as human security, as justification of man's historical status, they were empty of comfort.

To the scale of the steps of progress that the Enlightenment of the eighteenth century thought it could lay out, the abbé Galiani had already opposed his "Nous et nos enfants... le reste est rêverie" [Ourselves and our children... the rest is daydreaming]. The super-dimensional time periods into which, after the disappointment of the "best of all possible worlds," the newer optimisms deferred the parousia [presence] of human happiness—in the last analysis, in order to justify the present as the necessary preliminary and transitional stage on the way to that distant future—these could hardly be described as secularized infinity and were only a surrogate for omnipotence to the extent that man as an individual now had to perceive himself as impotent vis-à-vis time, the omnicompotent. The position of transcendence was reoccupied by the element of postponement.

But the very difference in time scale between Malthus and Darwin shows that nature and history have definitively ceased to relate to one another; Malthus sees the crisis determined by the law of population as immediately impending, whereas Darwin justifies nature's indifference to what is alive at any given time, over thousands of generations, by appeal to the "unerring power of natural selection" and derives from this natural right the demand (at the end of the Descent of Man, published in 1871) that society should open for all men the free competition that grants to the most successful the greatest number of descendents. But precisely this social relevance of the new conception of evolution makes the heterochrony, the lack of temporal congruity between the natural process and the acute historical situation in which man finds himself, emerge with extreme sharpness.  

The fascination that once again emanated from the concept of nature in this both overwhelming and alarming formulation was just as delusive as most of what had ever been represented to man about 'nature' as reassurance in his uncertainty—and, no matter how strange it sounds, even this 'organic' total conception, in spite of its surrender to mechanism, was still a type of reassurance. With it man took shelter, as Dolf Sternberger has put it, "under this bizarre gradualness, and he is warmer here (notwithstanding the rigorous technique of this
selection, of which, after all, he feels nothing now), warmer than in the position of the free outcast who confronted the rest of nature as a trial, task, issue, and enigma, as an alien abode. The peculiar organic/mechanical double character of this idea of evolution, which seemed to make man into at one and the same time the accidental result of the process and his own demiurge, having disposition over the process as his instrument, had precisely the lack of definition that man finds comforting in his utopian projections. This last of all alliances with nature was a blind alley—for many reasons, among which some were, in their implications, frightful (and that was due not, as must be said explicitly, to the theory as such but rather to its supposedly being rendered humanly pragmatic, to the claim to have given the definitive answer to the Malthusian problem regarding man's future). Malthus and Darwin had both made their theories culminate in the advice that man should obey the law of nature by clearing away the social hindrances to its unmediated and unadulterated operation.

The greatness of the much reviled nineteenth century lay in the fact that, at least in the greater part of what it actualized historically, it opposed this advice.

The opposition was in the breakthrough of technicization. Malthus's work was not intended to stimulate it, but in effect, like no other spiritual factor at the turn of the century, it made plausible the process of technicization (in the shape of industrialization) as man's self-assertion in the face of nature's inhumanity. That the great extension—by leaps and bounds—of life expectations could be accomplished at all violated the supposed law of nature by violating the difference between the progressions that law asserted, whose palliation, rather than alteration, Malthus had seen in the measures taken by the state and society against poverty. Even Hegel (in section 245 of his Philosophy of Right of 1821) still expresses his opposition to the public and private 'poor relief' illustrated by the English example by arguing from the irreducible difference between needs and means of subsistence: "It hence becomes apparent that despite an excess of wealth, civil society is not rich enough; that is, its own resources are insufficient to check excessive poverty and the creation of a penurious rabble." Technical progress made it evident that the scope available for life was not a natural constant and did not stand in a necessarily ultimate disproportion to the growth of population.
Neither resignation before ‘laws of nature’ nor leaving everything to the transcendence of time, as the end form of all the transcendences that are indifferent with respect to man, have been able to invalidate the self-assertion of reason. Its essence was expressed, once again by the Abbé Galiani, in the eighth of his *Dialogues sur le commerce des blés*:

“Nature is an immense undefined something. It is a work worthy of its Creator. And we, what are we? Insects, atoms, nothings. Just let us compare. Doubtless nature always returns to the laws given it by its Creator for an indefinite duration. Doubtless it returns everything to equilibrium, but we need not wait for this return and this equilibrium. We are too small. For nature time, space, motion are nothing, but we cannot wait.”

**Translator’s Notes**

a. The author presented several contrasting “concepts of reality” from different stages of our tradition, of which one is the concept of a “consistency” that is “never definitively and absolutely granted” but is perpetually contingent on future verification, in his “Wirklichkeitsbegriff und Möglichkeit des Romans,” in *Nachahmung und Illusion* (Poetik und Hermeneutik 1), ed. H. R. Jauss (Munich: Wilhelm Fink Verlag, 1964; 2nd ed., 1969), pp. 10–14. (Quotation from p. 12.)

III

The 'Trial' of Theoretical Curiosity
According to a simple formula for mirroring backgrounds, the statement that the contemporary world can exist only by means of science stands in suspicious relation to the fact that this is asserted by people who themselves make their living from science. But this suspicion is still harmless compared to the suspicion that results from the fact that science itself brought forth the very world, to live in which depends on—and makes us increasingly dependent on—science’s continued existence and continued operation. The dilemma of any attempt to focus on this underlying state of affairs lies in the fact that talk about science only begets a further science (Wissenschaft: knowledge), whatever one chooses to call it. Nor can the attempts to inquire back into a prescientific sphere, whether synchronically, in the ‘life world,’ or diachronically, in history, free themselves from this adhesion. The great gesture of self-liberation is no help here. If one wants to speak of theoretical curiosity as one of the motivating forces of the process of science, then one cannot escape entanglement in the misgiving that one is being swept along oneself in the stream of that motivating force. It is curiosity that draws one’s attention to curiosity; curiosity depends entirely on itself to throw off the discrimination imposed on it, as its modern history shows. It is not able to confirm the Platonic hope that one could know in advance what is held in store for it.

That the difficulties we have, and will increasingly have, with science are always integrated into it as scientific difficulties is only one aspect of the outlook on the subject of ‘theoretical curiosity’: the inevitability of a failure to find an Archimedian point over against the reality of
Part III

science. The other aspect is that of responsibility. Most of the people whose lives today depend on science would not even be alive, or would no longer be alive, if science had not made their lives possible and prolonged them. When one puts it that way, it sounds laudable. On the other hand, this means at the same time that the overpopulation of our world is also an excess produced by science. Are there unambiguous conclusions that can be drawn from this statement? One should avoid too easy answers to this question. To a large extent, science has broken the brutal mechanism of the "survival of the fittest": it gives more life to people who are less ‘fit’ for life and keeps them alive longer. Is this a humane achievement? Here again it would be frivolous to say that we have an answer to the question. But to pose it is to make as clear as possible the significance of what one is dealing with when one not only focuses on the dependence of our reality on science but also defines that dependence as problematic. The fact that, biologically speaking, we no longer live in a Darwinian world, or at any rate we live in a world that is less and less Darwinian, is a consequence of science that, even if in its turn it has consequences that are not evident at a glance, is simply irreversible. Science integrates into itself even the responsibility for the consequences of its consequences, by itself giving the alarm.

The existence, and even the mere dimensions of the existence, of science are not things over which we have the power of disposition as long as we do not feel entitled to answer in the affirmative the question whether the nonexistence of existing persons or the discontinued existence of people whose existence has at any time been in danger would have been a more humane alternative. The only person who can presume to play with the idea of a discontinuance or a reduction in the human effort called "science" is one who has a low estimate of the susceptibility of the motivation of theory to disturbance. The limits of responsible behavior may be much narrower here than many people imagine. Between uneasiness about science’s autonomous industry and the constraints resulting from its indispensability lies an indeterminate latitude within which we are free to act as we wish but that it would be misleading to project upon science as a whole.

The difficulties that we have with science and the rule of those who represent science [die Epistemokratie] suggest the gleam of a hope that we might escape them by setting up yet another science, an ‘ultimate science,’ which would concern itself with nothing but science itself.
Another thing that makes this idea attractive is that it promises arbitratrative functions, the exercise of power over the powerful, even if only over people defined as such for the purposes of the arbitration alone. It would be the Archimedian point—or else the exponential increase, through their iteration, of all the difficulties we already have with science. Why, after all, should a “science of science,” which elevates itself to the job of the emphatically so-called “critique” of every other species of science, be free from the problematic that it would be sure to find in them? The discernment of a need for such a metadiscipline, the consensus regarding its acute urgency, imply nothing whatsoever about its possibility. But skepticism becomes all the more irritating, the nearer we seem to be to filling the office of arbiter.

We cannot live without science. But that is itself largely an effect produced by science. It has made itself indispensable. But what this observation does not explain is what it was that set the ‘industry’ of science going and keeps it in motion. On the contrary, there exists a peculiar uncertainty as to what the motives are that move and intensify this epochal effort. One extreme is the mechanical connection between autonomous industriousness and meaninglessness that Victor Hugo expressed in 1864: “Science searches for perpetual motion. It has found it; it is itself.” The absolute necessity of science in the contemporary world does not license any inferences about the process by which it began. Even if existential exigencies prevent us from interrupting the functioning of science, this is not enough to show that its reality originates in its necessity for life. We must reckon with a break in motivation when the moving impetus of theory no longer comes directly from the ‘life-world’—from the human interest in orientation in the world, the will to the expansion of effective reality, or the need for the integration of the unknown into the system of the known. This is where uneasiness sets in. Necessity is manifestly not enough; it is unable to dispel the suspicion of meaninglessness or, perhaps, even more severely, the “fear of a total meaninglessness that lies behind every science.”

The talk of the “science industry” [Wissenschaftsbetrieb] that has become popular refers, of course, to the objective structural similarity of scientific institutions and processes to those of industry, but in its most extreme form it points above all, contemptuously, to the bustling and autonomous industry of scientific work as it is now organized, to the rupture
of the connection between a motivation for the theoretical attitude that is founded in the ‘life-world’ and the realization of that attitude under the conditions on which the effectiveness of modern science depends; and finally it also points to the lack of congruence between the outputs of the autonomous process and the expectations, rooted in the European tradition, that the truth would make men happy and free. Seen from the point of view of the conception of theory that corresponds to these expectations, the connection between science and securing the chance to live is really an unexpected historical development. This surprise is not the sole cause of our uneasiness with science, but it is an essential element in the situation.

Since ancient times, what theory was supposed to do was not to make life possible but to make it happy. Hence also the first epochal injection of mistrust in theory, when happiness had become a matter for hope directed at the next world, for a salvation that man could not bring about, though it was still defined as \textit{visio beatifica} [beatific vision]—as the acquisition of truth, fulfillment through theory. The premise that only the final possession of truth could guarantee man’s happiness went over from ancient thought into the interpretation of the biblical eschatology. That life was pleasanter for one who knew than for one who sought knowledge was a premise Aristotle took for granted; it corresponded to his concept of God and especially to his physics of finite space and thus of finite “natural” motions justified only by—and ending in—a goal state of rest. The early-modern renewal of the pretension to unrestricted theoretical curiosity turned against the exclusion of pure theory, and of the pure happiness that was bound up with it, from the realm of what could be reached in this world, just as it turned against the medieval God’s claim to exclusive insight into nature as His work. The investigator of nature could no longer remain—nor again become—the ancient world onlooker, though he had to reconstruct the connection between cognitive truth and finding happiness in a different way if, following Francis Bacon’s new formula, domination over nature was to be a precondition of the recovery of paradise.

From a central affect of consciousness there arises in the modern age an indissoluble connecting link between man’s historical self-understanding and the realization of scientific knowledge as the confirmation of the claim to unrestricted theoretical curiosity. The ‘theoretical attitude’ may be a constant in European history since the
awakening of the Ionians' interest in nature; but this attitude could take on the explicitness of insistence on the will and the right to intellectual curiosity only after it had been confronted with opposition and had had to compete with other norms of attitude and fulfillment in life. Just as 'purity' as a quality of the theoretical attitude could only be formulated in the circumstances of Plato's opposition to the Sophists' instrumentalization of theory, so also the 'right' to an unrestricted cognitive drive constituted itself and was united with the self-consciousness of an epoch only after the Middle Ages had discriminated against such intellectual pretensions and put them in a restrictive adjunct relation to another human existential interest posited as absolute. The rehabilitation of theoretical curiosity at the beginning of the modern age is just not the mere renaissance of a life ideal that had already been present once before and whose devaluation, through the interruption of its general acceptance, had only to be reversed.

The classical anthropological question whether man strives for knowledge on account of an inner and uncoerced impulse of his nature or whether the necessity of gaining knowledge is thrust upon him by the naked demands of the prolongation of his existence is no timeless, unhistorical problematic, although its continual recurrence—for instance, in the contrast between Husserl's phenomenological radical of the "theoretical attitude" and Heidegger's Daseins-analytic "existential" or "care"—seems to make this a natural assumption. The most widely read handbook of physics in the century of the Enlightenment was able to harmonize this question with no trouble: "Necessity and men's curiosity have perhaps made equal contributions to the discovery and further elaboration of the science of nature. . . ." Jürgen Mittelstrass has proposed a distinction between "naive" and "reflected" curiosity, at the same time describing "talk of a novel type of curiosity that initiates the modern age itself'—of a 'self-conscious curiosity'—as "unsatisfactory. "So long as this beginning of the modern age" cannot be distinguished by "specific transactions. "I am not going to go into the question whether one who demands evidence of "specific transactions" is not left in the hands of an overdetermined concept of history and thus in continued bondage to the criteria of official documentation [Aktenkundigkeit]. The proposed distinction in any case seems to me to be useful.

Just as anyone who wants to characterize the modern age as an epoch marked by technology or tending toward that end finds his
attention directed again and again to technicity as an original anthropological characteristic and thus as an omnipresent human structure, which admits only a quantitative differentiation of increased complexity between a stone tool and a moon rocket—so the stress on the element of curiosity undergoes the same process: Curiosity is a mark of youthfulness even in animals, and a mark, all the more, of man as the animal who remains youthful. Naive curiosity, then, would be the constant; but at the same time it is the substratum around which historical articulation and focus set in.

It is just this process that is my subject here: As a result of the discrimination against it, what was natural and went without saying is explicitly 'entered into' and accentuated; play with the world's immediacy becomes the seriousness of methodical formation, the necessity [Notwendigkeit] of self-preservation becomes the versatility [Wendigkeit] of self-assertion, and what was a mere occupation becomes a prerogative to be secured and at the same time becomes the energy that increases exponentially each time it turns out that the suspected reservation of the unknown but knowable does exist—that knowledge can extend beyond the Pillars of Hercules, beyond the limits of normal optics and the postulate of visibility, in other words, beyond the horizons that had been assigned to man as long as he had thought that he could remain the onlooker in repose, the leisurely enjoyer of the world, taken care of by providence. The interpretation of natural restrictions as representing a realm to which man was denied access 'in this world' radically altered the quality of the theoretical form of life recommended by ancient philosophy.

To demonstrate the logic of this process is immediately to exclude the naturalistic suggestion that in the preponderance of theoretical curiosity in the modern age what we confront is a fateful recurrence of the same, the turning of an anthropological tide. Toward the end of the nineteenth century Otto Liebmann exhibited the satisfaction of one who had finally pinned down a law of nature in explaining the epochs of theory:

That is, the propensity to theorizing seems to be subject, like other human inclinations, to an alternation of ebb and flood. In the causal context of a great variety of cultural-historical factors it experiences its alternating maxima and minima. There are ages in which it swells into a regular monomania and overruns in hypertrophic fashion the more modest need for the gathering of simple observational knowledge.
of matters of fact. There are other ages in which it sinks below the zero point and seems entirely overcome by that same (to it) antagonistic need. When a doctrinaire attitude, ensconced in what has become a rigid and dogmatically closed world view, considers itself to have arrived at the summit of wisdom and now employs all its sagacity in elaborating all the subllest ramifications of the finished conceptual system that it holds to be true—but equally, however, when a period that is carried away with youthful hope, a reforming period, in its precipitate drive to give form, peoples the unknown land of anticipated truth with hitherto unimagined mental creations and strays into the boundless and the fantastic—then the reaction against such hyper-theorizing follows in natural sequence, and subsequent generations, cautiously assessing the evidence, will have to invest half of their efforts in the critical clearing out of overflowing Augean stalls. Then, to be sure, that excess is followed by a deficiency; a praiseworthy avoidance of doctrinaire illusions, an understandable fear of unreliable pseudo-theories, an entirely admirable feeling for the truth causes people to fall into the other extreme.

This naturalistic approach makes very clear, in negative form, what should be expected of a presentation of the historical 'proceedings' relative to curiosity that aims at rational analysis.

Our situation is not that of the beginning of the modern age, however distinguishable by "specific transactions" that beginning may be. Is the problem of making a beginning still our problem? Jürgen Mittelstrass has answered this question by giving his concept of "reflected' curiosity" a specifically heterogeneous function that I would like to characterize as that of an already iterated 'reflection': What set the modern age's curiosity in motion no longer needs—in its self-accelerated, immanently propelled motion—rehabilitation and restitution of its primary energy; it has become indifferent to the new, as such, on account of its experience of the latter's inevitability, which may even constitute for it a burden to be endured, and instead it is all the more sensitive to the direction that belongs to the motion that is thus stimulated, sensitive to the question of where it is headed.

In this situation, anyone at all who "defends man's interest in what, so to speak, does not concern him" seems anachronistic—unless perhaps this were once again an act of defending theoretical curiosity in circumstances where it was supposed to interest itself only in material that did not run counter to powerful interests. Even in the categorization of theory as a derivative attitude subordinate to the radical of "care,"
there is a possibility, if not a necessity, of requiring the interest in
theory to legitimate itself once again by demonstrating a contemporary
and relevant, or even an authoritatively prescribed, “care” as its source.
Scarcely a decade after theory, as mere gaping at what is ‘present at
hand,’ had been, if not yet despised, still portrayed as a stale recap-
itulation of the content of living involvements, it was the greatness
of the solitary, aged Edmund Husserl, academically exiled and silenced,
that he held fast to the resolution to engage in theory as the initial
act of European humanity and as a corrective for its most terrible
deviation, and that he required of it a rigorous consistency, which is
still, or once again, felt to be objectionable. Hermann Lübbe has
described as the characteristic mark of this philosophizing, especially
in the late works, the “rationalism of theory’s interest in what is
without interest”: “The existential problem of a scholar who in his
old age was forbidden to set foot in the place where he carried on
his research and teaching never shows through, and even the back of
the official notice that informed him of this prohibition was covered
by Husserl with philosophical notes. That is a case of ‘carrying on’
whose dignity equals that of the sentence, ‘Noli turbare circulos meos’
[Don’t disturb my circles].”

The bearing of the concept of ‘reflected’ curiosity is on neither the
propulsion of theoretical activity nor its resistance to commands that
it halt or demonstrate its relevance; that is, the bearing is not on world
orientation but on the orientation of the total process of the curiosity
that is consciously formed out of its earlier naivete. Its expectation no
longer relates to “the discovery of something entirely new but rather
to the now never ending question, what will come next.” The self-
conscious curiosity that, at the beginning of the modern age, at first
turned against history as the epitome of the abrogation of reason and
of preoccupation with prejudices and impenetrable reserves made its
own history—as soon as it had one—a subject of inquiry, not by
adopting a qualitatively new attitude but because it still possessed the
naive ubiquitouness that looks under every stone and over every
fence, and consequently also into its own records. Reflection [Reflexion]
first arises as a result of the resistance that an examination of the
history of science as a supposedly linear process of accomplishment
opposes to the naive assumption that it is an ‘object’ like any other.
Reflection on where one actually finds oneself and on what should
come next is a side effect of the ‘encyclopedic’ impulse and activity
that are aimed at taking stock, at still keeping control of what can no longer be surveyed and taken in all at once, putting it in usable form as an available potential. Curiosity acquires its conservative complement in the encyclopedic program: It cannot understand itself only as motion; it must also seek to grasp its topography, the boundaries that are no longer set for it by an external authority but that instead it itself describes by the totality of its findings. Diderot’s article “Encyclopédie,” written in 1755, marks the onset of reflection on the competition between the need to survey and assimilate—to take stock—and the need to orient further progress. For the organizer of the Encyclopédie the problematic of the use of time is clear: It is true that assimilation does not yet take longer than the duration of the validity of what is assimilated, but the fundamental encyclopedic ideas of universal accessibility and of replicability through organization become, at least, questionable. On the one hand, Diderot is confident that future generations will be able to construct a better encyclopedia on the basis of his; but on the other hand, he emphasizes the special circumstances that have made this particular work possible, and thus the uncertainty whether comparable conditions will be present in the future. The balance of these considerations reads as follows: “L’Encyclopédie peut aisément s’améliorer; elle peut aussi aisément se détériorer” [The Encyclopedia can easily be improved; it can just as easily deteriorate].

The initial success of theoretical curiosity in the modern age would have been inconceivable without the transition from ‘naive’ to ‘self-conscious’ curiosity. The latter had not only emerged through its competition with the concern for salvation and its argument with the transcendental reservation [of realms of knowledge]; once people had presumed to peek behind the back cloth [‘behind the scenes’] of creation, it had also been able to translate the results, as confirmations of its suspicions as well as of its right to what was withheld, into the energy of the Plus ultra [Still further: Francis Bacon]. This dynamic of self-confirmation freed curiosity from the connotations of a ‘base instinct’ that bound man’s attention to inessential and superficial matters, to prodigies, monstrosities—in fact, to curiosa [‘curiosities’]. But the very summing up of these confirming effects engendered a need that one could classify, initially, as ‘topographical.’

The dilemma of the idea of the encyclopedia makes it clear why ‘reflected’ curiosity will find the dynamic set in motion by the self-conscious interest in knowledge objectionable: The expansion of the
horizon of known and understood reality could not be coordinated with the presence of what was already accessible within this horizon. Diderot did indeed think of the perfection of the encyclopedia as an objective task for the future; he thought about what abilities the contributors would have to possess, what circumstances would be favorable; but he did not consider the situation of the reader and the way in which it would be altered by the universal quality of the work. He would already have been able to say what we have to say today, that while we know more about the world than we ever did before, this "we" does not by any means mean "I." The "we" of this statement confronts the "I" only in the form of institutions—of encyclopedias, academies, universities. These represent higher-level agencies [Über-subjekte] that administer knowledge about reality in space and time and organize its growth. The disproportion between what has been achieved in the way of theoretical insight into reality and what can be transmitted to the individual for his use in orienting himself in his world is disconcertingly unpreventable. But the intensity of the process becomes critical in regard to not only the relation between the objective stock of knowledge and its translatability into subjective orientation but also the stability of that stock itself in view of the fact that in the succession of generations of knowledge, the length of the 'half-life' of each, on its way to obsolescence, has already dropped to less than a decade. The phrase "in possession of the truth" [Wahrheitsbesitz]—no matter how one defines truth epistemologically—is no longer capable of nonironical employment. Even if, forgoing the use of the classical term, one speaks of the encyclopedic postulate of possessing the greatest possible stock of information, still the accelerating rate at which that information decays means that the individual is compelled to acquire a capacity for provisional relations with it, for transitory reliance on it, within the duration of his individual lifetime. It is easy to imagine this disappointment with the stability of scientific knowledge pushing people toward modes of 'having' theoretical propositions that seem less unstable and less taxing because they are hardly falsifiable.

This phenomenon of the acceleration of the theoretical process can no longer be explained by reference to the hyperfunctioning of a theoretical curiosity that organized itself around the recovery of the right to unrestricted expansion. Undoubtedly there exists somewhere in the course of the progressive consolidation of this structured process a point at which the possibility of the intervention of exogenous, 'life-
worldly,’ historical motivations narrows and finally disappears and after which one has to say that in relation to what comes about as science, and to what scientists do, theoretical curiosity is now only a secondary factor. However much it may still determine the genesis of a choice of profession, it has correspondingly little effect on the objective state and the availability to the individual of the structured process in reality. This also—the lack of room for individual motivation, for an authentic initiative—is involved in our uneasiness with regard to science.

Of course it will not be possible to determine the exact point in time up to which, while an individual might not have been able to assimilate the totality of the truths accessible at the time—that limiting case has probably always been unattainable—still, enough could be attained in one lifetime that the individual could impute to himself a substantial share in what was known of reality and what seemed in any way necessary for its comprehension. It is only on this assumption, that the truth in its totality was at the disposition of the individual, that the ancient association of eudemonia with theory, as its precondition, could be held on to and even renewed. For when the program of a science safeguarded by method was projected in the early modern age, this elementary assumption was renewed. The reality in which man, both as individual and as society, lived was supposed to remain identical with the reality that theoretical knowledge was to open up and make perspicuous for human action. Otherwise Descartes could not have promised the definitive morality as the consequence of the perfection of physics.

The definitive morality, which as the epitome of materially adequate behavior was supposed to guarantee human happiness, remained bound to the continuing presence of the perfected theory for practice because the behavioral norm in each case emerged from personal insight into the structure of reality. But almost simultaneously, in Francis Bacon, a concept of human happiness appeared that separated theory from existential fulfillment by reducing the necessary knowledge to the amount fixed by the requirements of domination over natural reality. The recovery of paradise was not supposed to yield a transparent and familiar reality but only a tamed and obedient one. For this equivalent of a magic attitude to reality, the individual no longer needed to understand himself in his relation to reality; instead it was sufficient if the combination of everyone’s theoretical accomplishments
guaranteed a state of stable domination over this reality, a state of which the individual could be a beneficiary even without having insight into the totality of its conditions. The subject of theory and the subject of the successful life no longer needed to be identical. This appears as relief from a demand that was immediately to become unfulfillable, even before the incongruence between theoretical objectivity and individual competence had become foreseeable.

Here it has already become in principle possible and permissible for scientific knowledge to be an instrument of specialists, a reserve administered by initiates, institutionalized not as something one can possess but rather as an available potential. Theoretical curiosity serves only to guarantee that in spite of the impediments to it, the cognitive process gets under way and is pressed forward; but the vindication of its self-assertion is not accomplished by the mere fact that the overstepping of the boundaries of the known world, which it dares for the first time, does enable it to discover new worlds but only by a demonstration of the real usefulness of knowledge as a source of capability. This is the explanation for the delay that intervened before Bacon’s theory of theory enjoyed real success. His ulterior magical conception—that a world that was created by the word must also be one that can be dominated by the word, that to be in paradise means to know the names of things—had to be forgotten. This is not the context in which, for instance, Montesquieu speaks of the curiosity that is inherent in all men in his address to the Académie (near the beginning of the eighteenth century) on the motives to encourage people to pursue the sciences: that curiosity, he says, has never been so well vindicated as in the present age, in which one daily hears it said that the limits of man’s knowledge are being infinitely expanded and that the savants themselves are so amazed at what they know that sometimes they doubt the reality of their successes.

To understand the process of the legitimation of theoretical curiosity as a basic feature of the history of the beginning of the modern age certainly does not mean to make curiosity into the ‘destiny’ of history, or one of its absolute values. The legitimacy of the modern age is not the legitimation of its specific constituent elements under all possible circumstances. It is possible that Socrates was in the right when, as Cicero says, for the first time he brought philosophy down from the heavens, settled it in the cities, introduced it into people’s homes, and forced it to investigate life, manners, and norms of behavior. But one
must also see what this Socratic turning became once it ceased to be understood as making man the subject of inquiry and was interpreted instead as the theological reservation of other subjects to divine sovereignty and was accordingly placed in Socrates's mouth as the abbreviated motto, *Quae supra nos, nihil ad nos* [What is above us is nothing to us].

The rehabilitation of theoretical curiosity is justified in the first instance only as the rejection of discrimination against it, of a restriction of its legitimacy that had only initially been grounded on concern for the salvation of the one who was thus constrained. Despite the fact that the connection between theory and eudemonia that was established in antiquity was involved in the process of the emancipation of curiosity at the beginning of the modern age, the question whether man in fact achieved happiness too in exercising the rights that he had thus recovered has no bearing on the establishment of the legitimacy of his pretension: From the perspective of a pure eudemonism, restrictions on human inclinations, based on any principle whatever, are incompatible with the motivation that is proper to the desire for happiness; that fact defines the burden of proof that has to be met in justifying restrictive reservations. The Socratic question whether man's interest in himself does not require neglect of his interest in nature does provide a form of argument for the discrimination against curiosity but is not characteristic of the state of affairs at the close of the Middle Ages, which was the determining factor in the formation of the new pretension. The balance sheet of theoretical curiosity in general is not predetermined by its legitimacy in the modern age. Still, the latter does provide food for thought that is relevant to the former, as is proper for a piece of philosophical reflection.

**Translator's Notes**

a. "'Reflektierte' Neugierde." Like our "reflect," reflektieren conveys the ideas of considering and of "reflecting on" something, but in addition it carries a clearer suggestion than our term does of 'reflexiveness,' of the possibility of considering or reflecting on one's own actions and inclinations as one's own, and thus of self-consciousness.

b. A remark reportedly made by Archimedes to Roman soldiers who, after conquering his city, Syracuse, were on the point of killing him.
The light in which the landscape and things that surrounded the life of the Greeks stood gave to everything a clarity and (in terms of optics alone) unquestionable presence that left room for doubt regarding the accessibility of nature to man only late and only as a result of thought's experience with itself. This nature exists essentially 'of itself,' and it is essentially true 'of itself.' Such a naturalness of truth can immediately be combined with the conception that understands the world as a cosmos and interprets man's theoretical relation to reality teleologically, as a piece of this order, by explaining man's capacity for knowledge as something corresponding to a 'characteristic' of things, namely, their intelligibility.

The cognitive relation was therefore already interpreted early on, by the Presocratics, as the realization of an elemental affinity between the substance of the objects and that of man's organs of perception and knowledge. That a thing can only be represented "by its like" still finds in Aristotle's doctrine of the soul an admittedly more abstract but materially identical formulation in the proposition that "the soul is, potentially, everything in existence." Internal homogeneity and external intensity of light allow the soul and its objects to belong to one world, in whose all-around appropriateness there cannot be such things as the too small and the too large, the hidden and the withheld, and in which existential fulfillment is guaranteed if what is planned to go together does come together. Accordingly, man is seen, down to the Stoics, as the world's observer, at rest at the point from which
all of its objects are accessible, objects of which he experiences both the truth and the enjoyment. The 'theoretical attitude' is not recognizable as a basic decision, such as was projected by Husserl into the beginning of the European tradition—not as a voluntaristic act of foundation that grasps one possibility to the exclusion of others. Reality itself [die Sache selbst] offers itself and by its mere presence compels the inquiring intelligence along its path; and this basic idea justifies interpreting the history of inquiry and thought as a course aimed at sifting out the truth, as Aristotle undertakes to do with his philosophical predecessors, in whose formulas he sees the plan—won from the truth itself, though admittedly still obscure—of his own consummation of the tradition. When, in the lapidary initial sentence of the Metaphysics, Aristotle formulates the point of departure and the justification of philosophy in the proposition that “all men, by their nature, strive for knowledge,” one could see in this an already one-sidedly accentuated, narrow, and potentially problematical comprehension of that basic situation, to which there would have to stand in strict symmetry the formula that everything in existence ‘strives’ from its nature to be known. So as to indicate what has happened in the history that we are discussing here, let me introduce a remark of Goethe that accurately states the resignation that accompanies the reverse of this basic experience: “If God’s concern had been that men should live and act in the truth, then He would have had to arrange matters differently.”

Into the arcadian picture of this initial situation—which we have inferred in the manner of linguistics as an unverifiable root form—features must now admittedly be introduced on which later darkenings and doubts are founded. Philosophy originates with the discovery of the hiatus between appearance and existence, perception and thought, and already in Heraclitus and Parmenides it divides men into those who unreflectingly submit to appearance and perception and those who penetrate to the authentic truth behind these, who do not even gain access to the truth by their own powers but rather require initiation, as though into a mystery. The religious aspect appears here already as a potential restriction on the immanent self-evidence of theory and thus as a reservation against the self-realization of a fulfilled existence in the world, a reservation that in the last analysis terminates in the displacement of the possible unity of truth possession and happiness into a ‘next-worldly’ state, a displacement that will be carried out by
Christianity. Bound up with the weight of this religious reservation is a revaluation of theoretical activity: While in the assumed initial situation a certain intellectual quietism—letting the truth ‘come to one’—was implied, with this reservation the energetic desire for knowledge really becomes for the first time not only a superfluous but also a blasphemous industriousness, in which man disturbs the teleology and economy of his lot and fails to behave trustingly as a member of a cosmos in which he is provided for.

Already at this early stage the attempt, so to speak, to bring the world of the heavenly bodies (seen as possessing the quality of divinity) down to the scale of human knowledge played a special role that is very characteristic for our tradition. Here man reached for the highest and therefore the ‘critical’ object of his world and his theoretical capability. Philosophy emancipated itself from the mythical relation to the world precisely by making observation of the heavens into the exemplary exercise of man’s vocation for theory. Here the basic or initial situation shows through once again when the assertion (no doubt intended as justificatory) could be ascribed to Theophrastus that philosophy did not search out and choose this object among others but, on the contrary, the beauty of the object itself first awakened the philosophical appetite for knowledge. The transfer of the motivation of the cognitive drive outward, into the pressing character of the given itself, which occurs particularly in the derivation of philosophy from man’s amazement at and admiration of the world, takes on a justifying function: The immediacy of the perception of the divine—which seemed to be disturbed by theory’s unilateral laying hold of the phenomena—is converted into the indirect form, mediated by physical knowledge, of the more or less developed proof of the divinity standing behind appearances. The first philosopher to live in Athens, Anaxagoras, could be accused of impiety because he had maintained that the sun was a glowing mass; and even if this accusation was only an explicit formula for the demythologizing of philosophy that he definitively carried out, it was nevertheless certainly not accidental that it became the central charge against him. Perhaps the anecdote about Thales that Plato hands down also has a similar background; the laughter of the Thracian maid over the philosopher who fell in the well while sauntering and observing the stars may represent not only the malicious pleasure of the unfree in observing the consequences of idleness, but also an understanding of the revenge taken by her
tellurian gods on the Milesian who devoted his attention entirely to the stars. In the patristic polemics, the gaze upward is still contrasted, as the one capable of transcendence, to the downward gaze of the heathens, who are in the power of material idols. But the Thracian maid’s ridicule of the protophilosopher Thales also hints at a further motif, which was to reappear in the course of the process through which the theoretical attitude became questionable: the conflict between the distant and the nearby, between that which has no immediate effect in life and the daily duties of a citizen in a community. He knows his way about the heavens, but he does not see what lies before his feet, sneers the slave girl. Especially the Roman reception of the Greek ideal of contemplative leisure will bring out this conflict of interests and thus prepare a pattern that was to be taken up by the patristic literature when the latter put the necessity of salvation, and the resultant economy of all human efforts, in the place of political urgencies.

The central figure around whom this discussion unfolds, and to whose name it was to remain attached, is Socrates. The primacy that he gave to man’s self-knowledge draws after it the question whether the natural philosophy of his predecessors is disqualified as a distraction of attention from what is essential or whether knowledge of nature must be coordinated with that primacy of the knowledge of the human, as the precondition of man’s integrating himself into the cosmos. In Xenophon’s account of Socrates’s trial, Socrates is said to have clearly separated the human/ethical from the cosmological/theological themes. Decisions that relate to what is uncertain and unknowable require the help of mantic power, the questioning of an oracle; but it would be foolish to question the oracle in matters for the judgment of which the gods had given man a capacity of his own. “Likewise he considers it impermissible to ask the gods about things that one could know if one only took the trouble to measure, to count, or to weigh.”

What sounds to us today like a justification of quantifying natural science is here related exclusively, however, to the ponderabilities of practical life. Everything else that had become the object of philosophical interest since the Ionian school was now to be excluded. “He did not even have the habit, like most of them, of talking about the nature of the universe, or of discussing how the ‘cosmos’ (so-called by the philosophers) had come into being, and from what causes the various phenomena in the heavens came about, but rather actually
declared those to be fools who concerned themselves with such things. He asked these people whether they believed that they already understood human affairs so well that they could turn to such investigations, or whether they considered it acceptable to dismiss human matters and inquire into superhuman ones instead. He was amazed at their failure to understand that it was quite impossible for men to fathom such matters. According to this account, Socrates then pointed to the contradictions between the philosophical schools in questions regarding nonhuman nature—a mode of argument later to be characteristic of the theoretical resignation of Hellenism.

Still more important is the consideration closing this chapter, which appeals to the criterion of the applicability of theoretical insights: “He who studies human matters thinks after all that he will be able to apply what he learns for his own use and for the use of other men. On the other hand, it does not even occur to those who investigate divine matters to expect to derive any application of their knowledge of the causes of winds, waters, weather, and all that sort of thing, but they are satisfied merely to investigate their origins.” The catalog of the human matters of which Socrates is said to have treated in his conversations includes piety and impiety, beauty and ugliness, justice and injustice, virtue and foolishness, bravery and cowardice, the polis and the politician, government and the technique of governing, in other words, everything that makes up the difference between the excellent and the unfree. All knowledge is justified only by the gauge that it supplies for action, and the worthiness of the objects of theory to be known is determined accordingly.

The authority of this Socrates is appealed to by the Cyrenaics, who “abstained from inquiry into nature because of the obvious unintelligibility of the object, but occupied themselves with logic because of the usefulness springing from it,” and the Cynics, who discarded logic and all other traditional disciplines along with physics in order to concentrate on control over themselves. The formulation that Cicero gave to this picture of Socrates, according to which he “was the first to call philosophy down from the heavens, to make it at home in the cities, to introduce it into people’s homes and to require it to investigate life, customs, and the difference between good and evil,” was also distinctive in that it cited among the Presocratic objects rejected by Socrates not only the questions of natural philosophy in the narrower sense—that is, those regarding the origin and construction of the
cosmos—but also the purely quantitative elements of phoronomic astronomy: *siderum magnitudines, intervalla, cursus* [the sizes of, distances between, and paths of heavenly bodies]. On account of the great influence that Cicero's formulas were to have, special attention must be drawn to this broadening of the Socratic exclusion.

The inconsistencies of the picture of Socrates conveyed to us in the various sources are not what we want to discuss here. But nevertheless it may well be assumed that they are due to stylizations of a mature figure who was to be made exemplary for posterity—stylizations in which Socrates's own past was dissolved into variously accentuated contrasting positions. Xenophon's Socrates, with his exclusion of the knowledge of nature from a philosophy concerned solely with human matters, represents the overcoming of Socrates's point of departure in the philosophy of Anaxagoras, whose student he had been and whose interest in natural philosophy was still ascribed to Socrates and ridiculed in Aristophanes's *Clouds*, which—produced in the year 423 B.C.—presents a picture of the philosopher that antedates the Platonic picture of the last years of his life by a quarter of a century. In Plato's *Apology* also, Socrates does allude to earlier slanders and accusations directed against him, which had related to the impiety of his being occupied with the *meteora* [atmospheric and astronomical phenomena] and with what might lie under the earth. In the same passage, however, still another element of the Socratic past comes to light in the reproach that Socrates knew how "to make the weaker argument into the stronger." This points to Socrates's opposition (pushed into the foreground by Plato) to Sophism, to which in his youth he doubtless stood closer than can be admitted at the beginning of the *Apology*, which is directed against every kind of rhetoric. In any case even the Platonic Socrates still commands the whole range of the dialectical and rhetorical tricks that were marketed by the Sophists. For Plato the anti-Sophistic role of his Socrates dominates the scene so much that he could consciously abandon the rejection of natural philosophy as early as the *Phaedo*, when he made Socrates into the transmitter of a natural-philosophical total myth whose presentation seems to substantiate the reproach, rejected in the *Apology*, that he had done wrong by engaging in unnecessary inquiry into the things under the earth and in the heavens—a reproach to which Socrates had replied there that he had taken no part whatsoever in this variety of the interests imputed to him.
Chapter 1

There is thus not only an inconsistency between Xenophon and Plato but also within the Platonic picture of Socrates, which incidentally Diogenes Laerius already noticed: "It looks to me as though Socrates also made the knowledge of nature an object of his discussions. He did after all go into explanations of providence, according to Xenophon's testimony, although the same Xenophon insists that his discussions were concerned only with ethics. The situation with Plato is similar. In the *Apology* he mentions Anaxagoras and other philosophers of nature, of whom Socrates claims to know nothing. But in spite of this, when he expresses himself on natural philosophy, he puts it all in Socrates's mouth." One will have to relate this additional interest (in natural philosophy) to an earlier phase in Socrates's life and thought in order to do justice to both of the close witnesses. The doctrine that is cited in order to justify attributing this interest to him, that of the providence of nature on man's behalf, which Diogenes of Appolonia seems to have been the first to formulate in connection with Anaxagoras's concept of God and in opposition to the Ionian natural philosophy, could have operated in Socrates's intellectual biography precisely in the direction of establishing the superfluousness of interest in the riddles of nature. This integral combination of a metaphysical dogma with a physical skepticism or indifference will indeed demonstrate its usefulness in Hellenism and in the patristic literature as well because it is precisely an anthropocentric teleology of nature that deprives man of the basis on which to argue that he needs to secure himself against nature, or at least against fear of its spectacular phenomena, by means of inquiry into them. The modern age, on the other hand, will attack this teleological element so violently precisely because it will see in it an inadmissible and false assurance about nature that pacifies and weakens man's claim to knowledge. Whether Socrates was "the real founder of teleology in reflection upon the world" (K. Praechter) or only the recipient of ideas from Diogenes of Appolonia (W. Theiler) is not crucial for this function—which at any rate first became recognizable in connection with him—of what was later so important an element in the tradition and the epochal break.

Diogenes Laerius's other argument, based on Plato, for the assumption of a Socrates who philosophized about nature—the argument from the difference between the *Apology* and Plato's later dialogues—is also hardly sound, but it does lead to an essential connection: That which, as natural science, had been recognized as just as impossible
as it is unnecessary can be perfectly legitimate and sensible if it is
given a different form of authority and relevance to what is humanly
essential as a myth functioning in the context of ethics.

This becomes evident in the very same Platonic dialogue that Di­
ogenes Laertius no doubt had especially in mind when he speaks of
the natural philosophy conferred on Socrates by Plato: the Phaedo. In
this last instruction session, Socrates tells his students once again that
in his youth he had been eager above all for the sort of wisdom that
people call natural history. He had been concerned more than anything
else with knowing the causes of things, of their coming into being,
persistence, and ceasing to be, and he had devoted all of his energy
to these questions. But finally he had come to understand that he
was as unsuited for this sort of investigation as he could conceivably
have been, in fact that in a peculiar way he was blinded by it to things
that he had earlier found quite obvious and immediately intelligible.
Socrates then depicts his experience with Anaxagoras’s world reason,
which he takes to imply a universally teleological way of seeing things.
However, his expectations were bitterly disappointed in his pursuit of
Anaxagoras’s theory of nature, which was unable to derive from this
principle any advantage at all in explaining the construction of the
world. Disappointment with the explanatory performance of natural
philosophy explains his withdrawal, indeed flight, into the realm of
concepts, so as to contemplate in them the truth of things. The
subsequent discussion gives an example of the efficacy of the use of
abstract concepts and their application to the problem of immortality;
that is, it justifies logic by demonstrating its human significance. But
with the assurance of immortality a secondary question comes up,
which can no longer be dealt with by rational means, namely, the
question of the fate of the soul after death. The topography of the
soul’s travel and introduction to Hades now requires—just as it did
much later in the case of Dante—that a whole cosmology be unrolled.
Socrates grasps this scanty point of departure with an enthusiasm that
only shortly before he had regarded as the youthful misplacement of
his philosophical interest: There are many and wonderful regions of
the earth, and these in general are differently constituted than is
thought by those who make a habit of talking about them. There
follows the well-known imaginary world picture, whose whole function
consists in being able to strengthen the hope of a virtuous soul for a
fair reward in the end. Socrates explicitly admits that it would not be
becoming to a reasonable man to assert seriously the reality of every-
thing he relates there; it is not at all a matter of the correctness of
the assertions but rather of being able to risk belief in a particular
appropriate fate of the soul; and to take this risk is noble. One must
therefore recite to oneself some such myth as the one he had contrived,
and even swear to it. 16

Here we have in a few words the entire justification for the fact
that the Platonic Socrates, who had renounced all natural science,
nevertheless in his last hour in prison expounds precisely a piece of
'natural philosophy' — the mythical brackets, inhibition of the assertive
character, exclusion of the theoretical will, and functional coordination
with man's ethical self-fortification justify this in a new way.

The readily employed schema of the duality of 'Mythos and Logos'
does not suffice to comprehend adequately this change in the function
of observation of nature. The myth serves hope. The theoretical ele­
ments of probability, of which it too has need, are properly employed
in order to answer — or to place within the horizon of answerability—
questions that under the strict claim to knowledge would not be an­
swerable. In the myth of the judgment of the dead that is presented
in Plato's Gorgias, Socrates says that what may seem to Callicles to be
a myth nevertheless counts for him as a 'logos' 17 — understandably,
since this myth is even more narrowly and precisely oriented toward
the fundamental question of ultimate justice and thus of the rationality
of moral action. It wards off the failure of the attempt to inquire after
a historically immanent justice — in view precisely of Socrates's own
fate. But even here the myth is not really a logos. Socrates does not
obscure this differentiation: We could scorn the myth if we could really
find the better and truer solution that we seek and in exchange for
which we would be willing to give it up. 18 The floating, uncategorical,
almost poetical form of assertion that is characteristic of myth is the
vehicle by means of which, after Socrates's great turning toward logic
and ethics, the philosophy of nature returns to philosophical thought,
widely visible and with lasting influence in the demiurge myth of the
Timaeus.

This mythical cosmology also has a consistently Socratic function
within the planned trilogy of dialogues, namely, that of preparing for
the exemplary prehistory of Athens, to be presented in the second
dialogue, the Critias. Accordingly allusion is made at the beginning of
the Timaeus to the discussions held on the previous day, in which
Socrates had sketched the picture of an ideal state. Consequently the real theme of the myth of the demiurge is mediation between the ideal and the real cosmos by the world’s master builder, the archetypical original process, on the basis of which the translation of the ideal state into the real polis of Athens can also be pursued. Just as the real world of our perception stands before us as, so to speak, perceptual proof of the realizability of the ideal, so the history of the Athenian state should be taken as demonstrating the realizability of the ideal state that was developed earlier and briefly sketched once again at the beginning of the dialogue. Here again the myth’s probability is sufficient, allowing (indeed) that it may have been different, but not that it may have been different in kind. Both pretension and resignation are operative here: pretension to what it is essential for man to know of nature, resignation regarding what develops entirely within the immanent dynamics of questioning. For those who are recipients of such an evident myth, it is obligatory not to investigate beyond it.\(^{19}\)

The positive side of this is that when one holds a piece of scientific knowledge to be quite true, beneficial to the state, and thoroughly agreeable to divinity, then there is no other possibility than to let it be known.\(^{20}\)

Thus consistency with Socrates’s self-criticism regarding his past inquiries into nature is maintained by Plato in an entirely unexpected roundabout fashion. It is a separate question whether the original function of such an extensive construction as the cosmogonic myth endures in the tradition or whether, even before any misunderstandings, there enters in a process of separation from and defunctionalization of the whole. This question affects the tradition of the *Timaeus* all the more because over many centuries it served to isolate a relatively small piece of the history of the world’s production and thus (even just literarily) made the functional context unrecognizable. Thus the history of its influence contributed hardly anything to the problem of the legitimacy of interest in knowledge of nature.

However, the recurrence of interest in the cosmos in the Platonic picture of Socrates can also be derived from the other aspect of his overcoming of his own biography: the counterposition to Sophism. The Socratic formula of the identity of wisdom and morality, of knowledge and virtue, can be understood as the overcoming of Sophism by its own means. The freeing of knowledge from its pragmatic employment in the service of political interests, the recovery of its im-
manent significance, gives to action a norm that is independent of partial ends. But this means that the objectivity of theory cannot be regulated primarily through the selection of an interest, which seeks only to procure justifications and techniques for its success. On the contrary, it must seek to grasp the universal order whose maintenance alone guarantees to human action that it draws after it eudemonia as the confirmation of its correctness. The appropriateness that governs action as its norm can no longer be defined as the pragmatic coordination of the means to particular occasional ends but rather as the subordination of all ends and means to the single highest end of man, that of achieving and maintaining his well-being within the cosmos.

Thus ‘nature’ as a theme recurs in the requirement of man’s self-knowledge, which is never the self-knowledge of an individual subjectivity but rather the knowledge of an essential nature and its naturally prescribed needs, even before the choice of particular existential ends. But this human nature is not yet—for the Greek—the singular definiteness of a subject standing over against the world and objectivizing it as the field of its risky or conditional self-realization; it is rather an element and constitutive part of the cosmos itself. Self-knowledge does indeed appear until deep into the Christian epoch as an alternative to knowledge of the world, and as a condition of securing one’s personal salvation, but nevertheless always, to judge from the logic of the rules that are derived from this imperative, in such a way that only the world in its pregiven order of essences can give particulars regarding what is appropriate or inappropriate to this self, what will fulfill or fail to fulfill its position in the order. Knowledge of the cosmos is implicated in the postulate of self-knowledge.

In the Phaedo the investigation of the logoi that followed upon resignation from hopes of knowledge of nature turns into an argument for immortality that understands the evidence of logical, mathematical, and ethical knowledge as a state of certainty foreign to the conditions of the world of appearance and deriving from preexistent anamnesis. Anamnesis explains how man can ‘learn,’ how he grasps the necessary connections in given states of affairs and thus is able to confirm the intelligibility of his thought and his concepts amid the agitated variety of appearances: He carries in himself the dowry of the Ideas according to which everything that confronts him is constituted. The Platonic doctrine of the Ideas very rapidly lost its original limitation to concepts having force in logic and ethics and broadened the sphere of Ideas
into the world of the original images of everything in existence. But in the process it divested the cosmos of the foreignness and sheer externality that had driven the young Socrates to resignation from the useless effort of trying to comprehend nature.

The unfolding of the Platonic doctrine of Ideas no longer allows one to continue to draw an essential distinction between what essentially concerns man and what in the guise of nature appears only to stimulate his curiosity: When the agent conforms to the normative Ideas of the moral virtues, in reality he only integrates himself into the universal obedience in which nature—as the sum total of images—stands to its originals. The doctrine of Ideas not only explains man's learning and inquiry as turning to the truth possession already latent within him; it also legitimates them as the exhaustion of a potential that would otherwise remain untouched. Even if anamnesis may only have had the character of an episodic, quasi-mythical expedient in Plato's thought, still the foundation of the visible world in the world of Ideas, which remains, cannot be easily reconciled with the Socratic position's exclusion of cosmological theory.

Seen in retrospect, from the point of view of the Platonic doctrine of Ideas, Socrates's recommendation that philosophy restrict itself to logic and ethics appears after all as a transformation of Sophism, which had relativized the universe of existing things to man's purposes and to the benefit that his will to live could derive from them. In contrast to this, anamnesis made man's cognitive drive a piece of the much more narrowly intended Socratic postulate that man should concern himself only with his own affairs.

It is quite consistent that Plato also provides an explicit legitimation for man's extreme claim to knowledge—his interest in the starry heavens—in the myth of the demiurge. He has the world fabricator produce the human soul from the material left over from the making of the world soul and thus, through its kinship with the substance of the world soul, guarantee it universal access to knowledge. Down to the pedantic point of having the number of human souls correspond to the number of stars, the myth carries out the basic idea that Aristotle, by both the first sentence of his Metaphysics regarding the naturalness of the appetite for knowledge and the fundamental principle of his psychology that "the soul is, potentially, everything in existence," was simultaneously to formulate abstractly and to withdraw from any further foundation. So the ideal of theory that was shaped for our
tradition by the ancient world first became formulable, precisely in its foundation on the nature of man and in its relation to fulfilling eudemonia, only in the countermove against the Socratic reservation. 

At the beginning of the *Metaphysics*, Aristotle detaches the human striving for knowledge from coordination with self-knowledge and moral action. Man's essential nature justifies itself simply by being realized and has no need of relation to any other existential purpose. The naturalness of the cognitive drive is read directly from man's relation to the perceptual world, from the delight he takes in his access to it through the senses. Something so natural and essentially appropriate is not grounded merely in the circumstances and needs of human life. The order of the senses themselves confirms this by the preeminence of sight, which stands closest to knowledge because it conveys the greatest number of differences between things. But the history of the human conduct of life also proves the essential superiority of purposeless knowledge, of knowledge unrelated to needs: If men have turned to philosophy so as to escape their ignorance, then they evidently sought knowledge for its own sake and not for its practical usefulness. "And this is confirmed by the facts; for it was when almost all the necessities of life and the things that make for comfort and recreation had been secured, that such knowledge began to be sought. Evidently then we do not seek it for the sake of any other advantage; but as the man is free, we say, who exists for his own sake and not for another's, so we pursue this as the only free science, for it alone exists for its own sake." Here the essential appropriateness of pure knowledge is related to the freedom of man, who exists for his own sake and whose self-realization is his only end. In a very subtle way, the principle of the likeness of the knowing subject and the known object comes into force once more.

But this autonomous significance of theory immediately falls under the suspicion that in it man goes beyond what is appropriate to his nature and thus invades the essential reserve of the divine. Aristotle at once takes up the question: "Hence also the possession of [such knowledge] might be justly regarded as beyond human power; for in many ways human nature is in bondage, so that according to Simonides, 'God alone can have this privilege,' and it is unfitting that man should not be content to seek the knowledge that is suited to him." The argument relieving this suspicion is derived from the experience of the human capacity for happiness through pure knowledge: "If, then,
there is something in what the poets say, and jealousy is natural to the divine power, it would probably occur in this case above all, and all who excelled in this knowledge would be unfortunate. But the divine power cannot be jealous (nay, according to the proverb, 'Bards tell many a lie'), nor should any other science be thought more honorable than one of this sort. For the most divine science is also most honorable. . . ." But if this was correct, the conclusion also had to be drawn that the difficulties that man encounters in investigating nature, and in the face of which Socrates had renounced such investigation, are not grounded in the subject matter but rather in man himself, although men have a sufficient natural instinct for what is true and can comprehend most of it.24

When Aristotle says in another passage that a life of pure theory and thus of perfect happiness exceeds man's powers and is only made possible by the divine reason that inhabits man,25 then what this means is not the erection of a limit to human pretensions, which it is blasphemy to transgress—it does not propose a transgression of what is essentially appropriate—but rather, as the Greeks conceived of the divine, it is precisely a call to a self-deifying life, the possibility of which lies in human nature. Aristotle again rejects the poets with their fiction of envious gods:

But we must not follow those who advise us, being men, to think of human things and, being mortal, of mortal things, but must, so far as we can, make ourselves immortal and strain every nerve to live in accordance with the best thing in us; for even if it be small in bulk, much more does it in power and worth surpass everything. This would seem, too, to be each man himself, since it is the authoritative and better part of him. It would be strange, then, if he were to choose not the life of his self but that of something else. . . . That which is proper to each thing is by nature best and most pleasant for each thing; for man, therefore, the life according to reason is best and pleasantest, since reason more than anything else is man. This life therefore is also the happiest.26

Man's life is thus in principle capable of fulfillment in its essential pretension to knowledge, and the objectivity to which he has access exceeds neither his powers nor his finitude.

A further consequence of this position is that in the later history of Aristotelianism, one man and his work, namely, Aristotle himself, could be regarded as the complete determination of this claim and
realization of its possibility. The Scholastic authority of "the Philosopher" is preformed in the assumptions of the system itself. I quote (out of sequence) the "commentator" on Aristotle who was to appear to Latin High Scholasticism as the authentic interpreter of the system, the Islamic Scholastic Averroes: "Aristotle's doctrine is the highest truth, for his spirit was the perfection of the human spirit, and thus one rightly says of him that he was created and given to us by divine providence so that we should not remain ignorant of what can be known."

A later reflection (falsely attributed to Aristotle but probably stemming from the first century A.D.) of the beginning of the *Metaphysics* is given by the markedly Stoicizing treatise *On the Cosmos*, the first chapter of which expresses with fine pathos the philosophical spirit's universal relation to the world and pretension to knowledge. Here philosophy again appears as a divine undertaking elevating man above himself when it rises to the contemplation of the world's totality and apprehends its truth, even where all other types of knowledge fail. For it, the investigation of the cosmos is simply its appropriate mode of self-realization. Although man cannot bodily leave the earth and penetrate the heavens so as to observe the holy regions there, still the soul with the help of philosophy under reason's guidance has found the path, has tirelessly taken flight and brought together in thought what was separated in space, indeed has easily recognized what was related to itself and grasped the divine with its godlike eye and proclaimed it to man. In spite of the unmistakable Stoic influences, the ascription of the treatise *On the Cosmos* to Aristotle has a core of justification: The cosmological truth-pathos is a phenomenon of historical delay, an attempted reaction against the disappointment and resignation, the imprint of which is recognizable in the various doctrinal schools of Hellenistic philosophy.

Even the Stoa is not free of it; though it was the first to make of the geocentric cosmology an anthropocentric diagram, in which man as the world's privileged observer directs his gaze from the earth freely in all directions at the spectacle of the heavens, an element is taken up again in this teleology that had already been a motive of Socrates's abandonment of the study of nature: the function of teleological trust as a way for man to reassure himself regarding the urgency of knowledge of nature. The Stoic life ideal of *apatheia* [nonsuffering, dispassion] is based on this fundamental trust in nature and presupposes that the
basic Hellenistic question of what the world’s events and the world itself mean for man can validly be answered in general, independently of the solution of individual physical questions. Trust in the teleological background hypostatized as Prōnoia [providence] and Logos [word, reason] makes possible indifference as a mode of behavior toward everything that impinges on man from outside. An apocryphal remark ascribed to Ptolemy characterizes the basic Hellenistic concern with being unconcerned in such a way as to subsume even the Stoa in this totality: *Inter altos altior est qui non curat in cuivs manu sit mundus* [Among the profound, the profoundest is he who does not care in whose hand the world is]. This multiply significant formula indicates what the Hellenistic attempts to unburden man metaphysically had in common and designates at the same time what, in the sense of the late term *curiositas,* is superfluous concern, extending beyond what is possible and needful for man.

The early Stoics already distinguished between ‘wisdom’ as the knowledge of divine and human objects and ‘philosophy’ in the narrower sense of the acquisition of a competence that is one of the necessities of life. Philosophy becomes a position prepared as a recourse against the uncertainty of theoretical success, an uncertainty that must not become palpable as a source of disquiet for man. This is also systematized in the Stoic logic, which, by ascribing an assertory character to judgment, inserts a volitional element between the idea and the act of judgment and accordingly provides for a third logical quality, a refusal to decide—that is, either to assert or to deny—which it designates by the term *epoche* [literally: holding back]. This possibility of theoretical reserve demarcates the ‘interiority’ of the subject as a sphere of pure disposition over oneself. It is the initial attitude of the Stoic wise man, which he can only be provoked into leaving by the evidentness of an idea. The precipitancy of judgment, which is (so to speak) seduced by the cognitive drive, is theory’s original sin, the anticipation of reason by the will, which produces an impotent surrender to the reality with which one is confronted. Accordingly appropriateness of judgment is what life gains from logic, the science of “when one may assent and when not,” which makes the wise man unhurried in judgment.

The same orientation is evident in the Stoic grammar with its doctrine of predicates that possess no assertory character, the doctrine of modalities with its ‘weak’ intensities of judgment, and the doctrine of
inference with its special cultivation (which was important for the history of logic) of the topic of hypothetical inference. The real interest operative in the Stoic logic is not in securing formal methods of proof but rather in exploring the scope of a theoretical ‘quietism’ that lies between abstention from and certainty of judgment, a region in which human insecurity and alarm are most apt to originate. The dogmatic impression conveyed by Stoic philosophy is superficial; its materialism and empiricism are economical minimal hypotheses, or are intended as such. This is where Stoic fatalism belongs as the metaphysical justification of a particular hesychastic [quietistic] attitude to the world: Nihil omnino agamus in vita [We should do absolutely nothing in life]. Here again Stoic logic provides a key to the Stoic maxims of behavior in its predilection for sophisms like the sorites. In the aitia [difficulty, embarrassment] of the sophism, one is driven step by step into and through the readiness to decide, to say yes or no. In connection with the sorites, Chrysippus says that when there is a slight difference between ideas, the wise man withholds judgment. At this point the Skeptics, emphasizing the privilege they derive from being free of dogma, joined in, saying that if even the Stoic dogmatists said in the case of the sorites that one must stand fast and refrain from judgment, then they themselves should do this that much more firmly.

The Stoic epistemology also corresponds to the presystematic unifying principle of what, after a fashion, one could entitle “existential economy.” This holds in particular for the controversial criterion of truth, whose existence—even before any definition—is inferred by regression from the certainty presupposed by action: If it is ever necessary to act at all (a premise that is shared by both Stoics and Skeptics), then there must also be a criterion for the certainty presupposed in action—an inference that in its turn functions only under a teleological universal premise for which the Stoic philosophy of nature had to take responsibility. According to anecdote, the definition of the truth criterion as katalepsis [a grasping] was illustrated with gestures by Zeno, the founder of the school: “After exhibiting the inner surface of his hand, with the fingers spread, he said, ‘Such is an idea [visum].’ Then, with his fingers somewhat bent, ‘Such is assent.’ Then when he had drawn them together entirely and made a fist, he said that that was katalepsis—it was thus that he coined the term ‘katalepsis,’ grasping, which was not usual before that; but when finally he used his left hand as well and tightly and forcibly squeezed the fist together with it, he
explained that this was the knowledge that no one but the wise man possesses." But what is meant by "grasping"? Who grasps whom? In Zeno’s metaphor this still seems fairly unequivocal, since “katalepsis” refers to the idea that grasps the object by making it present in the fullness of its features and thus totally subduing it. Later, however, the faculty of imagination that is ‘grasped’ by the evidence of the object gains currency in the Stoic system of metaphor, both in the imprint metaphor of the ‘stamp’ and also in Chrysippus’s simile of the idea that grabs a man by the hair and forces him down to assent. I mention these details here in order to mark the distance between the Stoic account of the cognitive process and the initial situation of the ‘naturalness’ of truth, which was characterized with the help of the metaphor of light.

If one keeps in mind these early declarations of the Stoic school with their tension between existential economy and metaphysical dogmatics, the palpable inconsistencies of later Stoic authors in regard to the theme of intellectual curiosity become understandable. For on the one hand this curiosity is subject to justification by the teleological principle, according to which such a deep-lying disposition cannot remain unfulfilled and cannot be contrary to nature; but on the other hand the cognitive drive also induces man continually to cross the boundaries of the immediately sensuous and obvious and to give himself over, in connection with vague and obscure objects, to the very precipitancy and excess that were supposed to be suppressed with the help of the Stoic logic and theory of knowledge.

This aporia can perhaps be grasped most clearly in the case of Seneca. Little is accomplished here by tracing actually or apparently contradictory elements back to different sources or explaining them by a change of position on Seneca’s part, from following Posidonius to following Zeno and Chrysippus. The real problem, that of providing an argument for self-restriction of the pretension to knowledge, is unavoidable on the assumptions of Stoic teleology.

Nature has given us an inquisitive spirit (curiosum ingenium), and being aware of her own skill and beauty she has brought us forth as spectators of the great spectacle of things, since she would have sacrificed the enjoyment of herself if she had displayed her works so vast, so wonderful, so artfully constructed, so luxuriant, and so various, to empty solitude. That you may understand that she wants to be investigated and not only contemplated, notice the position she has assigned to
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us: She has set us in her center and given us a panoramic view in all directions, and she has not only given man an upright posture but also an elevated head resting on a flexible neck, so that he can follow the course of the stars from rising to setting and let his face turn with the movements of the heavens. 37

Here again the teleological justification is sought out after the factual phenomenon has been exhibited; immediately before the passage just cited, Seneca refers each individual to the powerful appetite that lies in him to get to know the unknown, which makes many a person venture out on the sea and submit to the hardships of the longest journeys solely in order to discover something hidden and remote; which drives masses of people to the spectacles; which makes us rummage through what is locked up, search out what is secret, trace out antiquities and take in accounts of the strange customs of other peoples—all the possible directions in space and time in which the human appetite for knowledge can extend are comprehended in this phenomenology. In such a context curiositas still cannot carry a negative value; in the observation of the heavens it is the very highest objects that compel our intellectual curiosity (curiosos nos esse cogunt). 38

But in the 88th Letter to Lucilius, Seneca uses the same teleological premise to argue for theoretical self-restriction, for the economy of necessary knowledge: “Plus scire velle quam sit satis, intemperantiae genus est” [To want to know more than is sufficient is a form of intemperance]. The resigned programs of the Skeptic schools, which have introduced nonknowledge as a new branch of knowledge (qui novam induxerunt scientiam nihil scire), appear to him to follow and to result from the preceding violation of this economic limit by philosophy itself. Dogmatic hypertrophy of intellectual curiosity and skeptical resignation are two aspects of one and the same process, of the loss of the norm of theoretical self-restriction: “Ille mihi non profuturam scientiam tradunt, hi spem omnis scientiae eripiunt” [The people I first mentioned provide me with knowledge which is not going to be of any use to me, while the others scratch away from me any hopes of ever acquiring any knowledge at all]. What is close at hand and what is closest of all is what concerns us: “Quid ergo sumus? quid ista, quae nos circumstant, alunt, sustinent?” [Then what are we? The things that surround us, the things on which we live, what are they?] This great summary critique of the artes liberales [liberal arts] presupposes the finitude of what can be known and is worth knowing in these
disciplines; they are what can be acquired and are therefore only a first step toward maturity of the spirit: “Non discere debemus ista, sed didicisse” [All right to have studied that sort of thing once, but not to be studying them now]. Their objects should not draw the spirit into the infinitude of the appetite for knowledge, or they lose their meaning, which is to make man free: “Unum studium vere liberale est, quod liberum facit” [There is really only one liberal study that deserves the name—because it makes a person free]. The economy of knowledge intervenes in the ordering of the course of education: “Rudimenta sunt nostra, non opera” [Our business is foundations, not constructions].

Here again a special status belongs to knowledge of the heavens. The treatment of this subject—the indifference recommended in regard to the possible connection between the heavens and men’s fates—reminds one of the way Epicurus neutralizes the affective influence of natural phenomena. What is the use of knowing the meaning of the constellations of the stars, which are driven around in accordance with the continuus ordo fatorum et inevitabilis cursus [uninterrupted sequence of destined events and inevitable movement] and either call forth or announce events—what is the use of knowing the causes or signs of what is unavoidable? “Scrias ista, nescias: fient” [They are going to happen whether you know about them or not]. What is necessary for man is not to be prepared for particular events but to be ready for anything. To this the interpretation of the stars contributes nothing; on the contrary, it is a hindrance. The principle of teleological economy is sharpened into the askesis [training, practice] of concern for what is necessary. The great integration of human culture into the meaningful context of nature, which had been carried out by Posidonius, is sharply rejected and analyzed almost with the modern category of the ideological: The extension of the teleological principle to the phenomena of human invention and cultivation is unmasked in its function of justifying existing cultural conditions. The concept of ‘nature’ is reduced to a critical function.

Translator’s Note

a. Note that curiositas, “curiosity,” derives from curio, to care.
Seneca’s *morbus Graecus* [Greek ailment] had already been diagnosed and subjected to therapy at the beginning of Hellenistic philosophy, by the Greek Epicurus. For Epicurus the appetite for knowledge is an important source of the affects of fear and hope that rule human life and cheat it of its potential happiness. But the method by which to get at the root of these disorders of the mind is not refraining from judgment but rather the technique of demonstrating the affective neutrality of all possible theories about the natural phenomena that surround man and fill him with uncertainty.

Epicurus’s physics, theology, and ethics are systematically homogeneous in the single tendency to neutralize the relevance of these phenomena. His negative concept of happiness is matched by his economy of cognition: Cognition is supposed to eliminate subjectively acute uncertainty but not to establish an objective kind of knowledge. Regarding the gods, it is enough to know that they are not *curiosi* [curious ones; colloquially: busybodies] like the God of the Stoics, who ‘pokes his nose’ into everything and whose *providentia* [providence], as the ground of hope for man, is purchased at the price of fear of the concrete and—for the individual—irrelevant rationality of his arrangements, which conserves only the cosmos as a whole and is thus not responsible to the individual. Cicero will sum up this line of thought in a passage that is instructive for the verbal and conceptual history of *curiositas*, where he makes the Epicurean Velleius argue against the Stoics’ concept of God that this God was imposed on man as something
incessantly dominating him, filling him day and night with fear; for who would not fear a God who foresees, considers, and looks after everything, considers himself competent in every affair, concerns himself about everything and is full of officiousness? Here *polypragmosyne* [officious interference], the antithesis of the philosophical life ideal, is projected onto the Stoic image of God, which in its central characteristic of *providentia* necessarily also involves *cura* [care, concern] and is consequently incompatible with the unencumbered bliss of the life of a god. Theological unrest, as a violation of the ideal of the god who is devoted only to himself, implies anthropological restlessness, and the therapy for the latter must attack this root. Gods and men—and this is good Greek theology—have at bottom the same existential disposition, namely, to be happy. They fulfill the conditions of the possibility of this disposition only by having nothing to do with one another. That Epicurus’s gods may not know anything of man and the world, if they are to be happy, does not distinguish them much from Aristotle’s unmoved mover, who seemed to Christian Scholasticism to be so similar to its God. For men, who cannot by nature be so sure of their happiness—because they do not live in the *intermundi* [spaces between the worlds], independent of the accidents of the world mechanism, but must rather live ‘in the world,’ that is, in one of the worlds—it is important to know of the existence of gods resembling them in form, as a comprehensible guarantee, not of their own actual happiness, but of its possibility.

Intellectual curiosity is now the disastrous drive that misleads us into violating the boundary settlement between the human and the divine sphere. The Stoics had, as it were, demonstrated how to do this with their derivation of theology from physics, with their pathos of observation of the heavens and admiration of the world as the motif of all knowledge of God. This was where the Epicurean therapy had to intervene. In spite of the enormous size, which we can only surmise on the basis of surviving fragments, of Epicurus’s *Physics*, with its thirty-seven books, the ‘economy’ of what elementarily concerns man plays a crucial role in this system. The *Letter to Pythocles* is at least close enough to Epicurus’s own work to allow us to discern in it the methodology of this physics. Its treatment of meteoric and stellar phenomena rejects every claim of theoretical curiosity and poses for itself, as its overriding purpose, the elimination of the emotional infection of the still more or less mythically associated realm of the heavens. This
philosopher, too, wants above all to convey ataraxia, a dispassionate ease in the world, and not science. The hypotheses regarding individual phenomena (already cataloged by Theophrastus) are placed alongside one another, without any judgment being passed. This procedure can afford to leave the pretensions of theory unsatisfied because theory’s unrest appears secondary in comparison to the uncertainty as to what a phenomenon means (in each case) for man. The unstated auxiliary assumption that the catalogs of hypotheses are complete contains, of course, a teleological implication, which reminds one again of the way Aristotle had taken the tradition that preceded him for granted as a sufficient basis for his isolation of problems and overcoming of their aporias [difficulties]. Thus abstention from an interest in theory is not the initial attitude here; it only sets in in the course of running through the assembled physical hypotheses, as the result of their affective equivalence. The appetite for knowledge restricts itself, by stopping short of deciding between the hypothetical alternatives, and thus saving itself, through ataraxia, from the disappointment of the desire for definitive knowledge. The phenomena of the heavens and death designate the spatial and temporal boundaries where man’s suspicion arises that this could crucially concern him; this is where knowledge of nature must prove itself critically; otherwise we would have no need of it. Physics as ‘pure’ theory possesses no legitimation, since the measure of the disturbance by fear and hope that is bound up with its phenomena is at the same time the measure of the urgency of their clarification—of the establishment of the irrelevance to man of their possible results.

One can regard the rules of theoretical procedure in Epicurus and his school as a canon, directed against the first sentence of Aristotle’s Metaphysics, of the finitude of man’s natural pretension to knowledge. In Lucretius this appears as an image in his polemic against Aristotle’s recasting of the Platonic parable of the cave, which rightly looked to him like a piece of Stoic admiration of the cosmos, and whose allegorical structure he now appropriates for the Epicurean liberation of man—that is, recasts once more. The relation of the spirit to the new doctrine he is proclaiming, a doctrine that eradicates admiration of the cosmos, is compared metaphorically to one’s surprise at the first sight of the world on emerging from the cave. Lucretius approves of the ‘entropy’ of beholding and being amazed by the world, the natural process of wearying and increasing indifference as one gets used to being in the
world, from which the Stoics always want to pull us out again so as to renew the quality of unusualness. This process of leveling off is even supposed to benefit the Epicurean physics that he expounds in his didactic poem, in that through the poet’s recommendation of it, the doctrine can lose its strangeness and its essence can become habitual and commonplace. The singular but fleeting shock of this novelty was supposed to relieve one once and for all of susceptibility to disconcerting aspects of the world.

The theory of the origin of culture, in the fifth book of De rerum natura, is also essentially directed against the positive quality assigned to the cognitive drive by Aristotle and the Stoics. This was the first appearance of a theme in the critical self-restriction of intellectual curiosity that was to be handed down to Rousseau, a theme that does not require the religious idea of a sphere reserved to divinity and therefore constitutes in a more precise sense the antithesis to the first sentence of Aristotle’s Metaphysics—to his joining of the appetite for knowledge to man’s essential nature. In his original condition man is supposed to have existed in a sort of blissful narrowness: “sponte sua sibi quisque valere et vivere doctus” [trained to live according to his own inclination and interests]. To this condition Lucretius ascribes as a crucial advantage the obviousness of everything given, the absence of the Greek astonishment that now appears as merely a metaphysical sanction for the internal irregularity of curiosity: “Non erat ut fieri posset mirarier unquam” [It could not be that he should ever wonder]. In the description of the primeval condition and its lack of need for theory, there is again hidden an analogy to the image of the Greek gods, an attempt to ascribe to man an original essential form of fulfilled existence in self-sufficiency, in autarky. Thus the theory of culture takes the field immediately alongside theology in the function of assuring man of his authentic capacity for happiness.

The exemplary directions in which man breaks out of this shell of his innate narrowness are seafaring and astronomy. In both cases it is instructive once again to confront the Epicurean position with the Stoic position. For Lucretius man goes to sea out of curiosity and in search of luxuries; in Cicero’s treatise on duties the seafarer becomes the executor of the teleology of nature, which does indeed bring forth all goods in sufficient quantity to satisfy man’s needs but does not do so at the same places where men have come together in communities, so that she leaves the transportation and distribution of goods to man
himself. With the question of the genealogy of seafaring, a lasting theme in connection with the question of the legitimacy of man’s curiosity is raised. For the negative significance given to interest in the heavens by Lucretius in his theory of the origin of culture, we again have a Stoicizing antithesis in the schema (transmitted by Firmicus Maternus in the fourth century A.D.) of the history of the world and of man within the individual cycles typically repeated between the world conflagrations of the Stoic cosmology. In this five-stage development of culture, each phase is placed under the authority of a planet. The primitive period—still without knowledge of the basic astronomical facts and regularities—is characterized by fear of the lawlessness and absolute facticity of events in the universe.6 The teleological function of astronomy in calming man’s consciousness of the world arises from the experience of a lawfulness that fills man with confidence in the periodic return of favorable living conditions and encourages him to emulate internally the lawful consistency of nature: “Omnia explicanda sunt, quae probant hominem ad imitationem mundi similitudinemque formatum” [all things must be explained that demonstrate that man was formed to imitate and copy the (orderly) universe].7
Regarding the three great Hellenistic systems, those of the Stoic, Epicurean, and Skeptical schools, Karl Marx made the lapidary observation (in his *Dissertation*, in 1841) that “these systems are the key to the true history of Greek philosophy”—a thesis worth pondering, after the preference long accorded to ‘classical’ Greek philosophy, and which can certainly be made fruitful for the renewed interest in Hellenistic culture. It can be given greater precision. I would like to put it as follows: Skepticism in particular—and specifically in its differentiation into Academic and Pyrrhonian Skepticism—represents such a key because of the way it uncovers previously unquestioned assumptions of the classical manifestations of Greek thought.

Skepticism systematizes most resolutely the disappointment of the great pretension to truth that philosophy had introduced into the world. The signature of the epoch following Plato and Aristotle is the common possession of the characteristic Hellenistic idea of philosophy, which can be described as its *therapeutic* conception. Whereas for Plato and Aristotle philosophy was supposed to provide fulfillment, through the truth it conveys, of the essential needs of the spirit, philosophical understanding now becomes the corrective of a mistaken orientation of man precisely in his theoretical endeavor, an endeavor in whose realization the experience of disputes and entanglement in doubt, of the all too obscure and the all too distant, the alarming and the superfluous, leads to a new basic attitude of ‘caution.’ This caution was indeed differently realized, both methodically and in the degree
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of its intensity. But from the *epoché* [holding back] as the ‘normal quality’ in the Stoics’ doctrine of judgment, and ataraxia in the neutralization of dogmatic results in the Epicurean natural philosophy, to the *epoché* as the condition of happiness in Skepticism, this becomes the basic attitude in relation to reality in the three school systems.

If we are going to have to regard Augustine’s concept of *curiositas* as the formulation of the upshot of the authentic human struggle for truth apart from faith that was largely binding for the Middle Ages, then attention must also be given to the importance of the Skeptical phase of the young Augustine. His biography has not yet been adequately understood in its logical sequence. The attempt to understand this sequence should not allow itself to be forced into the use of the theological schema of *conversio* [conversion]. Between Augustine’s Gnostic, Skeptical, Neoplatonic, and finally Pauline phases, there are intelligible structural-logical connections. We should not accept uncritically the accents and weights that Augustine himself assigned to these phases in his *Confessions*; this also holds for the role of Academic Skepticism, which may have influenced him much more profoundly, in preparing the way for his readiness for faith, than he admits.

Augustine’s conversion to Christianity reflects in exemplary fashion the conditions under which Christianity could appear to the Hellenistic spiritual world less as a ‘breach’ than as a logical consequence. For “the victory of Christianity over ancient philosophy cannot be explained solely by the more or less successful attempt of the patristic writers to interpret Christian teachings in terms of the Hellenistic world of concepts. The conceptual translation would in itself only have sufficed to add another to the already existing schools.” For Christianity’s onset in the Hellenistic world, it was to be decisive “that in late antique thought, philosophy, understood as knowledge of the true structure of what there is, had to give up its claim to be the way to happiness, and thus freed the position for the Christian teaching of faith.” It is true that Augustine left Skepticism initially for Neoplatonism, but theory as ‘natural’ access to truth and thus to existential fulfillment was not to be recovered. The essential relation of a condition to what is conditioned that obtained between theory and eudemonia had been dissolved. Appealing to Cicero, Augustine sees precisely in Skepticism the absolute precedence of the accomplishment of happiness, no longer mediated by theory but separated out as man’s existential pretension.
Faith becomes the new condition of happiness, no longer vulnerable to skepticism and no longer requiring worldly confirmation.

Thus the outcome exposes the basic problem of late-antique Skepticism: the relation between truth and happiness in life. The increasingly prevalent experience in the history of Greek philosophy of undecidability between the dogmas of the respective schools had not primarily made the problem of knowledge a source of discomfort—only when, as in the modern age, a form of life first begins to depend on science for the conditions of its possibility does the problem of knowledge as such become so elementally acute for it that the problem of the possibility of life poses itself even before that of happiness in life. The unquestioned obviousness of the assumption that existential fulfillment comes only through the possession of truth forced the inference from the evident failure of philosophy that the human claim to happiness was in vain. The first sentence of Aristotle’s *Metaphysics* could no longer be the first possible assertion about man without abandoning experienceable existential fulfillment as the cosmic confirmation due to each nature. Diderot’s observation that “skepticism is therefore the first step toward the truth” distinguishes itself precisely by the fact that it is not appropriate to skepticism in general, certainly not in its ancient form. For this ancient Skepticism is not a way into philosophy but rather a way out of it; and it accepts as its inheritance, in the extreme case of the later Pyrrhonian Skepticism, only a vague concept of happiness, which has this in common with Epicurus’s: Happiness is, so to speak, the ‘remainder,’ which is left over when one succeeds in eliminating disturbing factors such as repugnance and pain, curiosity and the cognitive drive. What such a negative definition leaves unclear was of no concern once one recognized the therapeutic function of philosophy, in which it shares with medicine the unproblematic nature of the positively defined good that it seeks to restore, namely, health. The therapeutic function of philosophy implies that philosophy itself has no relation at all to the essence of happiness in life but represents only a technique of eliminating impediments to it.

The dogmatic Skepticism that became dominant in Plato’s Academy soon after his death did not reverse the movement away from Socrates, as Cicero, for example, claimed; rather it was a thoroughly logical consequence of Plato; that is, it was not merely a revolt of the sons against the fathers but the answer to the increase of the essential distance between man and the truth that we can observe in Plato’s
later works. The anecdote, never taken quite seriously, that is told by Sextus Empiricus about the first Skeptic of the Academy, Archesilaus—according to which he continued to preach Platonic orthodoxy to a narrow circle of selected students while publically professing Skepticism—is illuminating, quite independently of its historical accuracy, in this context and in connection with the transition from Classical to Hellenistic philosophy. Only the transcendental character of truth allows the dogmatic assertion of the impossibility of a certainty whose characteristics were specified with the aid of the Stoic doctrine of the “cataleptic” idea.

The superfluity for people in general of something that can only fall to the lot of a chosen few was indeed already presupposed by the increasingly ecstatic/esoteric position of the philosopher as it emerged in the development of Plato’s thought. Was not the myth of the demi-urge something like the report that might have been given to the chained inhabitants of the cave (in the simile used in the Republic) by their escaped comrade after his return from the real world outside—that is, communication by the one, who had seen, to the many, who could only hear? Socrates had still been able to practice maieutic on everyman and had exalted the inner treasures of anamnesis in which even a slave had his share. The situation is entirely altered when there is immediate and mediated knowledge of truth, that of the philosopher and that of those who have to depend on him. The myth offers the probable as true, because at least it saves the recipients from the perplexity of the “strange and unfamiliar” questions being investigated, because it could be the graciously granted ‘representation’ of the true, in response to an appeal to the god—a representation that is adequate to man’s station ‘even now,’ whereas he can achieve certainty only by a special concession on the part of the divinity.

The Skeptical reversal in the Academy would then be simply the ‘demythologizing’ of this very probability, insofar as life is dependent on it. That such probability can be, not misleading appearance, but rather a reflection of the true, and thus sufficient for man’s action and for his happiness—therein lies the whole of Platonism with its relation of correspondence between Ideas and appearances, between what really exists and its images. All the contradictions in which Academic Skepticism became entangled, and had to become entangled, are due to its Platonic residues, although this fact is linguistically disguised by its opposition to the Stoa. Thus it is, for example, in the
attempt to prove that the characteristics of a cataleptic idea could also belong to false ideas. This argument involves the Skeptic in a burden of proof whose definition is self-contradictory because it presupposes the very distinction between true and false whose possibility it is supposed to be refuting.

At bottom, dogmatic Skepticism is an attempt to save the constitutive elements of the ‘classical’ philosophy by putting them back into effect on a lower level, with a stepped-down claim to certainty. In the process, above all the relation of foundation between knowledge and eudemonia is preserved in analogous form: “The contradiction in Academic Skepticism is due in the last analysis to its holding fast to the dogmatic premise that true knowledge is necessary because it is the condition of the possibility of becoming happy.” Thus it is not surprising that from the “denial of finding” there arose what was admittedly a restricted, but not for that reason less ‘scholastic’ philosophy, in the tradition of which the ultimate return to dogmatism, under Antiochus of Askalon, is no more surprising than was the detour through Skepticism.

The development was evidently in the reverse direction in the Skeptical school founded by Pyrrho of Elis about 300 B.C., revived in the second half of the first century B.C. by Aenesidemus and then persisting into the second century A.D., in which one can see the consistent result of the positions of Democritus and the Sophists that were repressed by classical Greek philosophy.

Here also man was assumed to be an inquisitive being, naturally inclined toward theory. The first sentence of our main source, the Pyrrhonian Hypotyposes of Sextus Empiricus, sounds like a commentary on the first sentence of Aristotle’s Metaphysics with its statement that man essentially seeks knowledge, in that three possible results of such a search, in the broadest sense, are specified: the ‘finding’ that is promised to the seeker by the dogmatists of all tendencies, the categorical denial of finding that is pronounced by Academic Skepticism, and the indefinite continuation of the search, whose establishment as the factual state of affairs is the point of departure of Pyrrhonian Skepticism. The pretension of man’s cognitive appetite to knowledge is not disputed or restricted. But the preeminence of the striving for eudemonia is maintained, and it is freed from the threat posed by the factual state of indefinitely continuing search by loosing it from the condition of the accessibility of knowledge. Concern for what is
possible or impossible in the future, the root of curiositas, is eliminated
through a resolute restriction to what is given in the present. For the
Academy a ‘new’ event in relation to the truth is excluded, but not
for the Pyrrhonian Skeptic; he does indeed bring the cognitive process
to a standstill in his epoché, in that he neutralizes the value goal of
truth by denying the dependence of happiness upon it, but he remains
attentive to the truth that becomes evident from itself. In this un-
derstanding of truth, there still lives the inheritance of the hypothetical
initial situation of Greek thought, in which truth was thought of as
that which prevails of its own accord, even if from now on it is reserved
for an as yet unknown experience.

The methodical meaning of this Skepticism, a meaning that is (so
to speak) still realizable as philosophy, can only be to destroy every
remnant of the suspicion that a relation of foundation could subsist
between theory and eudemonia. But for this very purpose the residual
dogmatism of the type of Skepticism taught in the Academy must be
eliminated, a residue that consists in the dependence of human self-
reassurance on the single ‘truth’ that truth is inaccessible. Thus the
radicalization of Skepticism by its application to its own dogmatic
employment is not primarily motivated by logical/systematic consist-
ency or by epistemological resignation but rather by the precedence
of existential fulfillment over every other human interest. The screening
out of the future as a dimension of ‘concern’ inaugurates pure presence
as a giving oneself over to the given, an attitude that is indeed designated
(in the Stoic terminology) as “assent” to the phenomena, but is not
seen as an act of the free disposition of the subject over his ‘circum-
stances’ but rather as the renunciation of the useless exertion of ‘taking’
definite ‘positions.” Because eudemonia depends entirely on the favor
of what is present, to promote it to a ‘value’ and thus to something
that induces an aspiring effort is to render it impossible.

This Skepticism is at bottom so little interested in epistemology that
the object of its skeptical destruction is not what is given but what is
sought; expressed in terms of modern philosophical anthropology,
this would mean that man is brought back from his exposed ‘involv-
ment with the world’ [Welthaftigkeit] into the sheltering presence of the
‘surrounding world’ [Umwelt], in which the phenomena remain ‘unin-
terpreted,’ indeed are let be not even as phenomena but rather as
circumstances of the subject (we would say: in their immanence to con-
sciousness). So appearances themselves cannot be delusive and dis-
turbing, but only assertions regarding them, which inevitably relate what is present to what is not and are thus the root of 'care.' The fundamental question that is supposed to be the theme of every skepticism, the question whether something really is the way it appears to us, is itself the 'original sin' of theory from which Skepticism promises to deliver us.

If Greek philosophy began with astonishment at the 'performance' of the little word "is," it ends with the condemnation of that little word as the source of every seduction into dogmatic precipitancy, the essence of which lies in the transition from the pure presence of the appearance to the assertion that what is apparent relates to something that is not apparent—the logos as such, not just as a specific word, is seductive. "Holding back," as a Skeptical maxim, is, measured against its voluntaristic sense in the Stoic logic, more an abandonment to the immediacy of life, an unconditionality of obedience to whatever suggests itself first. But in this self-abandonment to life, compared to which even the maxim of ataraxia implies a dogmatic anticipation, a ground of its possibility makes itself felt that would not have been able to bear the weight without the help of the Greek trust in the cosmos. When the Skeptic rejects even ataraxia as a maxim—specifically because he sees the possibility of indifference threatened by the axiom of indifference—he falls into a self-surrender and incompetence for his own existential fulfillment, in which the identity of his person as expectation and as memory threatens to dissolve into an atomism of moments, from which neither confirmation nor disappointment of the faith in the cosmos that no longer ventures to make itself explicit may be expected. To put it another way: The Skeptic now sees the sole possibility of his happiness in the circumstance that he himself is no longer responsible for it.

For the question of the legitimacy of theoretical curiosity, the consequence is that such curiosity is no more defensible, critically or ethically, than the other 'states' [Zustände] in which phenomena show themselves as supposed 'objects' [Gegenstände]. The renunciation of principles, objects, and values leaves only one thing behind, namely, that the Pyrrhonian Skeptic registers himself in each of his present states: "... whenever the Skeptic says 'I determine nothing,' what he means is 'I am now in such a state of mind as neither to affirm dogmatically nor deny any of the matters now in question.' And this he says simply by way of announcing undogmatically what appears
to himself regarding the matters presented, not making any confident declaration, but just explaining his own state of mind. Here it almost looks as though the Socratic alternative to knowledge of the world—self-knowledge—is opening up again, and indeed this time really as 'inner experience.' But that is a mere appearance; the differentiation is not between world knowledge and self-knowledge but between the theoretical attitude and an unphilosophical attitude. At this point in the history of ideas, this is a 'postphilosophical' attitude, a conscious leveling of the differences opened up by philosophy, even the difference between self and world, both of which are reduced to the level of the *phomenon*, which means less the 'appearance' that 'confronts' me in the strict sense than the state in which I find myself at the moment. But as much as this reduction of the subject to its states after it had opened itself to theory is motivated by a longing for a matter-of-course existence that wants least of all to conceive of itself as called upon to make a choice between *attitudes*, it was equally impossible for the return to the 'life-world' (to use a term from modern phenomenology)—perhaps the first attempt at escape from history in the form of a 'return'—to succeed.

The indifference [*Gleichgültigkeit*] of the Skeptic cannot deny—if only because it derives from the method of the equal validity [*Gleich-Gültigkeit*] ([Greek:] *isostheny*) of contrary and contradictory propositions—that it is the indifference of one who, disappointed by history, falls back on 'nature' without wanting to admit it and without wanting to give content to this concept. When the Pyrrhonian Skeptic left uncertain even the relation of conditionality between ataraxia and eudemonia, and thus deprived himself of the only remaining possibility of a maxim for conduct by means of which he himself could attend to the fulfillment of his existence, then the totality of the given conditions of his life, to which he thus abandoned himself, had to have some more or less dependable basic disposition—let us say, one that held out some prospect of eudemonia's presenting itself—however one might describe this disposition (if one described it at all). Here, for the last time in our tradition down to Nietzsche, knowledge of reality was, in a precise sense, *renounced*; for the subsequent theological epoch only exchanged the cognitive claim for transcendent guarantees and expectations that appeared more certain to it and did not so much 'hold back' theoretical curiosity as it discriminated against it and denied it to itself in favor
of a salvation that was not only independent of it but in conflict with its satisfaction.

Translator's Note

a. "Dass solche Wahrscheinlichkeit nicht der irreführende Schein, sondern der Widerschein des Wahren . . . sein kann." A play on the many kinds of Schein, which cannot be reproduced in English. For an account of the history of the concept of probability, with special reference to Platonism and Skepticism, see the author's "Paradigmen zu einer Metaphorologie," Archiv für Begriffsgeschichte 6 (1960):88–105, chapter 8: "Terminologisierung einer Metapher: 'Wahrscheinlichkeit.'"
For the further history of the problem of the legitimacy of theoretical curiosity, Augustine's conversion is the key to, or at least the appropriate focus of, new formulations. The ancient points of view on the question, which I have tried to lay out, were conveyed to Augustine primarily by two sources: Cicero and Plotinus. For Augustine, Cicero awakened a greater intellectual agility through the course of instruction in rhetoric; and Plotinus prepared, to the point where it could easily be confused with Christianity itself, the theological alignment toward transcendence. But this path is also and above all a passage through Manichaean Gnosticism and an alienation from it in a transitional period of Skeptical resignation. Augustine's own statements regarding this phase of Academic Skepticism, in particular, remain unclear; but if we bear in mind the 'Platonic remainder' in Academic Skepticism, the turning toward transcendence appears less miraculous and can be made intelligible as the reactivation of this residue.

Cicero is not only the actual transmitter of the philosophical tradition to Augustine but is also, beyond the eclecticism ascribed to him by the analysis of sources, the originator of an authentic conception that allows us to trace the immanent unity of the problem of Hellenistic thought behind the heterogeneity of the school dogmas and the disputatiousness of the sects. The idea of an 'economy' of theoretical activity most nearly conforms to the breadth of variation of the Hellenistic formulas with which we are already acquainted for the threat posed to human eudemonia by the appetite for knowledge. The root-
edness of the cognitive drive in human nature remains undisputed here. Knowledge of nature (explicatio naturae), says Cicero, not only liberates from fear, as Epicurus thought, but leads, especially in astronomy (cognitio rerum caelestium), to a certain self-control on man’s part and to justice.¹ Noticeably subordinated to this moral interpretation of natural science is the remark that an inexhaustible pleasure is to be had from the investigation of these objects, in which by itself it is possible to live an honorable and free life, once the necessities and duties of life have been disposed of.²

At first glance it looks as though this could have been copied from the passage cited earlier from the second chapter of the first book of Aristotle’s Metaphysics, where Aristotle connected the origin of the human disposition to inquiry with the precondition of the satisfaction of vital needs and an easier conduct of life. But in Aristotle’s case this was related to the history of human culture and was meant as an argument in favor of the theoretical interest as an end in itself, whereas in Cicero it relates to the individual life and its coordination of necessity and freedom, of public duty and private interest. Knowledge of nature is indeed immanently meaningful here too, but it has need of a legitimized ‘position’ in the context of the inescapable obligations that are laid on the individual. It achieves its freedom only by paying tribute to necessity. Aristotle’s statement regarding the beginning of the cognitive drive was historical; Cicero’s is moral and political in the broadest sense. I am therefore unable to discover any contradiction between this passage from De finibus and the corresponding passage from De officiis, where in connection with the derivation of the doctrine of virtues from the propria hominis [characteristics of man], a steady, but not unconditional, hold is kept on the Greek primacy of research into the truth (veri inquisitio atque investigatio).³ This precedence is valid here only on the assumption that we are unoccupied with necessary obligations and concerns. This restriction has two meanings: On the one hand it contains the basic Greek idea that only leisure frees man to realize his essence in knowing, but on the other hand it also implies the critical principle that we ourselves may give way to the appetite for knowledge of hidden and marvelous things (cognitio rerum aut occultarum aut admirabilium) only in the leisure that is appropriate vis-à-vis other human and civic demands. Thus the statement, so similar to the first sentence of Aristotle’s Metaphysics, that “we are all drawn and directed to the appetite for knowledge and science”⁴ is not the
justification of a primary and unconditional practical principle but rather stands under moral conditions that legitimize the cognitive drive as a mean between two extremes—that is, in accordance with the *mesotes* [mean] of Aristotelian ethics, although at this very point Aristotle himself had not proceeded in accordance with this schema. Two errors are to be avoided in the realm of what borders so closely on human nature (*maxime naturam attingit humanam*): the one already familiar from the Stoic ethics of knowledge, that of precipitate assent, and that of immoderate concessions to curiosity in connection with obscure and superfluous subjects.

But where is the criterion of differentiation and restriction to be found? There is no objective thematic boundary; Cicero explicitly counts astronomy and geometry, dialectics and civil law among the activities recognized as belonging among the moral and worthy cognitive enterprises, to which exertion and care can rightly be applied. The immediately appended restriction does not relate to an exclusion of a realm of objects but rather to the economy of the active subject: Taking pains to acquire these skills in the investigation of truth should not keep one from everyday duties since the commendation of moral quality pertains only to action. The naturalness of the cognitive drive is thus both a justification and a danger; man should not uncritically abandon himself to his nature, if only because it consists of a plurality of abilities and drives, which collide with one another if each is actualized for itself in isolation from the others.

Cicero portrays the danger threatening the curious man by the Homeric image of Odysseus lured by the Sirens, not only by their song but also by the promise of knowledge of all earthly things. Here also Cicero proceeds from man's innate love of knowledge and science, which is not determined by any prospect of profit. That toil and worry can be involved in the theoretical effort, and are only compensated by satisfaction at the acquisition of knowledge, is more strongly emphasized than it could have been in Greek texts. But it is not only the expense in time and energy withdrawn from the claims of practical and political life that creates the competitive situation; a negative element also comes into play, which is the absence of the Platonic assumption that only one who was fully initiated into theory could be a truly practical man and politician. The positive character of the return from pure theory to the life situation—in Platonic terms, the return to those chained in the cave of the one who has been
brought to the world above and has risen to the level of philosophy—is missing. Odysseus’s conflict in view of the enticements of the Sirens is not a conflict between the aesthetic and the ethical in our sense but rather between his theoretical curiosity and his native country. Although Odysseus does not succumb to their enticements, it is suggested by the length of his wanderings alone that knowledge was more important to him than his native country. In this context there emerges, in connection with the term *curiosus*, the negative characterization of curiosity as the longing to know everything. However, this negativity is seen as quite close to the quality of greatness, since being driven by the perception of sublime objects to desire knowledge is characteristic especially of important men. Although he is not explicitly condemned, even Archimedes seems not entirely beyond criticism, since the *ardor studii* [ardor for study] caused him to forget the conquest of his city while occupied with his diagrams.

He who sees primarily inconsistencies and contradictions in these texts fails to notice, as a result of preoccupation with the philological problem of sources, how clearly Cicero himself is marked by the conflict he describes, which allows him to condemn the excess of curiosity more easily in the mythical poetic figure than in historical individuals. Personal experience stands forcibly behind the caution of the evaluations: “Quae qui non vident, nihil umquam magnum ac cognitione dignum amaverunt” [Those who are blind to these facts have never been enamored of some high and worthy study]. Alleviation of doubt about the tasks to which life should be devoted can only come through being convinced of an immortality that promises compensation for everything that curiosity’s self-restraint denies itself in view of political duties. Even this Platonizing solution has acquired a different function in Cicero than it could have had in the Greek world. The renunciation of theory seems to be something one can perform without prejudice to one’s political and practical capability, so that relegation to the Beyond really can resolve the problematic: “... as happens now, when the burden of care is relaxed, we feel the wish for an object of our observation and attention, this will happen much more freely then, and we shall devote our whole being to study and examination, because nature has planted in our minds an insatiable longing to see truth; and the more the vision of the borders only of the heavenly country, to which we have come, renders easy the knowl-
edge of heavenly conditions, the more will our longing for knowledge be increased."\(^{11}\)

Here the transcendent deferment of the satisfaction of theoretical curiosity, whose pursuit in the circumstances of civic life could only be an exceptional situation like that of Cicero's enforced leisure, does not yet have the Christian *visio beatifica*'s essential differentiation from all earthly access to truth. It is only a matter of degree, a drawing near and improvement of the standpoint of the knower, with, in fact, a clear opposition to the immanence of the Stoa, according to which the human observer was guaranteed the favored standpoint of *contemplator caeli* [observer of the heavens] by his central position in the universe. At the same time the text makes clear, with the antithesis of care (*cura*) and contemplation (*contemplatio*), the basis on which the new formation of *curiositas* comes about: In illegitimate curiosity the place of the civic/practical concerns and chores is occupied precisely by the theoretical attitude, so that this latter, contrary to its nature, itself becomes a care dominating one's life. This happens all the more, the more strongly the theoretical attitude allows itself to be affected by the 'obscurity' of particular realms of objects.

This obscurity is still not the stigma of something 'reserved' to divinity, but it certainly is the sign of a negative teleological quality in comparison to the urgent things in man's life. In the hiddenness of the *res obscurae* [obscure subjects] from human understanding, there lies a sort of natural prescription of the region to which the cognitive will should remain restricted by practical reason. The localization of objects in relation to the range of the human capacity for knowledge is the index of a metaphysical relation that can indeed be described as the will of divinity but that does not proclaim a sort of jealousy as the motive of its secret preserve. The obscurity in which the truths of nature can be enveloped demarcates a realm in which man can be the beneficiary of its potential for service and use without also possessing the authority of theory.\(^{12}\) This lack of congruence between knowledge and use, between *scire* and *uti*, designates a relation to reality that the modern age was no longer to consider possible and to which it was to oppose its deep mistrust of any teleology not verifiable by theory. The *curiositas* conception has a connection with a differentiation that will recur in Augustine with the opposition between use and enjoyment, *uti* and *frui*. Just as for Cicero theory usurps the position of care in the framework of life, so in Augustine the enjoyment of purely theo-
retical activity appears as, instead of a trusting use of things, an anticipa-
tion of something that is possible only through transcendence.

Ambrosius of Milan (333–397 A.D.), whom we can regard as the Christian transmitter of the ancient tradition to Augustine, took significant and influential offense at Cicero’s admission (in his treatise on duty, which Ambrosius was paraphrasing) of astronomy and geometry to the catalog of things worth knowing. It is true that he holds to the preeminent ‘virtue’ of the theoretical attitude, but with the explicit exclusion of these two disciplines. Anything so obscure as astronomical and geometrical investigations, in which one measures the depth of spaces and comprehends the heavens and the sea in figures, makes the matter of human salvation retreat from its unique and absolute preeminence. Here the theological economy has taken the place of the teleological. The conditioning of the theoretical attitude by the requirements of the practical civic attitude has turned into an exclusion of specific objective realms. While there is no Gnostic demonizing of the attraction of the starry heavens, there is nevertheless an equivalent reordering of man’s ‘spheres of interest,’ a reordering clearly based on a break with the ancient ascription of predicates of divinity to the stars.

In Ambrosius we can reckon with the influence of Philo of Alexandria (ca. 25 B.C.–ca. 50 A.D.), whose transformations of Hellenistic philosophy into the biblical medium were to have a manifold influence in the patristic literature. The Augustinian conceptualization of curiositas had its most suggestive precedent in Philo’s allegory De migratione Abrahami, even if we cannot assume that it directly influenced Augustine. Abraham’s travels from Chaldea via Haran to Sichem and finally to Egypt give Philo the ground plan for a representation of the spiritual path from self-estrangement to self-appropriation. Chaldea is the land of curiosity (periergia), and specifically in the form of astronomy. Curiosity is understood as the independence of the senses, which have evaded their subordination to the intellect and instead of this deliver man up to what accords with them. Abraham’s path leads from sense perception to spiritual wisdom. The sojourn in Haran represents a turning from astronomical curiosity to self-knowledge, which in turn leads through the self’s discovery of its ignorance to recognition of God, and finally through this last to recognition of the world as God’s work. The requirement of this detour on the way to the cosmos is explained as legitimate because of the Author’s ‘ownership’ of the truth of His
work, which can become accessible only through Himself. Philo’s God does not, like the Platonic demiurge, find the cosmos already in existence in the form of the ideal reality of an independent objective sphere; rather He Himself produces even the spiritual plan of His Creation, the science of its coming into being.

This is a train of thought that leads to the critical epistemological principle of the identity of verum and factum [truth and fact], to the solus scire potest qui fecit [only he can know who makes (the object)]; but here it still stops with the metaphor of property and its reserved character: Legitimate knowledge can only derive from God, the origin and source of all skills and sciences, and should not try to found itself on unmediated, as it were, unauthorized inspection of the cosmos. The pseudowise men of Egypt stand for the dishonest and unjust claim to have seen ‘directly’: Their theories about the cosmos rest on the eyewitness claim to truth, since they presume to know the grounds of everything, “as if they had been present at the origin of the cosmos or had even helped the world’s master builder with advice in his work.”

God’s sovereign right to the secret of His creation, which is communicated by Him alone on the condition of knowing and acknowledging His authorship, is one of the enduring themes that were to enter into the curiositas complex. It found a place in the exegetical question why man came into existence as the last in the order of creation, the answer to which could be, so that he should not witness the work of creation and its secrets. This theme has not outgrown the mythical idea of the gods’ jealousy of man. It still plays a role in the ideas of divine majesty held by late-medieval nominalism, to which admittedly man was no longer to submit with humble resignation, but which he would rather oppose with a new epistemological conception of the possibilities left open to him even with this reservation.

For Philo the ‘omnipotence’ of allegorical interpretation still permits the idea that the truth about the questions of cosmology is not entirely forbidden to man but only hidden in the images in the biblical accounts. The exegesis that ventures into such multiple significance is rewarded in proportion to its humble exertion; curiosity, however, remains the ‘precipitancy’ that does not want to share the hardship of Abraham’s long wanderings but rather wants, as though by a coup de main, to raise itself from the earth to heaven, as it says in the lecture addressed to the “Chaldeanizers” that Philo puts in the mouth of Moses. When
Philo makes Moses admonish those who flirt with Chaldea's astronomy that they should come back down from heaven, this is not just a rhetorical figure; in it lives the suspicion of the transposition magic that conceals itself, as though 'ideologically,' in theory. This suspicion was to be fixed for the medieval tradition by Augustine when he imputed to the astronomers' cognitive arrogance the immanent pretension, which is a prospect held out in Cicero's *Tusculans* only to the soul freed from the body, of seeing itself transposed to the place of the highest object of its cognitive drive: "... ut in ipso coelo, de quo saepe disputant, sibimet habitare videantur" [They imagine themselves dwelling in the very heaven they so often discuss].

The *homoiosis* [assimilation] implied throughout ancient epistemology potentially combines theoretical curiosity with magical self-surmounting in that it considers the cognitive faculty capable not only of possessing its objects but also of becoming them. But precisely here lies the violation of the cosmic self-localization of man that is to be gained from self-knowledge and that identifies him with a particular position in the order of reality and makes adherence to this position the essence of the ethical implementation of self-knowledge. This background helps us understand why Philo makes self-knowledge the specific antidote to *curiositas* and admonishes the "Chaldeanizers" to cease desiring astronomical knowledge and find shelter in themselves. In its secret urge toward 'transposition,' curiosity will of course not admit to itself that it does not want to accept the cosmic position that would specify what is 'above' and what is 'below' man, what he must submit to and what he must master.

Self-knowledge for Philo, too, is a kind of vision; the wise man is defined by the fact that he sees, and thus has gone beyond hearing, whose data can only be like the Platonic *doxa* [opinions]—that he has "exchanged his ears for eyes" and now himself perceives what he had previously only heard about. But vision depends on the light in which its objects are 'shown' to it; Philo's Hellenization of the biblical testimony, his often noticed transformation of biblical expressions involving hearing into ones involving sight, is limited by the fact that the basic Greek idea of the things *showing* themselves no longer governs but rather the idea of their *being shown*. The God Who, in the beginning, creates light, is the one Who shows. Through its new correlation with God's allowing things to be seen, ancient theory loses an implication: It loses the 'naturalness' of access to things and acquires a
voluntaristic aspect on which their admissibility depends. The obscurity and distance of objects decrease the degree to which they are evidently allowed to be seen, and thus their openness to theory.

Even self-knowledge, then, remains a kind of vision, since wisdom is not only, like light, a medium in which one sees, but it also sees itself. Accordingly, there is a limitation on self-knowledge just as there is on knowledge of the world; in the context of an allegorizing polemic against the sciences, Philo brings out the failure of astronomy and says that it is the same with the heavens above man as with the spirit within him, since both transcend any knowledge that aims at their essence. Thus what is accessible to human theory, because God lets it be seen, lies between two boundary transgressions. In this symmetry the Gnostic metaphysical topography is prepared, just as the Talmud's warning against Gnosticism is formally implicit in it: "He who inquires after four things had better not have been born: what is above and what is below, what was before and what will be after." But what is new in Philo, and preformative for the patristic tradition, is not only this delimitation of the field of theoretical activity but also the specification of a sequential order of the stages in which knowledge has to be realized. A realm of objects does not legitimately offer itself, independently and as such, to anyone who is interested in it; it does so only on the assumption of passage through a previous stage: Theoretical contemplation of the world is conditional on prior self-knowledge and knowledge of God. The difficulty lies in the logical circle that self-knowledge has not yet been extracted from its ancient connection to cosmology and delimited as inner experience; it is supposed to precede cosmology, so as to provide the prerequisite knowledge of the ground of the cosmic creation, but it still depends on cosmology as the system of natures, to see oneself subsumed in which constitutes the essence of self-knowledge. Augustine's memoria [memory] specifies for the first time an organ and a content from which something that can be described as "inner experience" can constitute itself. Here already we can see in negative form the potential significance of the coordination of curiositas and memoria in the argument of the tenth book of the Confessions.

This coordination has its systematic foundation in the 'soul drama' of Neoplatonism. In the Neoplatonic antitheses of unity and multiplicity, of spirit and matter, the scenario of the history of the soul is marked out. In contemplating the unity of what is spiritual, the soul fulfills its
essential destiny; as world soul it achieves its unity because it is not in the world but rules throughout the universe by virtue of its union with the divine spirit. But if it declines into the separation of individual human souls, if it becomes itself multiplicity in the manifold, then it is within the world and endangered by the world and can only protect itself by thinking back to its origin, by not losing itself in its temporary abode, but remaining concentrated on itself. The definition of alternative attitudes indicates how the soul can protect itself from infection by the world, and in this prophylaxis curiosity has its systematic place.

As a part of the world, the soul is isolated, weakened, and delivered over to its own restlessness. Curiosity is only secondarily attraction by the object; primarily it is spontaneous unrest, dissatisfaction with oneself, being driven about. This polypragmonein [busyness, meddling] is the equivalent of periergia [overcarefulness, superfluity, investigation of 'curious' matters]: It is a sign of the human existence that is losing its essential centering, that seeks to be satisfied from outside, by external things—that has 'forgotten' its origin and its original relation to what is spiritual and has fallen into dispersion. Dispersion is brought about by seeing the many instead of the one. The being of the one who sees is not only affected but also 'effected' by what he sees; the seeing is not accomplished as theoretical distance from the 'object'; rather it is a pathos [passive condition] of surrender to the object, a homoiosis [assimilation] once again, to it and to its metaphysical quality, which is determined by the systematic order of the Neoplatonic "hypotheses."

If the soul turns from what is spiritual to what is material, it confuses what is above and what is below it and is entirely penetrated, in the instant of its turning, by obscurity and indefiniteness, the qualities of the hyle [matter].

A precondition decisive in preparing the way for the conceptual history associated with the term curiositas is that on the basis of Neoplatonic metaphysics there no longer exists, and can no longer exist, the self-confident and reposeful attitude of the onlooker of the world, that every theory is 'ecstatic' [displacing, changing] vis-à-vis its object and must lead, depending on that object's quality, to the soul's either winning or losing itself. It is noteworthy that the Greek equivalents of curiositas take as their point of departure the external condition and behavior of the busybody in his dispersion and still formulate this phenomenon basically from the point of view of the ideal of theoretical leisure; this produces for Plotinus the difficulty, indeed the impossibility,
of describing the soul’s turning of its gaze as an inner event, although this is evidently precisely what he needs to do. There is a gap in the process by which the soul’s isolation and debilitation are converted into bustling inquisitiveness, a gap that looks like the position later to be occupied by ‘inner decision.’

In the description of the origin of time from the self-alienation of eternity, also, the guiding idea is still the ancient contrast typology of the bustling inquisitiveness that forgets its own business. But here an attempt at motivation does after all show through clearly: The reposeful presence of eternity is perceived as a reservation, awakening the vague idea of a possible greater possession, which seems graspable by the bold venture of self-appropriation (idiosis). Thus the repose of possession gave rise to motion, in which eternity ‘temporalized’ itself. The world arises from eternity’s venturing forth into time as a result of a restless passion for the incommensurate, a passion that, as it were, produces its own objects and in its enjoyment of them goes outside itself. If this mysterious unrest in the essential self-sufficiency of the eternal is the origin of the hypostatic surplus, as which the cosmos is now conceived—and thus defined, in terms of its origin alone, as the object of an equally surplus interest—the peripetia of this process is the equally mysterious recollection of the truth of its origin, by which the degenerate being is awakened to itself and brought back.

“Anamnesis” is the recovery of metaphysical orientation, self-discovery, the renewed presence of the authentic potential of being. Lacking in Plotinus is both an explicit motivation for the unrest leading to degeneration and a recognizable agent to induce “anamnesis,” a role that is filled in the Gnostic systems by the bringer of salvation and awakener.

In Neoplatonism curiositas and memoria had become the decisive acts of the soul’s history, which is constructed symmetrically of descent and ascent. The task that remained for Augustine was to complete the removal of the cosmos from this history of the soul in which the phase of individuation had been identical in itself with the loss of the primeval status. Augustine’s readiness to make the peccatum originale [original sin], as ‘the species’ sin,’ into the pivot of his entire theology and of its absolutism of grace is certainly to be understood in one essential respect in relation to the Neoplatonic account of the soul’s history as the process undergone by the one world soul. The difficulty that arises for him from this presupposition, that of representing with
these categories the process undergone by individual souls, could probably only be repressed by means of the focus on the subject of his own life history in the Confessions. The ontological prehistory of the world and of the world's time turns into the experienceable content of the tension within each existence. Thus the potential for ‘temptation’ comes to be seen in the same perspective as ‘conversion.’ Since the emphasis on the grace that is the source of ‘justification’ removed it more and more from empirical accessibility, the landscape of the pitfalls of evil attracted more attention on the part of the descriptive and classifying faculty of orientation. What was to be grasped was no longer a condition or situation but rather a field of possibilities, each of which still, and over and over, encloses within itself the whole drama of self-loss. Here lay the point of departure for the reception and further elaboration of the idea of curiositas.

Augustine’s biographical attitude to the power of the cognitive appetite as human temptation was to be determined by his adherence to Manichaean Gnosticism. Alongside other, mainly mythological features, the basic conception of the Gnostic systems was the identification of knowledge and salvation; this was what they had in common with Neoplatonism. In Gnosticism as in Plotinus, recollection, as an act of intellectual bringing to mind, required no further practical taking of ‘positions.’ Remembering, as such, is recovery of the origin. The realm of the spiritual that comes into view again in anamnesis fulfills the soul by its mere presence and determines the soul’s being and its path in exactly the same way as, at the beginning of the soul’s history, a mere curious sideways glance at the hyle [matter] was sufficient to drag the soul from itself into captivity in the world. Where it looks and what it sees—this by itself decides whether it will be saved or the reverse. The equivalent aspect of the Gnostic mythologies is that merely hearing the call already is redemption, to know of the bringer of salvation already is the whole of salvation. Thus cosmology and the doctrine of salvation can no longer be separated; knowledge of the world itself becomes the central theme of theology.

What had been said about the origin of the world matter in the system of the Gnostic Valentinus (about 150 A.D.), according to the account given by Irenaeus, bears a remarkable similarity to the system of Plotinus a century later. In the hierarchical sequence of the twelve eons in this system, the Forefather at the head can only be known through the Nous [mind], whom he begat, and only the Nous “enjoyed
the vision of the Father and took delight in contemplating his immeasurable greatness.” The communication of this enjoyment to the remaining eons was thwarted, according to the Father’s will, by Sige, the hypostasis of silence, “who was to lead them all to reflection and to the desire to seek after their Forefather.” The twelfth and last eon, Sophia [wisdom], did not want to be satisfied with this situation, but became passionately agitated from jealousy of Nous’s communion with the Father and tried to leap over the gap. “Since she strove for something impossible and inaccessible, she brought forth a formless being... When she saw this, at first she grieved because it was an imperfect creature, but then became frightened that it did not even fully possess being. Then she became extremely embarrassed, while looking for the cause and for a way of hiding the creature. Now she reflected on her feelings, turned about and sought to return to the Father, but after a certain distance she became weak and humbly entreated the Father... Thence, from ignorance, suffering and fear, matter had its origin.” So in this myth also the origin of the visible world lies in (erotically transposed) theoretical hubris. But the disapproval of Sophia’s presumption does not seem unambiguous since the Forefather himself saves her from the great danger into which she falls when she ventures into the abyss of the unfathomable.

This unmistakable sympathy of Gnosticism with the pretension to knowledge of the ‘unfathomable’ is now made, especially by its Christian critics, into the central focus of their attack upon it. In the Gnostic speculation there seems to emerge for the first time a concept of knowledge that is prepared to pursue the appeal of its object even into the infinite. Two formal characteristics of the Gnostic systems continually bring forth new speculative elements of mediation and transition: their dualism and their emanatism. Irenaeus of Lyon (ca. 130–ca. 202 A.D.) warns, in connection with the speculation about the so-called pleroma [fullness], that “if anything else exists, apart from the pleroma, then the pleroma must be contained inside it and surrounded by it. But by pleroma they understand the first god. Or perhaps the pleroma and the other thing are separated from one another by an infinite distance. But then some third thing would have to exist, which would hold the pleroma and the second thing at an infinite distance from one another. This third thing would then encircle and include both the others and would therefore have to be greater than them, since it contains them both as though in its womb, and this goes on
in the same way, with that which is included and that which includes, to infinity. Such a form of knowledge, which is unable to reach a final ground and a primary authority, is perceived as the exact opposite of the ‘achievement’ of faith, the essence of which is supposed to be stopping and standing fast with a dependable quantity; the Gnostic cognitive drive, on the contrary, ‘overwhelms’ its object with questions and consequently ends up in the realm of the insubstantial and futile.

Irenaeus correctly saw that the philosophical root of the Gnostic multiplication of spheres of being lies in Platonism and its original/image relation between Ideas and appearances. He drew from this the conclusion that thought should not assume an objective sphere of originals (Ideas) as an ultimate binding authority but should rather assume a personal ‘inventor’ even of these originals. For Plato the quality of originality had become a ‘real predicate.’ The Ideas carry in themselves the obligatory quality of being originals that may only be imitated once, while the resulting images no longer carry this obligatory quality in themselves. Images of these images are thereby ontologically disqualified; this is made explicit as a critique of artistic mimesis in the tenth book of the Republic.

Neoplatonism and Gnosticism, on the other hand, made original and image ontologically indifferent and understood their connection as purely relational, so that every image becomes a superfluous and unobligatory multiplication of the original. This brought into play the possibility of arbitrary iteration and speculative infinity [infinite regress]. It is not in gnosis [knowledge] but rather in pistis [faith] that the rational interest in the theoretical economy of questioning coincides with the theological interest in the absoluteness of the concept of God. In this front-line position, the postulate of an ordo scientiae [order of knowledge], with a finite relation of rank and dependence between the Creation and the Creator Who—unlike the Platonic demiurge—can no longer be questioned about the source of His world plan, acquires the appearance of good critical sense.

A further example of the concept of ‘rational’ self-restriction with which the Christian polemic attacked Gnosticism is given by the critique of number speculation: rules for relations of fact should not be derived from numerical relations; on the contrary, numbers must themselves be understood in terms of the rule from which they arise, and this very relation between rule and multiplicity is comparable to the relation between God and the universe. Surprisingly seldom is any reference
made, in the polemical texts against Gnosticism, to the eschatological reservation, that is, the solution in the next world of the ‘remaining problems’ of existence in this one, as an argument against the Gnostic claim to see all questions already resolved here. What stands in the foreground just is not man’s interest and his striving for knowledge but rather the protection of God’s sovereign rights. This shift of accent, from the preaching to man of his salvation to the supposed protection of God’s interest by man, enters into the whole curiositas tradition.

The political metaphor of sovereignty overlies a theologically legitimate kernel of this anti-Gnostic polemic, which consists in the fact that the unsatisfiable claim to knowledge seems to be permeated with a deep mistrust of the Divinity’s will to revelation and of the ‘adequacy’ of His measures toward salvation. The idea of a ‘secret’ revelation made accessible only by human wit applied to exegesis and allegory contains an evident contradiction, though one that is seldom pointed up on account of the critics’ own lack of understanding. The essence of such revelation, given by God and made necessary by Him for salvation, should have been easily accessible and not dependent on the Gnostics’ speculative elucidation. But such thoughts remain in the background.

The Christian critics’ own attitude was meant to be distinguished from that of the Gnostics primarily by the fact that they had ‘relinquished’ their cognitive pretension to divine majesty and urged the Gnostics to do so as well: “Cedere autem haec talia debemus deo...” [But we must yield this sort of thing to God]. This theological model could be carried over, without further ado, to knowledge of the physical world, where much even of what lies before our feet is withheld from our knowledge and left to God as an acknowledgment of His preeminence. In his language and education Irenaeus is a Greek, and that may explain why he does not declare theoretical curiosity as such to be a sin. One would rather say that he tries to argue rationally for its self-restriction through faith because its transformation into an infinite undertaking appeared to him as a new absurdity in its consequences, one that had not yet been suspected by the classical authors.

The hypertrophy of theoretical accomplishment is a new historical experience, one that is derived from Gnosticism; it was only through it that the competition between the pretension to knowledge and the acknowledgement of faith became acute. This competition requires a decision: “It is better if someone knows nothing at all and does not
recognize a single cause of created things, but perseveres in belief in God and in love, than if, being swelled up by that sort of knowledge, he falls away from love, which makes men live . . . and (it is also better) than if by the subtlety of his inquiry and by splitting hairs he falls into impiety.” But even when Irenaeus appeals to the biblical saying that “all the hairs of your head are numbered,” his alternative to Gnostic curiosity—to the curiose inquirere that undertakes to count “how many hairs each person has on his head and what the cause is for this person having so many, that one having so many, and not all having the same number, so that he would find many thousand times a thousand different numbers”—is not what was meant by the biblical saying, namely, trust in the Creation and the providence of the Divinity, but rather the sensible economy of resignation, the self-discipline of theory, which is not the avoidance of sin but simply keeping to what is humanly possible. “Healthy, unthreatened, cautious, and truth-loving reason eagerly concerns itself only with what God has placed in man’s competence and subjected to our knowledge, and in this it will go on ahead and easily acquire more knowledge through daily exercise. To this belongs what evidently and clearly meets our eyes and what is unambiguously and explicitly said in the divine writings. Resistance to Gnosticism is understood as the self-maintenance of reason by adherence to its teleological economy. He who goes beyond the region of what lies open to man and seeks what is withdrawn from him (quae non aperte dicta sunt neque ante oculos posita [what has not been plainly said or placed before our eyes]) is one who prefers seeking to finding.

The overcoming of Gnosticism as the ‘suspension and carrying forward’ [Aufhebung] of its pretension to knowledge in the Christian teachings, is the attitude chosen by Clement of Alexandria (ca. 150–ca. 216 A.D.). Although ancient philosophy, as the epitome of man’s self-arrogated theory, is now admitted to a propaedeutic role in the form of Christian Gnosticism, it is not freed of its ambiguity by such mediation. This becomes most evident in the mythical conjecture that philosophy was conferred on the Greeks by a fallen angel as stolen property from heaven. But this thoroughly Gnostic-sounding illegitimate origin is made good again by permission from God, of Whom one certainly could not assume that He was ignorant of this event: “For in those days the stolen property was of some use to man, although the thief had not intended this, since providence turned his
sacreligious deed to a beneficial end." From this source, the fallen angels "who, so far as they were acquainted with the secrets, blabbed them to the women," not only the doctrine of providence but also the disclosure of the phenomena of the heavens are supposed to have reached the Greeks.

It would be surprising if, in the rich and motley educational landscape that Clement spreads before his readers (it was not accidental that he named the third of his major works the Stromateis [Carpets, Tapestries, or Miscellanies]), the figure of Odysseus did not also emerge again, the figure in which we saw Cicero critically exemplify the order of precedence that he ascribed to curiosity and civic duty. Reference to the great figures of human imagination and memory may in each case be intended only as rhetorical ornament, but the validity and richness of interest of such a figure themselves force the author, who seems ready to involve himself with them only in passing, to come forth unintentionally with his concept of man and man's proper form of existence and play it through in a thought experiment.

In the Speech of Exhortation to the Greeks, the first part of Clement's three-part principal work, Odysseus appears—in the reverse of the reproach pronounced by Cicero—as prefiguring those who do not want to pay the price of eternal salvation but rather "cling to the world, as certain species of seaweed cling to the rocks in the sea, and do not trouble themselves about immortality, since like the old one from Ithaca they do not long for the truth, the heavenly fatherland and the true light, but only for the smoke (of the hearth at home)." Here Odysseus bound to the mast is seen as a man who is ruled by the will to return to his earthly home, who does not take the apparently fatal risk of truth. In the Stromateis, however, Odysseus appears as the figure of the Gnostic who does not need to stop up his ears anxiously when they are exposed to the worldly wisdom of the Greeks but rather listens to the voices of Hellenism while nevertheless holding to his course aimed at returning home to the truth:

Most of those who claim the name of Christian seem to resemble Odysseus's comrades, in that they make for the Logos without taking any interest in a more refined culture; they pass by, not indeed the sirens, but rhythm and melody, and stop up their ears with rejection of knowledge [amathia] because they know that they would never again find the path to their homeland if they should open their ears to Greek wisdom even once. But he who selects what is useful for those who
need instruction—especially when they are Greeks—cannot turn aside from the love of knowledge [philomathia] like an unreasoning animal but must rather collect as many helpful ideas as possible for his listeners. But one should not continually remain and linger with these ideas, but only as long as one can draw benefit from them, so that as soon as one has derived this benefit and appropriated it, one can return to the home of true philosophy, after extracting as solid conviction the certainty for the soul that arises from all of this.47

Clement's advice to the Gnostic in his relations with the Greek tradition, aimed at the self-restriction of the theoretical interest that lives in that tradition, fits into this design: "Thus our Gnostic will have a many-sided education, not because he wanted to acquire the cognitive disciplines as virtues, but rather because he uses them as assistants; and since he distinguishes between the universal and the particular, he will find his way to the truth. . . . On the other hand, one should avoid useless busybody activity, which concerns itself greatly with what is entirely insignificant; the Gnostic must rather occupy himself with the various sciences as a preparatory exercise, which on the one hand helps the truth get passed on as accurately and clearly as possible and on the other hand is a protection against words that are intended, with their pernicious tricks, to exterminate the truth."48 By making the theoretical interest that he finds embodied in the traditional system of education useful for Christian purposes, Clement is able to set up this interest not as an end in itself but as a 'second duty' under the circumstances.

The curiosity by which false doctrines seem to be motivated is regarded not as an inevitably misleading drive but rather as a neutral motive that can just as well be made to serve the truth if it is only made to function in the right way: "For while the truth that comes to light in Greek philosophy extends only over limited regions, the real truth puts in the right light all the deceitful attempts of Sophism to make something credible; just as the sun brilliantly illuminates all the colors and shows clearly how both the white and black are constituted."49 Once again the simile of the sun serves to clarify the relation of the absolute truth—to regard which directly is to risk being blinded—to the worldly partial truths, over which the absolute truth has precedence, without excluding them.

The familiar distinction between wisdom and the sciences also helps Clement to 'save' the controversial disciplines of astronomy and ge-
ometry: He who doubts that it is useful to know something about the motion of the sun and the stars and their causes and to consider geometrical theorems runs the risk of falling into error regarding the freedom of the spirit as well. Apparently we are to understand that scientific knowledge frees one from the suspicion that human action might be conditioned by combinations of cosmic factors, that is, that—as Epicurus had taught—physics 'neutralizes' its object for man. For Clement the Gnosticism that is legitimized by Christianity not only has individual significance in relation to salvation; it also discloses the educational meaning of history. The discussion with Greek philosophy must try, by means of loving criticism, to enable the adherents of those teachings "finally, even though late, to understand the true value of the erudition to attain which they undertake journeys over the ocean." But gnosis [knowledge] here is not recommended to everyone; it is the highest challenge of Christian self-realization, not a universal condition of salvation. This is illustrated again by Odysseus, who alone among his companions can endure the danger posed by the Sirens, following the motive of his curiosity, as a representative who demonstrates once and for all that temptation can be overcome: "It is enough that one man has sailed past the Sirens."

This salvation formula extracted from the Odyssey's scene of the Sirens provides the occasion for a justification of the lack of literary pretensions of the Stromateis, and likewise of the whole genre of literature concerned with salvation: "I know well that to be saved oneself, and in the process to be helpful to others who want to be saved, is the most important thing..." Pythagoras had recommended giving preference to the muses over the sirens, by which he meant "that one should cultivate the sciences, but should not seek in them the satisfaction of a desire for pleasure"—here again the differentiation of use and enjoyment is in the background. The vital point is that with the role given to individuals by Gnosticism the basis for a statement about 'human nature' like that at the beginning of Aristotle's Metaphysics has been abandoned: Odysseus and the Sirens, Oedipus and the Sphinx—the human interest is delegated to these solitary representatives as it is to the Gnostic, of whom it is said at the same time that it is enough if he finds even one single listener. In other words, there are exposed human positions, in which temptation cannot be avoided but must be endured, apparently because there is an economy of what humanity has to accomplish, a set of historical tasks, as it were. When the
polemics against Gnosticism deny this special role of certain individuals, the accent in the exegesis of the Oedipus figure alters: Now he is praised only for the ‘pastoral’ action of stopping up the ears of his companions, while his own exposed position is ignored.\(^5\)

In the Latin patristic literature, the term *curiositas* receives its specifically anti-Gnostic aspect of significance from Tertullian (ca. 160–220 A.D.). Here the characteristic imprint that the word had been given in Apuleius’s *Metamorphoses*, which were produced between 170 and 180 A.D., may have had an influence.\(^5\) The process whereby the cognitive appetite that was naturally and essentially appropriate to man was transformed into a constituent element of the catalog of vices took a decisive step forward here, in that *curiositas* became the dominant trait of a character, of a type.

This had been prepared for, in the conceptual history of the Greek *polypragmosyne* [officious busyness, meddlying], by Plutarch (ca. 45–ca. 125 A.D.), in a treatise that had described busybody activity as harmful, particularly in the realm of human relations. Plutarch’s suspicion of this characteristic takes as its point of departure the assumption that man’s supposed ‘interest’ in other men is directed especially at hidden wickedness, which it seeks to bring to light and publicize through ‘gossip.’\(^5\) This gossipy curiosity is directed at the intimate sphere of one’s fellow man and penetrates the secrecy (which is, in its own way, humane) of human wickedness. It puts into words, and into the circulation of talk, the unspeakable things that pertain to others, so that, in an extreme comparison, adultery can be described as a sort of curiosity about someone else’s carnal pleasure.\(^5\) It is characteristic of Plutarch, the Greek, that he recommends as a means of curing such gossipy curiosity the diversion of interest by other objects, and explicitly mentions the heavens, earth, air, and sea. He assures us, in this connection, that nature has nothing against the cognitive appetite diverted toward it; however, no hidden wickedness is to be found there, and he who cannot do without it will have to stick to history.\(^5\)

In Apuleius’s novel, *curiositas* is radicalized; its magical potency—which Philo earlier thought he had recognized in its secret drive toward transposition—is made thematic. One of the ironies with which the author treats Lucius’s curiosity—animallike, credulous, and capable of any indecency—is that he counts among his famous ancestors not only the author of the treatise on curiosity, Plutarch, but also the Skeptic Sextus Empiricus. For even the hero’s immoderate lust for
knowledge is exhibited as the degeneration of the philosophical appetite for knowledge when he introduces himself as "not indeed curious but still desirous of knowing everything, or in any event a great deal." Elsewhere he does not shrink from describing himself as possessed by an innate curiosity. The 'ontological' precondition of the hero's immoderate curiositas and of his magical inclinations is the vanished firmness of the contours of the world's constitution, the suspension of the cosmic quality of reality and the resulting explosion of the horizon of possibility, which creates a space in which what man can look forward to is indeterminate: "Nihil impossibile arbitror..." [I think that nothing is impossible]. What is unexpected in common experience, happens. Of the voluptuousness of a feast it is said, "Quicquid fieri non potest ibi est" [Whatever could not possibly come into being is there]. Curiosity seeks no longer what is admirable and wonderful in the cosmos but rather the strange, the peculiar, the curious (in the objective sense), that which can only be gaped at, in a structure of reality that is dissolved into transitions and alterations of form. The hero also describes himself as "all too eager to become acquainted with strange and astonishing things."

Augustine himself suggests to us that he knew this work by referring to the fact that Apuleius and he were fellow Africans. This may be regarded as no less probable in the case of the Carthaginian Tertullian. The intellectual biography of Tertullian, who first became a Christian as a mature man and in his old age turned to the Montanist heresy, can be described as a strenuous effort to think and to exist against his own nature. This highly complicated thinker, practiced in every finesse of juristic and rhetorical technique, commits himself to the program of a 'simple' faith, in which all questioning has come to rest, and in fact as a result not so much of the demonstrable and reassuring possession of the truth as of a conscious surrender, contradicting what was 'natural' to him, of the cognitive pretension that urges one in the act of questioning: For Tertullian, Gnosticism has its root in the obstinate insistence on further questioning. He denies ever having raised the problems that he deals with himself; all objections and difficulties have been imposed upon him by others. The desire, for example, to know more about the soul than is contained in the simple statement that it derives from God's breath (ex dei fiat) leads into the boundless waste of argumentation about positions decided upon in advance and, where
argument does not suffice, to the summoning up of rhetorical persuasion.61

Tertullian holds the heretics responsible for the reception of ancient philosophy within Christianity; the pluralism that they produced forced people to make use of the preexisting means of intellectual argument. A homogeneous religion would not have needed to interest itself in philosophy. Tertullian sees the difference between Gnosticism and his faith as reduced to differing interpretations of the biblical command “Seek and ye shall find.” Gnosticism perennializes this relation of conditioning. To the restlessness of seeking it holds open one chance of finding after another, whereas Tertullian localizes the end of seeking and the totality of having found in the single act of accepting faith.

“In a single and definitive system of doctrine, there cannot be an endless search. One must seek until one finds, and believe when one has found, and then there is nothing more to be done but to hold fast to what one has grasped in faith, since after all one also believes that one should not believe, and consequently should not seek, anything else, since one has found and faithfully accepted what was taught by him who commands us to seek nothing but what he teaches.”62 The model of the ancient conception of motion, according to which rest in a goal state teleologically determines the process, is unmistakably at work here. There lurks in man an instinctive readiness to yield to the “tickling of his ears” by the philosophy that is born of “the cleverness of earthly knowledge” and to submit to the canon of its questions as the embodiment of what man has a legitimate need to know. But philosophy is a “rash interpreter of God’s nature and arrangements,” and by these rash interpretations it furnishes the heresies with their “equipment.”63

Tertullian exhibits a clear awareness of the fact that the historical process stabilizes the system of questions once raised and thus exercises a pressure toward answers, which imposes the ‘settling’ and reoccupation of systematic positions that have become vacant. Thus it is no longer ‘human nature’ that unfolds its appetite for knowledge in a catalog of pretensions to knowledge that can be gathered from history; rather it is the factual antecedence of schools of dogma that imposes upon what is new a framework of continuity that is just as unfulfillable as it is demanding of fulfillment. Curiosity is the result of the unresisting reception of the inherited system of ‘nonnegotiable’ questions. Tertullian seeks, with his characteristic radicalness, to cut this burden
loose. The opposition that he encounters in this effort is conditioned by the fact that in Gnosticism the ancient tradition is already assimilated and has unfolded its immanent logic. Thus the field of the discussion and the rules of the game are pregiven. Tertullian would like to make it plausible to his readers that he is an early Christian author delayed for two centuries, with a longing for the simplicity of the language of the Bible, and that it is only against his will that he summons up rhetorical and dialectical brilliance against the Gnostics' instruments of persuasion. Tertullian made one attempt, in his treatise *On the Testimony of the Soul*, to demonstrate how much he despises the otherwise so trustworthy method of convincing opponents by turning their own logic against them. He practices the maxim “Nobis curiositate opus non est post Christum” [After Christ, we have no need of curiosity] by excluding the very zeal for knowledge (*magna curiositas*) with which the Christian apologists wanted “to extract testimony for the Christian truth from the most widely known writings of the philosophers, poets, and other teachers of worldly erudition and wisdom.”

The *magna curiositas* stands at the beginning of the treatise on the ‘simple’ self-evidence of the soul as the great reproach not so much against the heathen philosophers as against the Christian protagonists who with their inquiring diligence had subjected themselves to the constraints of the prevailing rules of argument. Against this Tertullian poses the unconscious testimony of the soul, which is just as uneducated as it is unmiseducated: “It is to you that I speak, you who are simple and unformed, unpolished and uneducated, as with people who have you alone and nothing more, the soul, just as it comes from the alley, from the street corners, from the workshop. It is your inexperience that I need, since your experience, as little as it is, is believed by no one. I want to question you as to what you bring with you into man, how you have learned to feel, whether from yourself or from your author, whoever he may be.”

The anamnesis ascribed to the soul, and to attest to which the soul is summoned, no longer has anything to do with the Platonic ‘re­membrance,’ inasmuch as it has no reference to the world; it no longer mediates between appearance and Idea but rather serves exclusively to secure the soul’s derivation from its creative origin. Thus self-knowledge as the alternative to knowledge of the world acquires a dimension quite heterogeneous to and independent of the latter. But *curiositas* too, as the contrary of such self-exploration, is not primarily
directed at the world; for Tertullian it has scarcely anything to do with the Augustinian "pleasure of the eyes" but exhibits a more 'literary' character, comparable to the vanity of education and the pleasure of dialectical activity. To this the simplicity of the *anima idiotica* [uneducated soul] is contrasted. To the extent that the cognitive appetite directs itself at nature, it is reprehensible not on account of the nature of its objects but rather because it prefers the inferior realm of the dependent and the conditioned to the immediacy of its relation to its author. Thales's astronomical curiosity is reprimanded for this metaphysical short-sightedness. The physician and anatomist, on the other hand, who is apostrophized as the *inspector curiosissime* [most curious investigator], is in danger of equating what is visible and discoverable with everything that exists and also of forgetting that his object is altered by death and dissection and is consequently no longer able to provide an answer for every question.

Thus *curiositas* is rejected here only conditionally on account of the specific objects it prefers, to the extent that these have the concealed and concealing function of absorbing or misleading the cognitive appetite. It was in his concept of truth and the value judgment bound up with it that Tertullian defined most radically what he meant to exemplify with all of this: For man truth as such is not unconditionally worth striving for, but only the truth that refers explicitly to its divine derivation and foundation and is represented in relation to that origin. If one wants to know something about the soul, then one must rely on its author: "Quis enim revelabit quod deus texit?" [For who will reveal what God has hidden?] This has the appearance of an epistemological reflection. But that is not what concerns Tertullian; what he wants is to transform the act of knowing into an act of acknowledgment. This rigoristic interest in form makes the possession of truth irrelevant for man in comparison to submission to its absolute master: "Praestat per deum nescire, quia non revelaverit, quam per hominem scire, quia ipse praesumpserit" [It is better to be ignorant through God because He has not revealed than, because man himself has presumed, to know through man]. Even knowledge about the soul loses its value, even if it is the truth, if it does not derive from the legitimate source of divine revelation but rather from man's presumptuous authenticity. Freely chosen *ignorantia* [ignorance] can thus become an act of acknowledgment of the exclusively divine right of possession of the truth and disposition over it.
Chapter 4

The value of truth, for Tertullian, is formal, not material: Not that one may expect accurate objective statements only from God—but only what one receives from God is the obligatory and beneficial truth for man, and it is so only because one receives it from Him. Hence Socrates’s daimonion [genius, guiding spirit] could not convey any truth, no matter what it said, because its essence was praesumptio, not revelatio [preumption, not revelation]: “Cui enim veritas comperta sine deo?” [For to whom is truth revealed without the aid of God?] What it is necessary for man to know is shown to him only by its source; all ‘knowledge’ consists in knowing what one does not need to know and should not strive after. Still there is also for Tertullian, as there was later for Augustine, a kind of justification and coordination of curiositas as a means to salvation. Thus the cognitive appetite was the power in the ancient authors that drove them to draw secretly from the wellspring of the prophets; but in this they were only intent on their own fame and eloquence, so that they overlooked the simplicity of the truth and converted their curiositas into mere scrupulositas [concern for minutiae]. Only it is remarkable and contradictory that the heathens’ natural appetite for knowledge of the Christian’s “hidden blessing” grows weak prematurely and they prefer not to know anything more about it, while with the Gnostics the same appetite for knowledge swells beyond measure into an enormitas curiositatis [enormity of curiosity]—a contradiction that Tertullian cannot explain without recourse to demons.

The basic idea, that the truth is God’s property and subject to His disposition, not only made theoretical curiosity appear to be a striving for an illegitimate acquisition but also combined with the technique developed by Philo of tracing Greek philosophy’s possession of truth (which had willy-nilly to be recognized) back to the concealed reception of biblical sources, that is, characterizing it as illegitimate use. From this it could be deduced that Christian doctrine demands that philosophy ‘restore’ this property to its rightful master.
and he who lays claim to it and wants to attain it under his own power puts himself in the wrong.

For Lactantius (ca. 250–ca. 325 A.D.) the truth is an *arcanum summi dei, qui fecit omnia* [a mystery of God in the highest, Who made everything], and consequently only the acceptance of divine revelation gives legitimate access to it. That God wanted to keep something secret from man, and that this is quite in keeping with the idea of His majesty, indeed that this majesty is attested precisely by the inaccessibility of the mystery for man, is the premise that remains entirely unquestioned in the context of these discussions. Here the question whether God’s keeping the truth secret in this manner could be intended as beneficent protection of man does not yet play any role at all; for this kind of motivation is not necessarily already implied by the fact that the information that is necessary for human life is excepted from secrecy and made easily accessible for man. This is especially true if one proceeds from the ancient assumption that the securing of vital necessities can be only the *terminus a quo* [starting point] of the theoretical attitude. Against those who nevertheless wanted to investigate what was not granted to them, God had protected Himself by making man the last of His creations so that he should not acquire any insight into the process of creation. This observation is directed against Epicurus’s denial of creation, which among other arguments had used that of the unimaginability of how it was done.

The idea that God had wanted to deprive man of insight into the work of His creation and had consequently made him the last of His creations must have alarmed its author almost before he had written it down. Without wanting to relinquish entirely the point aimed at Epicurus, he gives it a turn toward thoroughly customary Stoic teleology: Man could hardly be introduced into the world before it was completed, for how should he have kept himself alive in an unfinished world? And vice versa: If man had been able to live in the world before it was completed, then everything that would have been created after him could not have been created for his sake: “Itaque necesse fuit, hominem postremo fieri... illius enim causa facta sunt omnia” [And so it was necessary for man to be made last... because everything was made for his sake]. But if it was impossible for this reason to introduce man into the world any earlier, then the interpretation of man’s position at the end of creation directed against Epicurus loses its basis. The pragmatic teleology benefiting man, expressed in his
position at the end of creation, is supposed to appear to him as gracious compensation for the fact that the jealous withholding of the mystery of the Creation leaves his theoretical curiosity unsatisfied.

The mortgage of Gnosticism falls on man; he is the one affected by exclusion from cognizance of the act of creation, an exclusion originally meant to demonstrate the impotence of the demiurge with respect to the 'accomplishment' of the work of creation. The human spirit is 'taken into custody' (quasi custodia) by the body precisely so that it cannot 'see everything,' and in view of such a painstaking exclusion from the secrets of nature, it would be foolish to inquire after what has after all been removed into the realm of the unreachable.\(^{81}\)

The more subtle form of divine jealousy regarding the secret of the Creation is the elimination of the Platonic presupposition of the demonized Gnostic demiurge: He is able to set up the world and counterfeit its ideality only because kosmos [order] is thought of as an objective, universally accessible stock of realizable possibilities, which the demon no less than God can take as his 'prototype.' Only when one makes God the 'inventor' of the world can one dispute the demiurge's insight into the world concept, which is now a 'subjective' plan, and thus call into question his ability to usurp the genuinely divine competence. This crucial step toward the conception of spiritual originality was first made, for purely defensive purposes, by Irenaeus.\(^{82}\) Since 'having the idea' and doing the deed coincide, the hypostatic preexistence of the ideal cosmos is abolished and the world eidos [Ideas] becomes a 'fact' that is no longer intelligible. But this means that every claim, even the human one, to the intelligibility of nature must be rejected because it would allow demiurgic activity (human as well)—secondary creation—to appear possible in principle. Thus a basic decision is made in the opposition to Gnostic dualism, a decision that was to determine not only the Middle Ages but also the beginning of the modern age, with its rebellion against this decision.

Truth can no longer be metaphorically represented by the brightness of daylight, which makes everything visible—both what there is and how it is—but figures rather as a hoard held in reserve, from which only so much is given out as is vitally necessary for man. The divine sphere of majesty and the human sphere of need are clearly differentiated. At the same time man may by all means inquire after his
happiness; indeed, in good Hellenistic fashion, this very question becomes the norm for the restriction of his cognitive will: “Quid ergo quaeris, quae nec potes scire, nec, si scias, beatior fias?” [What then do you seek, which it is neither possible for you to know, nor if you knew it, would you be made any happier?]

In one essential respect, however, as a result of his Stoic assumptions, Lactantius stands outside the anti-Gnostic tradition of curiositas: in his description of man as contemplator caeli [observer of the heavens]. True, Socrates is praised as the prototype of the overcoming of curiositas, and he is given credit for having been more prudent than others who thought they could grasp the essence of things with their mind and whose foolishness and impiety consisted in the fact that with their curiosity they wanted to penetrate the secrets of heaven’s providence. But at the same time he is blamed for the remark attributed to him that what is above us does not concern us because by this means he (supposedly) wanted to divert the essentially human direction of gaze, which is at the starry heavens. Here it becomes evident that the Stoic tradition was suited not only to retrieving astronomy from the realm of objects that are characteristic of curiositas, to which it had been consigned by the defense against Gnosticism, but also and especially to recovering the metaphysical justification of astronomy’s pretension to truth. However, in Lactantius the contemplatio caeli [observation of the heavens] is taken into the service of religious experience to such an extent that one could speak less of a theoretical relation than of a relation of ‘encounter’: “Man is induced to observe the world by his upright posture and his upward-facing countenance; he exchanges looks with God, and reason recognizes reason.” This definition of contemplative experience as something in the nature of ‘physiognomic’ dialogue leaves no room for mere theoretical curiosity. Thus here also the typical late-antique atheoretical attitude is preserved, in that the expectation that is operative in this vision is understood as one of existential fulfillment freed from the affliction of questioning.

The highly original ‘systematic’ classification of intellectual curiosity by the “false father” Arnobius, whose work Against the Heathen may have been produced soon after 303 A.D., remained without any noticeable influence on Augustine, and thus on the further elaboration of the curiositas theme. For him the discrepancy between the natural pretension to knowledge and the actual capacity for knowledge (which is seen as quite narrowly restricted) is one of the strongest arguments against the dogma of the divine origin of man. Again and again he
confronts man’s real situation with the richness and easy acquisition of knowledge that could be expected on the assumption of the divine origin of the soul. Arnobius asks ironically whether the king of the world dispatched the souls, so that only obscurity should confront their desire for knowledge of the truth about things. In his will to knowledge, man exercises no well-founded entitlement.

Arnobius takes it as the core of Christian revelation that man was not indeed created by God, but the gift of immortality can fall to his lot to the extent that he proves himself morally. From this he derives a maxim of theoretical resignation that approaches Skeptical abstention from judgment, in accordance with which even the alternative question that unavoidably presents itself, whence then did the human soul actually come, must remain a *tenebrosa res* [shadowy matter], a mystery enveloped in blank obscurities (*caecis obscuritatibus involutum*). The teleological economy of knowledge, as established in Cicero’s temperately balanced coordination of Skepticism and Stoicism, is sharpened into the blunt demand that man should leave alone everything that has nothing to do with the earning of immortality: “*Suis omnia relinquimus causis*” [We leave all things to their own causes]. Here the element of ‘care’ is again perceived as central to *curiositas* and understood as a misleading of man’s concern for himself. Curiosity is not the sheer sensuous pleasure of the busybody’s inspection and questioning of things but rather a disoriented perplexity regarding one’s own position with respect to the world. The acceptance of revelation becomes a liberation from this burden of supposedly vital problems.

It is not an accident that we come across traces of Epicurus’s thought in Arnobius, in the form of numerous allusions to Lucretius. The neutralization of theoretical concern about the world and the lack of relation between worlds and gods provided Arnobius with his model. This dependence does not by any means exclude Gnostic connections because the Gnostics’ demiurge and Epicurus’s atomistic accident, which has nothing to do with his gods, can very well act systematically as substitutes for one another. This explains a contradiction that already appeared to be present in Epicurus’s system between the irrelevance of the object called “nature” and the extent of the theoretical preoccupation with it. In Arnobius this inconsistency is repeated: No logical bridge can be constructed between the passage where Christ appears as a teacher of natural philosophy too and numerous others where such questions are explicitly consigned to indifference. The Epicurean
presuppositions are further reflected in an element that gives Arnobius a special position within the tradition of *curiositas*, which is his explicit rejection of self-knowledge and curiosity about the world as mutually exclusive alternatives: Man has no access to his origin and thus to his own nature; he is an *animal caecum et ipsum se nesciens* [blind creature, ignorant of himself]. The evidence of what is obligatory for him leaves no room at all for access to what he is. One might say that Arnobius adds to his resistance to theoretical curiosity the radical extirpation of all tendencies from which the function of a ‘world view’ could accrue to Christianity.

Arnobius resists submitting the Christian revelation to the test of whether it can answer the questions that philosophy has raised and has not answered; although the heathens would have had to admit their inability to answer the questions about the origin of and the reasons for many things, they made the same admission on the part of the Christians into a reproach against them: “Qui quae nequeunt sciri, nescire nos confitemur . . .” [We are the ones who confess to not knowing what cannot be known]. Arnobius evidently wants to raise Christianity above a function into which its own apologetics had pressed it, namely, offering to the surrounding late-antique world, which was resigned about its own abilities, a solution of the traditional problems ‘by new means,’ and thus functioning as the final form of philosophy. In contrast, the admission of the inaccessibility of the objects of theory especially was meant to turn and to concentrate man’s self-understanding radically on its single real possibility. The Epicurean neutralization of nature now no longer serves liberation from fear but rather the setting free of moral energy and its exclusive interest in immortality. If ‘natural-philosophical’ communications are also attributed to Christ, then this accentuates precisely the futility of the ‘natural’ cognitive appetite, the indulgence of which forces history into an apparent continuity that it can no longer have after Christ. Thus *curiositas* becomes an inducement to the concealment of the heterogeneity of Christianity and to its transformation into a system of propositions amounting to a ‘world view’; the critique of curiosity is here functionalized for the self-understanding of Christianity with a precision that remained isolated and without influence.
Curiosity Is Enrolled in the Catalog of Vices

Again and again the question has been asked, at what point in his spiritual biography did Augustine's 'real' conversion take place? If it is correct, as I propose, to understand his transition from Academic Skepticism to Neoplatonism simply as a reactivation of the 'Platonic remainder' in dogmatic Skepticism, and if we must recognize a high degree of continuity between his Neoplatonic and his early Christian phases, then the turning point shifts back to his alienation from Manichaean Gnosticism. Locating the break in the spiritual process at this point is also—in fact is especially—apt in relation to the problem that is our topic here: the foundation of the medieval *curiositas* complex. This is already evident from the way in which, in the retrospect of the fifth book of the *Confessions*, Augustine broadens his critique of Manichaeism into a generalization of the tendency to shield himself against philosophy, a generalization that certainly cannot be justified solely on the basis of disillusionment with Gnosticism but in fact runs directly counter to the immediate lesson of that disillusionment. This makes the argumentation many leveled and complicated.

On the occasion of his encounter with Faustus, the Manichaean, Augustine claims to have recognized the slight value of the Gnostics' cosmological speculations, specifically through a comparison, unfavorable to Gnosticism, with the precisely calculated astronomical predictions of the 'philosophers.' This would have been a plausible argument against the Gnostics but at the same time an argument *in favor of* philosophy. But Augustine does not want his reader to be led
to this obvious inference; the turning away from Gnosticism must not appear as a repetition of the philosophical ‘conversion’ as it had been presented in the fourth chapter of the third book of the Confessions. In order to avoid this result, Augustine builds a step into the argument of this passage that would otherwise be totally unmotivated here: the philosophy that has just made such a favorable appearance, thanks to its cognitive accomplishments, in contrast to Gnosticism, now acquires a seductive attraction and is characterized as an attitude that is endangered and dangerous in its innermost nature. Its ability to give exact prognoses regarding the most exalted object in the world, the starry heavens, exposes man to the danger of self-admiration, of autonomous cognitive security, of impia superbia [impious pride].

It is not its object that constitutes the danger of the philosophical attitude but rather the authentic power—inferrered from the mastery of the object—of the human intellect, whose origin man ascribes to himself without acknowledging it as the creation and gift of his Author. Augustine puts this in terms of his characteristic metaphor of light: The man who knows is not himself the light to which he owes the intelligibility of his objects, but himself stands in the light, of whose full truth potential he ‘deprives himself when he ascribes the origin of this light to himself. In the moment in which he is able to predict the future eclipses of the sun, he guarantees the present eclipse of his own illumination.

The antithesis that pervades the tradition of curiositas since the anecdote about Thales between on the one hand what is nearest at hand and essentially urgent and on the other hand the humanly remote matters that conceal the former is reoccupied here: Now what is nearest at hand is the perception and acknowledgment of the dependence of one’s own capacity for truth upon illumination. The theoretical attitude is apprehended, in accordance with the exemplary model of astronomical prediction, as relating to the future and is seen as exposed in that very respect to the danger of evading the transcendent conditionality of its origin and the contingency of its presence. Reflection on this last condition of the possibility of human knowledge is opposed, as the mode of behavior of a finite being, to the essentially infinite curiositas, which passes over the simultaneous acknowledgment of the contingency implied in every acquisition of knowledge, being consumed, instead, entirely in the attraction of the object. Consequently Augustine’s God denies Himself to those whose curios a peritia [curious
skill] wants to count the stars and the grains of sand and to calculate the extent of the heavens and the paths of the stars.\textsuperscript{3}

The excursus on \textit{curiositas}, which takes up the greater part of the third chapter of the fifth book of the \textit{Confessions} and only leads back to the point of departure of the account (the disillusionment resulting from the encounter with Faustus the Manichaean) in a very short final section, makes it evident that the reason why Augustine does not consider his own path to the overcoming of Gnosticism exemplary is that the criterion of scientific accomplishment implies acknowledgment of the right to theoretical curiosity. Thus Augustine fields philosophy against Gnosticism but does not turn the field over to the victor.

The problematic that the alliance with philosophy constituted for the whole patristic tradition is reflected here: How was the critical rationality that one had employed against mythological polytheism to be circumscribed and subordinated in its turn to the religious interest? Augustine attempts to do this by subjecting reason’s theoretical accomplishment to the question of the conditions of its possibility, a question that he considers essentially theological because it points to the problem of the Creation. If this reflection is carried out explicitly and the critical autonomy of philosophy is thus neutralized by a critique of philosophy itself, then the lasting benefit of the confrontation of Gnostic cosmology with philosophical astronomy can be admitted.\textsuperscript{4} Thus the desire to know, as such, does not by any means amount to \textit{curiositas}; on the contrary, \textit{saecularis sapientia} [secular knowledge] distinguishes itself favorably from Gnostic speculation precisely by the fact that it admits of empirical confirmation, whereas Gnosticism had required assent to its statements about the world as though by a kind of faith, without pretense of verification. Thus in this passage Augustine connects the mistake that he sees in \textit{curiositas} neither with a particular object, such as the astronomical one, nor with authentically theoretical insistence on precision and verifiability but only with unreflectiveness in the use of reason, which as such already constitutes denial of the debt of gratitude for being created. With this degree of subtlety, admittedly, the idea was not capable of transmission as tradition.

In the tenth book of the \textit{Confessions}, \textit{curiositas} returns in connection with the ‘systematic’ account of his spiritual life history that Augustine gives there. Here it must be seen in indissoluble antithetical connection with the two questions, directed at himself and at God, that provide the framework of this account: \textit{Quid sum? Quid es?} [What am I? What
are You? After chapter 30 the guiding thread of the three classes of vices is dropped, and the whole of chapter 35 is devoted to *curiositas*: It represents precisely “ocular desire” (*concupiscentia oculorum*), the pure functional drive of the organ of sensation, which finds satisfaction even in the most trivial object and is defined as the futile and inquisitive appetite for sensual experience (*experiendi per carnes vana et curiosa cupiditas*). This self-satisfaction of instinct through surrender to the world of appearances dresses itself up in the great words and the images of supposed value in whose terms the human spirit conceives of its destiny and dignity, as knowledge and science (*nomine cognitionis et scientiae palliata*).

Here *curiositas* distinguishes itself from naive delight in the senses by its indifference to the qualities of the beautiful and the pleasant, since it ‘enjoys’ not its objects as such but rather *itself*, through the cognitive capability that it confirms in connection with them. Such self-enjoyment on the part of the cognitive drive is always facilitated by the degree of difficulty and remoteness of its objects, which do not present and recommend themselves of their own accord, like something beautiful. That curiosity can, in fact, become one of man’s central vices is a characteristic not only and not primarily of man himself but also of the world in which he finds himself—a sphere of obstructed immediacy and only partial anthropocentric teleology bordered by zones of hiddenness and remoteness, of strangeness and alienating reservation.

*Curiositas* is indeed a category applied in turning away from Gnosticism, but the world in which it can become a possible cardinal vice is no longer the cosmos that is open to man and symmetrically intelligible in all directions from the center but rather a sphere filled with Gnostic attributes in which man is [literally] ‘eccentric’—for nowhere in Augustine either does Stoic geocentrism play a role relevant to man’s understanding of himself.

Augustine’s world is not fulfilling but seductive, and *curiositas* is a ‘temptation’ (*forma tentationis*) in the double sense that to test oneself on and with what is resistant and uncommon (*tentandi causa*) is at the same time to be tempted (*tentatio*). In its extreme form this ‘tempted attempt’ of the appetite for experience and knowledge directs itself at God Himself, since even in religion there is hidden the attempt—the ‘experiment’ with God—to demand signs and miracles not as promises of salvation but merely to satisfy curiosity. In this attitude
God is taken into service and made into a means to the enjoyment of purely worldly experience. This makes clear what it means when Augustine again and again insists in his thinking on a strict differentiation between enjoyment and usefulness, between *fruui* and *uti*. He sees the basic character of the world in its *utilitas* [usefulness] as the instrumentality *ad salutem* [for salvation], whereas a fulfilled and fulfilling existential relation is only to be expected from the *fruitio* [enjoyment, delight] directed at God. The ordering principle of human life, which can be spelled out in the form of the ethical virtues, is fixed in the maxim that one should correctly distinguish between the usefulness and the enjoyment of things. At the same time there emerges a criterion for the positively evaluated attitude to which *curiositas* is contrasted: All theory is concerned with disclosing the instrumental relevance of the things in the world, the serviceability inherent in them. But this means that the Augustinian interpretation of knowledge of the world is no longer the ‘pure’ theory of Hellenistic philosophy.

Curiosity violates this ordering principle of use and enjoyment and betrays its content of disorder precisely by the fact that in its extreme logical consequence (as Augustine defines it), it subjects even God to the criterion of *utilitas*, so as to be able to seek *fruitio* in the human self alone. There remains the question whether the human self-enjoyment that is perceived in theoretical curiosity is equally a mistake when it stops short of the presumption of taking God into its own service. This borderline question in distinguishing between use and enjoyment is investigated first of all in connection with the relations between human beings. The biblical injunction to men to love one another is cautiously interpreted by Augustine in such a way that it does not command us to love the other man for his own sake, which after all would be equivalent to *fruitio*, because only that can be loved for its own sake that promises man the *vita beata* [life of bliss]. Now this consideration can be transferred to self-love and self-enjoyment as well: Since self-enjoyment competes with the absolute level of the *vita beata* in the self-forgetful contemplation of God, it becomes the anticipatory transposition of and surrogate for man’s existential vocation, and thus the epitome of the false conversion of the interest that underlies all action. In self-enjoyment man remains or becomes external to himself and loses his inwardness just as he does in the ecstatic possession by knowledge that is curiosity. It is said antithetically of God, in the interpretation of the story of the Creation, that He
does not take pleasure in His works but only in Himself and that the
day of rest after the work of creation is meant to illustrate this fact;
man’s mistake is that he parts with himself in his works and cannot
really ‘rest’ from them in himself.9

When we return from this digression on the regula dilectionis [rule
of love] to the central passage, book 10, chapter 35 of the Confessions,
some light is shed on the catalog of the levels of curiositas: After amuse-
ment at a mutilated corpse, theatrical shows are mentioned, and from
here a transition to investigation of nature and to the magical arts is
found.10 The riddles of nature, to which the mere desire to know
applies itself, are characterized as objects that lie praeter nos [beyond
us], in the double sense that neither are they seen from the point of
view of their utilitas nor do they relate to man’s self-knowledge. In-
vestigation of the things that nature does not make openly accessible
to man is of no use to him. This proposition involves the teleological
assumption, familiar from Cicero, that the degree of a thing’s theoretical
accessibility indicates its ‘natural’ relevance for man. When he goes
beyond this region of what lies open to him, he obeys the cognitive
appetite that is justified by no other interest.11

The appeal to nature proves itself here, as so often, to be an am-
biguous type of argumentation, whose self-contradiction Augustine
seeks to avoid by not attributing a natural status to man’s inherent
cognitive appetite but instead interpreting that appetite—as always
where cupiditas is applied—as a consequence of the condition of man
having fallen away from his original nature as a result of his original
sin. The first sentence of Aristotle’s Metaphysics has become, through
the omission of “by nature,” a description of man’s status defectus
[failed, defective condition]. On this assumption, confirmation by the
“predilection for sense experience” can no longer be a “sign” from
which the vindication of the disinterested purity of the theoretical
attitude “independent of need” can be obtained. The grasp at the
‘tree of knowledge’ caused the unregulated cognitive appetite to de-
generate into the vana cura [futile care] of a godless state of being
fallen into the power of the world.

Admittedly the systematic consistency of the idea of curiositas found
in the Confessions cannot be confirmed in Augustine’s work as a whole.
He does not always see the cognitive appetite as a particular inner
condition of the subject. The definition in terms of particular realms
of objects that was so influential in the tradition is not only a mis-
understanding of the Augustinian texts, however much it may miss
the heart of his conception. Seen from a biographical-genetic point
of view, the objective definition of this human characteristic seems to
be the earlier one. When, following Cicero, he associates the self-
restriction of the cognitive appetite with the virtue of temperantia [tem-
perance], the lapse from this moderation is not an inner disorder of
the subject but rather is brought about by the attraction of the physical
world operating through the eyes. Here again a basic structure of the
Gnostic concept of sin survives: The forgetting of the origin and destiny
of the essential spiritual core of man (the pneuma) was understood by
Gnosticism not as an inner event but rather as the concealment and
overlaying of memory—which is to say, of metaphysical self-
orientation—by envelopment in worldly things, by diversion and dis-
persion in what is given and obtrudes itself from outside.

This Gnostic frame of reference makes it clear—just as does the
Neoplatonist frame—why in the tenth book of the Confessions, curiositas
appears as the negative correlate of memoria. Only by memory can
what gets lost in dispersion be grasped; memory gives man the authentic
relation—which makes him independent of the world—to his origin,
to his metaphysical ‘history,’ and thus to his transcendent contingency.
Memoria and curiositas relate to one another like inwardness and out-
wardness, not, however, as alternative human ‘modes of behavior,’
but rather in such a way that memory as actualization of one’s essence
is suppressed only by the forcefulness of the world’s influence upon
one and can assert itself to the extent that this ‘overstimulation’ can
be warded off and dammed up. The soul is inwardness, as soon as
and insofar as it is no longer outwardness; it is memoria, insofar as it
does not lose itself in curiositas. Memoria, which as the original ground
of the soul corresponds in Augustine’s Trinitarian analogy to God the
Father, stands for the fact that all thinking, insofar as it is not occupied
and diverted by ‘objects,’ would have to be something that thinks
itself. Only then would it represent the likeness of a God Who had
been conceived, since Aristotle, as a thought thinking itself. If one
pushes Augustine’s premises to their conclusion in that way, then, in
comparison, his formulas for curiositas still depend on those that were
coinced earlier in the tradition and thus fall short of their logical
consequences.

The illusion to which man subjects himself when he surrenders to
his unbridled cognitive drive is also characterized by Augustine in its
limiting case as the transposition magic toward which we earlier saw Philo direct his suspicion of the "Chaldeanizers." "There are some individuals," Augustine writes, "who, having abandoned virtue and not knowing what God is nor the majesty of his eternal and immutable nature, suppose themselves to be engaged in a great enterprise when they busy themselves with intense and eager curiosity [curiosissime intentissimeque] exploring that universal mass of matter we call the world. Such pride is engendered in them in this way, that they imagine themselves dwelling in the very heaven they so often discuss."\textsuperscript{14} True philosophy, which is love of and zeal for wisdom, arises from the gift of moderation, which protects one against curiosity.\textsuperscript{15} The soul's legitimate path is not the arrogant flight to the stars but rather the humble descent into oneself and the resulting ascent to God. Those who thirst for knowledge have not recognized this path, and the reverse befalls them: They believe themselves to be placed among the stars in their exaltation and enlightenment, and for that very reason they plunge back to earth.\textsuperscript{16}

This hyperbole for the delusion of the ecstatic cognitive appetite that considers itself equal to what is inaccessible is indeed directed against Gnosticism and its claim to have been initiated into cosmology, but at the same time it is peculiarly clairvoyant with regard to astronomy's influence on consciousness as it was to be manifested at the beginning of the modern age. Nicolas of Cusa, Copernicus, Giordano Bruno, and Galileo will find for this the expressive formula that the world has been elevated to the status of a heavenly body. It is true that the idea of creation implied the suspension of the ancient separation between terrestrial nature with its changeability and transience and the stellar region of eternal stability in favor of the idea of a homogeneous world; but this implication was fundamentally an extension to the whole universe of the metaphysical characteristics that had earlier been ascribed only to the earth, and thus something like the 'tellurization' of the special nature of the heavenly bodies. The early modern 'stellarization' of the earth reversed this implication and thus provided the metaphor for a self-consciousness that had been made thematic in Augustine's condemnation of astronomical curiosity.

Augustine had discovered, in connection with his disappointment with Gnosticism, what an impression the exact calculations of the 'philosophical' astronomers could make. This competition between a system of faith and science preoccupies particularly the exegete of
the story of the Creation. He believes that he should prepare his readers for the fact that even a non-Christian can possess, on the basis of reason and experience, highly certain knowledge about the earth and the heavens, about the elements of the world, about the movement and circulation, size and distance of the heavenly bodies, about eclipses of the sun and moon, about calendar reckoning, about animals, plants, minerals, etc. The Christian, who should not intensively interest himself in such questions, should nevertheless not compromise his conviction in the face of such knowledgeable people by foolish assertions. Thus Augustine's exegesis of Genesis too is meant to provide speculation that is more spiritual than cosmological and to dismiss or to leave open, rather than to answer, the theoretical questions, that is, to practice what he calls *moderatio pia* [pious moderation]. He himself characterizes his exegesis of Genesis as having offered more questions than answers. One need not count on God's having wanted to communicate more to man than is necessary for his salvation. How much astronomy could nevertheless be included in such an economy of salvation was to be proved by the importance of the question of the calendar and the dating of the Easter celebration; so as time indicators Augustine counts even the heavenly bodies among the *utilia* and *necessaria* [useful and necessary things] benefiting man. It does not occur to him that the problem of time determination could not be solved independently of a model of the cosmos; he explicitly counts the question of the form and construction of the heavens among the problems that need not concern the man who is intent on his salvation. In this context Augustine can perfectly well speak as though such cosmological problems could be solved with a sufficiently intensive effort; but for him the expenditure of time is indefensible.

Waste of time seems at first glance to be quite a superficial standard for the legitimacy or illegitimacy of posing purely theoretical questions. But in this criterion the conceptual pattern of *curiositas* reappears: In the boundlessness of his cognitive will, man denies his finitude precisely in his dealings with time by behaving as though he does not need to apply any measure or to bring forward any justification here. If the modern idea of science will be characterized by its forgoing an evaluation of its objects and a distinction between what is worth knowing and what is a matter of indifference, this will only be possible through the elimination of this very objection based on the finite time given to the subject, an elimination accomplished by the integration, through
'method,' of a potentially infinite sequence of inquiring subjects active in temporally extended functional complexes—subjects whose individual lives and needs (in regard to truth) can be neither the point of nor the standard against which to measure the totality of knowledge to be realized.

To both the ancient world and the Middle Ages, a knowledge that neither related to nor could be made to relate to the capacity of the individual and his existential fulfillment was still an altogether remote idea. The basic idea of the teleological serviceability of natural objects that are available and can be singled out from the whole had excluded the possibility that only a knowledge directed at the whole of nature could enable man to assert himself in his personal existence both against and by means of nature. Only the metaphysical suspicion that nature could function without regard to man in its lawfully regulated processes makes urgent and necessary a knowledge of nature that can examine each state of affairs merely for its potential relevance to man and that must therefore reject the criterion of the 'appropriate expenditure of time' as a point of view associated with a teleological contemplation of the world. Once theoretical observation of the world could no longer be regarded as satisfying the human need for happiness, the demonstration of the equivalence, in relation to man's interests, of various physical and cosmological theories was sufficient and conclusive argument for the view that further insistence could no longer justify the expense.

Significantly, in demonstrating this view Augustine makes use of the very question whose definitive solution more than a millennium later was to orient and confirm the self-consciousness of the modern age: the question whether the sphere of the fixed stars stands still or moves. To those of his fellow believers who worried about this question in view of the biblical expression firmamentum [firmament: literally, support], Augustine replies that its solution would require ingenious and laborious investigations, to enter into and carry through which he lacked the time, and so should they. For the rest, those who treated such questions—with just as much curiosity as leisure—had found that the perceptible movements of the stars could be explained equally well on either assumption.24

The distinction accorded to astronomy as the critical objective referent of curiositas has, however, another aspect in addition to those discussed so far. This aspect again is directed less at the Gnostic cul-
tivation of cosmic speculation and its ‘useless questions’ than at the
astronomy of the philosophers, which had had the initial effect of
creating disenchantment with Gnosticism. It is characterized by the
exact prediction of stellar phenomena and the use of numbers, that
is, in the widest sense, by measurement. When the human
pretension to knowledge gives itself access to the dimension of the future, in
phoronomic astronomy, it presupposes an unalterable regularity of
nature. For Augustine that means that God’s free and autarchic dis-
position over His creation is thought of as being excluded by an act
of self-restriction.

Augustine deals with this problem exhaustively in a very remarkable
context in book 21 of his City of God, namely, in connection with his
discussion of the question of the physical possibility of the eternal
punishment of the damned. Of course, the ultimate ground of belief
in this possibility is divine omnipotence, which has sovereign disposition
over everything that can befit its creations ‘by nature.’ But this reference
directly conflicts with the ancient world’s traditional concept of nature,
with the elementary assumption of a cosmos that persists irrevocably
in its regularity. “To what shall I appeal,” Augustine asks, “in order
to persuade unbelievers that an animated and living human body is
capable of not only continuously evading dissolution by death but also
enduring even the torments of eternal fire? They refuse to be referred
to the power of Omnipotence, but demand to be persuaded by an
example.” The unbelievers’ objection that something could only be
considered possible if it could be confirmed as actual by experience
is supported by the characteristic and unquestioned premise of ancient
philosophy that the world as a whole exhausts all possibilities and at
the same time lies open and accessible to human experience. The
apologist has to conform to this premise and is thus himself forced
into the curiositas that is on the lookout for what is extraordinary and
strange in nature. The assertion that there are wondrous things (miracula)
in nature encounters the objection that these are nevertheless only
nature in those of its workings that are unknown to us and therefore
appear extraordinary. Augustine deals only superficially with this
argument, which he himself accepts as conclusive, by laying himself
open to the objection that he has appealed in support of the naturalness
of the miracula to the same omnipotence that he wanted to demonstrate
by pointing to them. No less problematical is the appeal in defense
of the miracles in nature to the miracle of the creation of nature. For
this supposed *fortior ratio* [stronger argument] not only presupposes what it is meant to prove but also includes the contradiction to which the Enlightenment particularly enjoyed calling attention that the absolute status of the first, universal 'miracle' is made questionable by the later occasional breaches of order.\(^{28}\)

The inconsistency of Augustine’s argumentation is itself very significant: On the one hand, he can provide himself with a basis on which to deal with unbelievers and with their concept of the cosmos only by making a point of holding to the regularity of the world and regarding supposed miracles as appearances due to regularities unknown to us; on the other hand, he fears a lawfulness to which appeal can be made, which would give legitimacy to the human inquisitive drive and would leave behind it, on account of its insistence on rationality, only a restricted acknowledgment of God’s free will.

This vacillation due to heterogeneity of motives becomes especially evident in the discussion of a mythical phenomenon of the heavens. In Varro’s *Roman Genealogy*, an account is given of an alteration in the color, size, shape, and path of the planet Venus in the early epoch of the kings, a unique phenomenon never observed before or after. This testimony is cited in order to show the possibility of a natural object at a particular point in time exhibiting behavior different from what it had been seen to exhibit at all other times and what had been held to be its essential nature. From such a beginning, he could quite well have gone on to explain the unusualness of the phenomenon as subjective, in accordance with the formula that the miracle contradicts not nature but merely the nature that is known to us.\(^{39}\) This would indeed have meant a broadening, but not an alteration, of the ‘cosmos’ concept: The regularity of nature would have been assumed as not indeed universally verifiable but still pregiven in principle. But Augustine does not hold to this line, and it was to have incalculable consequences for the history of Christian theology that he feared involvement in the cognitive pretension and in the exclusion of voluntarism more than he sought rationality. “So great an author as Varro,” Augustine writes, “would certainly not have called this a portent had it not seemed to be contrary to nature. For we say that all portents are contrary to nature; but they are not so. For how is that contrary to nature that happens by the will of God, since the will of so mighty a Creator is certainly the nature of each created thing? A portent, there-
fore, happens not contrary to nature but contrary to what we know as nature.”

So far he seems to have succeeded in reconciling to some extent the rationality of the cosmos and the volitional nature of the biblical God. But evidently this result does not satisfy Augustine’s theological zeal, and consequently he forces the concept of law and the metaphor of the ruler into an antithesis that is certainly unexpected after what has just been said: “What is there so arranged by the Author of the nature of heaven and earth as the exactly ordered course of the stars? What is there established by laws so sure and so inflexible? And yet, when it pleased Him Who with sovereignty and supreme power regulates all He has created, a star conspicuous among the rest by its size and splendor changed its color, size, form, and, most wonderful of all, the order and law of its course!” It is not evident at first glance why Augustine goes further here than is required by his premise of the subjectivity of ‘miracles’ in nature. But on closer inspection it turns out that the train of thought contains a point directed against curiositas: Augustine believes that he has found the meaning of God’s forcible intervention in the lawfulness of nature in the fact that it breaks through and frustrates the presumptuous claim of scientific exactitude to know the laws of nature and with their help to predetermine events: “Certainly that phenomenon disturbed the canons of the astronomers, if there were any then, by which they tabulate, as by unerring computation, the past and future movements of the stars, so as to take upon them to affirm that this which happened to the morning star (Venus) never happened before nor since.”80 The mythical event reported by Varro is set alongside the sun’s standstill in the Book of Joshua, which was so offensive to the early modern age; but it is not suggested that the biblical talk of the movement and standstill of the sun contains information about, and obliges us to acknowledge, a particular cosmological system. Only the sovereign act of intervention, putting in question all claims to theoretical ‘exactiness’ (inerrabilis computatio), is seen as the point of the story.

Nature is not set free as the final authority and embodiment of everything dependable, on which the human relation to reality can be based. The conflict between the idea of the cosmos and voluntarism is decided for the Middle Ages, and at the same time those premises are designated, by implication, whose secural had to become necessary
in order to constitute an idea of science that was to make the absolute dependability of nature a condition of human self-assertion.

That scientific knowledge *prescribes* laws to nature—this triumphant formulation of the outcome of the physics of the modern age—is suspected by Augustine as the secret presumption of theoretical curiosity and imputed to it as the essence of its reprehensibility. He wants us to perceive in the 'extraordinary' happenings in nature above all the warning that knowledge of nature may not draw from even the most exact observation of the regularities in the phenomena the conclusion that God may be bound to these rules and that they may be prescribed to Him, as though He could not bring about an entirely different state of affairs from the one that appears to cognition to be lawfully regular.\(^3\)

Perhaps even more instructive than what explicitly decides the matter for Augustine in favor of the voluntarism that renders consciousness of reality insecure is what is *not* present as motivation and argumentation for this decision. The discussions that have been cited from the *City of God* could still allow the impression that the paralysis of the ancient trust in the cosmos was not an essentially conditioned and internal consequence of the Christian system of categories. Augustine argues from the concept of creation: The right of intervention is the author's right of disposition. He could with still more theological reason have brought forward the eschatological argument: The partial revocation, through the *miracula*, of the natural order posited in the Creation only anticipates and, as it were, announces the radical revocation of the Creation in the destruction of the world at the end of time. But eschatology not only had largely been repressed from Christian consciousness by the nonarrival of the repeatedly proclaimed final events but was also (for its supporters) the uncomfortable scandal of the unconverted surrounding world. It was not, after all, accidental that Christianity was held responsible for catastrophes of and deviations from supposedly unshakable institutions and orders, since the catalog of signs of the coming end of the world could quite well be interpreted as betraying an 'interest' in the disintegration of the world order. Thus the reproaches directed at the Christians can be summarized in the formula that they were the causes of the world's departure from its laws.\(^2\) Augustine finds the Christians being held responsible even in a figure of speech—for the failure of rain to appear: *Pluvia defit, causa Christiani*.\(^3\) The connection that had originally been established by Christianity between its appearance in the world and the "sign in the
heavens” announcing the world’s destruction had to appear, on the assumptions of the still influential idea of the cosmos, as the suspect proclamation of a hoped-for ‘disorder.’

To the surrounding Hellenistic world in the time of the Caesars, the right of the Ruler of the World to arbitrariness vis-à-vis His creation could be made plausible more readily than the much more threatening meaning of the supposed miracles as announcements of the revocation of the existence of the world as whole. But just this concealed radicalness stands behind the disputes over the right of curiositas to guarantee itself the future of nature under laws. Dependability, rational constancy, regularity are characteristics of a concept of nature that does not want to admit the world as a metaphysical episode stretched between beginning and end, between creation and destruction. As the behavioral correlate of this concept of nature, with its insistence on man’s intraworldly possibilities, curiositas is definitively entered by Augustine into the catalog of vices.

Translator’s Note

a. The Latin tentare means to try, to attempt, to test—or to tempt, incite, etc. The German Versuchen has the same thorough ambiguity, which is only faintly suggested by the similarity of “tempt” and “attempt” in English.
Difficulties Regarding the 'Natural' Status of the Appetite for Knowledge in the Scholastic System

The Scholastic reception of Augustine's ideas about *curiositas* can be characterized first of all as a loss of differentiation and a detachment from their genuine motivation. The passages, which were originally embedded in a complex context but often lent themselves to citation because of their rhetorical formulation, are boiled down into 'sentences' and appear as verdicts of 'authority' in the Scholastic questions. The loss of substance in the process of tradition facilitates the change of function. Even where the Scholastic handling of a problem meets high standards in argumentation, the biblical or patristic authorities cited are mostly of questionable relevance; this is sufficiently explained by the fact that in Scholasticism there appear systematic pretensions, and questions developed from them, that demand too much from authoritative texts deriving from an entirely different technique of thought. There are other circumstances as well that had blunted the original problematic of *curiositas* for the Middle Ages; this applies particularly to the position of astronomy, and thus to an exemplary objective reference of the Augustinian *curiositas*.

The position of astronomy in the Middle Ages paradoxically had been weakened precisely by its classification in the obligatory educational system of the liberal arts. Due to the fact that the disciplines of the trivium and the quadrivium had become the propaedeutic curriculum of every course of study, geometry and astronomy underwent the fate that tends to be necessarily bound up with the supposed blessing of propaedeutic 'required courses,' namely, a leveling down
into a burdensome first step, to be quickly surmounted by means of formal expedients, on the way to what appears to be really important. Certainly mistrust of astronomical curiosity is the root of the theoretical stagnation of this science over centuries. But such mistrust became latent under a layer of the employment of the view of the starry heavens for edifying purposes. Occasionally it can happen in the Vita [Life] of a pious man that his astronomical curiosity is mentioned as an episodic attraction, a quickly abandoned byway among dangers happily and mercifully surmounted.1 Or the touching and at the same time very characteristic story is told of Odo of Tournai (who died in 1113) that the master followed the course of the stars with his students far into the night, pointing them out with his finger, while the assurance is explicitly added that this observation of the heavens took place ante ianuas ecclesiae [before the doors to the church].2 Or the comforting connection is established between the course of the stars, obedient to God, and man, who is bound to the same obedience to God's commandments and to whom the heavenly bodies are meant to serve pro miraculo pariter et exemplo [equally as a miracle and as an example].3 This seems remote from any thought of conflict.

Conflict about the interest in theoretical knowledge broke out when, after the saeculum obscurum [dark age], in the eleventh century, under the influence of Boethius especially, the ancient philosophical tradition again gained ground and (to begin with) the literature of logic determined the development of Scholastic practice. The reciprocal action characteristic of the reception of ancient philosophy throughout the Middle Ages can be observed immediately in this first phase of Scholasticism: At first the ancient authors are taken into service instrumentally, so as to provide means of argument for theology; but the heterogeneous medium for its part immediately begins to have a normative influence on the theoretical pretension, which unfolds its immanent rationality.

The rigorous carry-over of dialectical means to the problems of theology provokes a theological reaction whose first high point can be seen in the thought of Peter Damian (1007-1072). In the opuscule On the Superiority of Holy Simplicity over Inflated Science, all participation in access to the divine truth is denied to the “blind wisdom of the philosophers,” as summarized in the artes liberales [liberal arts]; indeed the pernicious cupiditas scientiae [desire for knowledge] is identified with the temptation of man in paradise to seek equality with God. It is
important that in this work the attack on the presumptuousness of theory is restricted to the trivium, that is, grammar, rhetoric, and dialectic; the disciplines of the quadrivium play no role. Even where Peter Damian explicitly cites Augustine's concept of curiositas as the desiderium oculorum [desire of the eyes], he gives no space to its theoretical aspect but restricts himself to enumerating plays, magic, and tempting God by demanding miracles. The core of his argumentation against philosophy is that true wisdom has no need of human expedients in order to open and show itself to those who seek it.

The real importance of Peter Damian is that in his little treatise On Divine Omnipotence he raised a theme that was to become not only central but fateful for the Middle Ages: the question of the relation between the idea of science and the concept of God, or more precisely, the question of the compatibility of the necessary presuppositions of knowledge of the world with the theological attribute of omnipotence, which pressed itself more and more into the foreground. That the general question of the relation between theology and philosophy was bound to emerge as a consequence of pursuing this concrete problematic is as yet scarcely to be suspected from this opuscule, which takes as its point of departure this quite arbitrarily, almost frivolously posed question: Utrum deus possit reparare virginem post ruinam [Whether God is able to restore a virgin after her downfall].

Here the question of divine omnipotence, which in late-medieval nominalism was to gain a destructive power against the system of Scholastic rationalism and to license the thought experiments of the Ockhamist philosophy of nature, still lacks any disposition toward destruction, any relation to the problem of human freedom and certainty of reality. But Augustine's schema is nevertheless taken up again, though in a narrower framework: The human cognitive pretension, since it is directed at a lawfulness in the phenomena and has to presuppose this for its success, requires a restriction on the power and freedom, standing behind nature, of the Creator, a restriction that inevitably leads to a collision between the will to theory and religious submission.

Peter Damian sees the problem almost exclusively from the point of view of the validity of 'dialectic' for metaphysical/theological assertions. He is concerned to protest the "blind thoughtlessness" of those who pose their questions and give their answers as though the structures of language (ordo verborum) and the logical rules of disputation
...were transferable to God and applicable as unalterable laws to His dealings with the world. Human thought and human language imply a temporal reference; true assertions about past states of affairs involve the unalterability of fact; and assertions about what is present and in the future, since they are either true or false, must assume in these temporal dimensions as well that necessity belongs to their factual correlates. But theology has its own language, which brackets out temporal reference as a human, intraworldly structure and obliges one to think from the point of view of God’s eternal presence and unrestricted potential. The premise of omnipotence prohibits a clear-cut separation between theological assertions about God and theoretical assertions about nature. Omnipotence and the continual presence of the world’s course for God’s disposition excludes the kind of statements about nature in which—as guarantees of lawful dependability—the human relation to reality is alone interested and can find both theoretical and practical fulfillment.

Peter Damian sees—and this is relevant to our subject here—the motive behind the adaptation of the problem of omnipotence to the mode of procedure of the *artes liberales* as *curiositas*, as man’s pretension to knowledge, insofar as man knows that that pretension may be rendered insecure and threatened by theological premises and consequently wants to secure the metaphysical conditions of the possibility of his objects. For the first time the legitimacy of *curiositas* is disputed because it is recognized as the exposed attitude of a pretension to rational self-assertion, which subjects the theological categories to the criterion of a possible human relation to the world.

*Curiositas* is struck at the root of its legitimacy when the admissibility of its conception of its object as ‘nature’ is disputed: The nature of things is not something ultimate, but rather there is a ‘nature of nature’ that is withheld from the pretension of theory, a nature that relates to nature as traditionally understood just as the will of the legislator relates to the laws that constitute a legal order for which he can at any time substitute his command. The aspect of nature that appears to man as a lawfulness given with its existence is in reality nothing but its obedience. The supposed *ordo naturae* [order of nature] turns out to be only an *ordo verborum* [order of words]. To manifest the Author’s right of disposition over the beings He created seems more important to the religious thinker than to exclude self-contradiction from the divine world plan. Thus it is not only a matter here of a
hypothetical consideration but rather of the statement, regarded as
demonstrable from many examples, that since the origin of the world
God has broken through nature unnaturally. The same ‘miracles,’ to
expect or to demand which is the ‘temptation’ (in the double sense
that includes ‘attempting,’ testing) of curiositas, are a phenomenon that
man must accept in the world as the stigmata of its origin from
nothingness in order not to be charged with curiositas in another aspect.
Everywhere the talk is of the supposedly extraordinary things in nature;
nowhere is it of wonderment at nature’s order, which is suspected of
being the self-confirmation of theory’s claim to lawfulness.

At the end of the treatise there stands as an illustration of theoretical
curiosity the anonymous figure of the philosopher (Thales) who in-
vestigates the paths of the stars and falls into the well in the process.
The mockery of the maid is directed not so much at the theoretician
of Plato’s anecdote, who forgets the facts of his earthly surroundings
on account of the exalted and remote object of his inquiry, as at the
presumption to heavenly—which is to say, here, theological—mysteries,
now only metaphorically embodied in the heavenly bodies, a pre-
sumption that leads to delusion regarding the load-bearing capacity
of the ground on which man stands, the ground that constitutes the
condition on which he ventures into those mysteries. The context
makes quite clear how this metaphor is intended: Man is misled by
the conditions of his language and his thought into posing, and believing
himself a match for, questions to which he can only find false answers.
Curiositas is erroneous confidence in the form of thought that has
proved reliable on earth, and in the lawfulness projected from it onto
the heterogeneous object of metaphysics. 11

The High Scholasticism brought about by the complete reception
of Aristotle gives a new aspect to the problem in view of the difficulties
that were involved in the integration of Aristotelian metaphysics and
natural philosophy into the system of Christian dogmatics. The absolute
value given to knowledge in the first sentence of Aristotle’s Metaphysics
was the ‘program’ whose execution did not allow the exclusion of
natural philosophy but rather laid a foundation for the process by
which it could make its way in spite of all ecclesiastical reservations.

In the process the attempt is now made, which we saw that Aristotle
himself significantly avoided, to transfer the schema of his ethics with
its normative conception of the mesotes [mean]—that is, the localization
of what is morally right as the mean between two extremes—to the
pretension to theoretical knowledge. Albert the Great (1193–1280) rejects this transfer of the authentic application of the Aristotelian assumptions when he answers in the negative the question whether the virtue of prudentia [foresight, prudence], can be defined as the mean between the extremes of stultitia [foolishness] and curiositas.\textsuperscript{12} This denial is based on the fact that a specific objective reference is ascribed to curiositas by which it can be defined as “investigation of questions that have no importance in reality and for us.” Prudence, in contrast, is the virtue that sticks to what is objectively and subjectively important.\textsuperscript{13} But this distinction, taken in itself, must nevertheless be regarded as unacceptable from the point of view of Aristotle’s assumptions if knowledge as such is supposed to be naturally appropriate to man. Albert the Great brings this objection into play when, contrary to the authority of both Augustine and Bernard of Clairvaux, he finds the reason for the reprehensibility of humanly irrelevant knowledge in neither the object nor the act of cognition as such but rather in the knowledge’s motivation, which can be inferred from the irrelevance of the object: The man who investigates such objects, objects that have no relevance to himself, can only have an intention that is wrong in itself.\textsuperscript{14} The unstated presupposition of this inference is that man does indeed strive by nature for every kind of knowledge, and thus for every kind of object of knowledge, but that on account of the finitude of his mental capacity—which is substantially exceeded by the extent of its possible objects—he is forced to pose the question of need and to orient his cognitive interest in accordance with it.

It is evident that thereby an assumption begins to play a role in this problematic that had not yet had any significance for Aristotle. Between the subjective cognitive drive and the objective need for knowledge, an incongruence has appeared. This conforms to the medieval system because the world becomes perceptible as an expression and demonstration of divine omnipotence, and thus can fulfill its testimonial function precisely because man’s capacity for theoretical comprehension falls short of the realm of its possible objects. The Scholastic thinker can assume the lively presence of this incongruence to consciousness and infer from it that any squandering of theoretical energy on what is not important for man must be due to a morally reprehensible disposition. Thus the proof is carried out indirectly, from neither the specificity of the objects nor a devaluation of the interest in theory as such.
In Thomas Aquinas (1226–1274) the first sentence of Aristotle’s *Metaphysics* is elevated to one of the absolutely valid principles, employed in many kinds of argumentation, of Scholastic thought. The natural status of the striving for knowledge implies the evaluation “Omnis scientia bona est” [All knowledge is good]. Thomas sees that the knowledge of God that is to be ascribed to all men in accordance with the Epistle to the Romans can only be assumed, under the stricter requirements of Aristotelian proof from causality, if the unrest of the cognitive drive—which will not be satisfied by any mere datum—is acknowledged in all men as part of their constitution. Unlike Augustine, Aquinas sees knowledge of God as the fulfillment—not as a condition of the legitimacy—of theoretical curiosity, which precisely in its natural insatiability and universality seems to be the guaranteeing factor and the specific energy of the ascent to metaphysical positions. Not to be allowed to inquire under one’s own power into what is hidden would appear, in this perspective, as a denial of the capacity of the Scholastic system as a whole to perform its function. Nevertheless, it is not to be expected that within the system a basic trait of human nature could have been conceived as unaffected by that nature’s postparadisaic losses. Quite naturally, then, Thomas too discusses the question of the legitimacy of knowledge in direct connection with the theme of original sin, using the antithesis of *studiositas* [attentiveness, diligence] and *curiositas*.

It is the man exiled from paradise, for whom his own existence and the nature that is no longer paradisaically granted to him have become a pressing task, who stands over against the demands of reality in the tension between appropriate and futile care, between expedient and superfluous expenditure of his abilities and energies. In the *studiosus homo* [attentive, diligent man] we have before us the “virtuous man” [*spoudaios aner*: literally, “assiduous, earnest man”] of Aristotelian ethics. He is projected into the theological situation (foreign to his origin) of the postparadisaic life in a condition to be characterized on the whole as “effortful,” with the basic characteristic of *cura* [care] and the consciousness of the futility of trying to retrieve under his own power the lost fullness of his existence. Precisely the supplementary assumption of futility, which was not yet known to Aristotle in his definition of the “virtuous man,” must be kept in mind in order to understand that for Thomas not only restless activity but also resigned indolence
is implicated in the lapse called *curiositas*—insofar as that lapse is a mark of the postparadisaic situation of the human interest in knowledge.

Thomas sees two extremes of the theoretical attitude and has thus arrived at the possibility of systematization in accordance with the schema of Aristotle’s ethics. “As regards knowledge there is a tension of opposites; the soul has an urge to know about things, which needs to be laudably tempered, lest we stretch out to know beyond due measure; while the body has an inclination to shirk the effort of discovering. As for the first, studiousness lies in restraint and economy, and as such is counted a part of temperance. As for the second, it is praised for a certain eagerness in getting to a conclusion....” A comparison with the meaning that Augustine had given to *curiositas* shows above all that Aristotelianism has eliminated all the remnants of Gnosticism and made their continued operation impossible. In spite of the original contrariety of the tendencies (*inclinatio*) of soul and body, no opportunity for dualism can arise because the Aristotelian schema orders modes of behavior on a continuum between two extremes whose ‘mean’ possesses no specificity of its own but is defined by reference to the extremes.

Thus *curiositas* too cannot set itself off definitionally by its own characteristics but is rather in the nature of a ‘quantitative’ distortion of the cognitive will, a will that is legitimate in itself. Nor can there be too much knowledge of truth (*cognitio veritatis*) itself but only too much drivenness and industry (*appetitus, studium*) directed to this end. The stipulation already set down by Albert the Great is held to: Knowledge can only fail *per accidens* [by accident, i.e., not by its essence] to have its intended value when something objectionable and harmful results from it indirectly or when it motivates pride (*inquantum aliquis de cognitione veritatis superbit*).

The Augustinian idea of the inquiry that does not maintain the proper religious connection, the *non religioso quaeerere*, finds in Thomas a very characteristic modification and Aristotelianizing correction. He does not attribute the error of *curiositas* to the absence of a recognition of conditionality by which the subject attributes his cognitive ‘accomplishment’ in the last analysis to God but sees the *perversitas* [perversity] rather in that the subject does not trace his *objects* back to their ultimate origin: “Man desires knowledge of the truth about the Creation, without carrying it through to its proper purpose by relating it to the knowledge of God.” Here *curiositas* lies precisely in the transitoriness and pre-
maturely satisfied inconsistency of the desire for knowledge, in a lack of the ‘thoroughness’ that has to exhaust the depth of the objects in their reference to their derivation and ultimate origin.

Curiosity is superficial dwelling on the object, on the prospect of the phenomena, a dissolution into the breadth of arbitrary objective variations, which represses the cognitive claim by resting content with truths while giving up all claim to the truth. But for Thomas the responsibility of the cognitive subject no longer leaves the level of theoretical accomplishment and its persistence but rather is developed precisely on and from this level. On this basis a fundamental and specific reservation against philosophy is no longer possible. Interesting oneself in philosophy is in itself and as such permitted and to be accepted, even and especially on account of the truth that was arrived at by the philosophical ‘authorities’ before the Christian era, even if on the basis of a sort of revelation that can only be recognized as such after the fact, but whose recognition does not necessarily belong to the ‘substance’ of this truth, as had been required by Tertullian.

The special position of astronomical curiosity in the complex of the question of the appropriateness of the appetite for knowledge also has its reflex in Thomas. After all, Aristotelianism had created a special and lasting reservation for the theoretical exercise of astronomy and for its concept of truth by sanctioning the dogma of the elementally different nature of the heavenly bodies and thereby systematizing a hiatus between types of physical objects for epistemology as well. In his commentary on Aristotle’s treatise On the Heavens, Thomas uses this reservation to dismiss certain cosmological questions, for instance, the question of the provability of the actual direction of rotation of the first sphere of the heavens. “If someone exerts himself to make assertions about such difficult and obscure matters and wants to assign them causes, and thus claims to extend his inquiry to everything and to omit nothing, then this must be regarded either as an indication of great stupidity, from which arises his inability to distinguish between the accessible and the inaccessible, or as an indication that he proceeds with great thoughtlessness and ultimately presumption, from which it appears that the man does not correctly evaluate his ability in regard to investigation of the truth.”

Thomas immediately restricts this general censure by adding that not everyone who has interested himself in this way in a fruitless subject can rightly be condemned for it, but rather it still depends on
the motive from which they made their assertions. It is not the same thing if someone expresses such things from love of truth (*ex amore veritatis*) as if he does so from the need to exhibit his own ability (*ad ostentationem sapientiae*). Further, one has to ask how far he laid claim to certainty for his assertions and whether he could have made his judgments on the basis of insight exceeding the usual measure. “If someone has gone further and achieved greater confidence in knowledge of the essential causes of these phenomena than seems possible according to the usual measure of human knowledge, then thanks rather than blame is due to such discoverers of necessary causal connections.”

The admirer of Scholastic speculation may find it disappointing that for the determination of the well-tempered mean of cognitive assiduity the mutually opposed tendencies of body and soul—as the indolence that avoids the effort of inquiry, on the one hand, and the facility tending toward excessive zeal, on the other—are put to work. For those who require a specifically medieval argumentation, another question of the *Summa theologiae* offers a more extensive and more precisely suitable account. The *acedia* (indifference, apathy) that is dealt with here accommodates itself better to the syndrome of the ‘postparadisaic’ situation. Thomas uses this cardinal vice to epitomize the despondency and indolence of the man who has deviated from his vocation, who conceals from himself in this pure melancholy the seriousness of the *cura*, *actio*, and *labor* (care, action, and labor) that are his task. *Acedia* is a form of sadness that surrenders itself to its own heaviness and thereby turns away from the goal of its existence, indeed, from all purposeful behavior and ‘exertion’ whatever (*fuga finis* [flight from purpose]). *Curiositas* is only one of the forms that this purposelessness takes. Here lies the connection with its definition as inconsistency, as premature failure with respect to the demands of a reality that no longer holds itself open to man in immediate self-givenness.

The description of this mistake as straying toward illicit things, as dispersion, once again takes up the motive that in Neoplatonism had been behind the soul’s turning away from its essentially appropriate concentration on the contemplation of what is purely spiritual and that was supposed to explain the one world soul’s own multiplication of itself as a result of a surrender to the manifold of worldly things. That dispersing curiosity was the weakness of something that itself
could not become pure spirit and that consequently came to be dominated by the powers in whose force field it stood. Fulfillment and failure were determined by the direction in which vision was directed; beyond that there was only surrender to the superior power of either the spiritual or the material.

In Thomas it can be seen to what an extent the Neoplatonic diagram of external relations, the drama of turning toward and turning away, has become internalized. External seduction is seen as inner danger, foreign superior power as an immanent moral quality. Thus curiosity too is a fundamentally wicked disdain, concealing itself behind supposed justification—a disdain of the absolute object, to turn away from which and to lose oneself in dispersion constitute the definition of curiosity. When the soul allows itself to become indifferent to its highest object, to the source of its fulfillment, it indulges in a calm that it should expect only beyond earthly existence in the perfect contemplation of the only object appropriate to it. The radicalness of this error is at the same time its peculiar rationality, since this anticipatory version of the transcendent condition arises from the discontent of a finite being in his present neediness in view of the infinite riches of the Deity. It does not take seriously the preliminary nature of its want of truth but rather perceives the still inaccessible blissful satiety of the Deity as the provocation of an unfulfilled promise. Of course, to convert the promise of salvation into mere impatience and restlessness is, for the medieval author, the summit of deadly sinfulness.

This description of wickedness has phenomenological relevance to the trial of theoretical curiosity: New motivations become discernible behind the negative evaluation. The attributes of divinity have acquired anthropological importance. Theodicy no longer holds man unquestionably in the wrong, and even his sin is more than mere error—it acquires a glimmer of plausibility. Man’s competition with the Deity, his comparison of his own with the divine possessions, has become formulable as something reprehensible. Thomas compares man’s sorrow over not being God Himself (tristitia de bono divino interno) with the individual’s envy of the possessions of another (invidia de bono proximi). Curiosity would then be the sort of compensatory extravagance that provides itself with a substitute, in the enigmas and mysteries of the world, for what man has given up trying to reach. From this we can understand curiosity’s pact with the devil, which was to
make the figure of Faust into the image of the emancipation, seen in terms of medieval assumptions, of early modern curiositas.

The resignation that is expressed in the idea of acedia with respect to the absolute object that had been 'wooed' for centuries—the theological/metaphysical discouragement with respect to the God Who withdraws in His sovereign arbitrariness as deus absconditus [hidden God]—will determine the ending of the Middle Ages and the revaluation of theoretical curiosity that was essential to the change of epoch. The vice of disregarding the preliminary character of this life was to be replaced by the conception of man's theoretical/technical form of existence, the only one left to him. From melancholy over the unreachability of the transcendent reservations of the Deity there will emerge the determined competition of the immanent idea of science, to which the infinity of nature discloses itself as the inexhaustible field of theoretical application and raises itself to the equivalent of the transcendent infinity of the Deity Himself, which, as the idea of salvation, has become problematical.

What Thomas Aquinas describes as the abyss of human sinfulness, man's mistrust regarding his promised share of God's inner wealth in a next-worldly form of possession—this ultimate intensification of the discrimination against theoretical curiosity as the mere negation of theology for human self-consciousness—at the same time makes visible a new motivation, by means of which the alternative of renouncing transcendent uncertainty is defined. That which within the medieval system can only signify man's dull torpidity in the consciousness of the share in the Deity's possessions that is denied to him here and now—that is, acedia—was to become the energy and the epochal exertion of a new historical form of existence. In the perfection of Scholasticism the potential for its destruction is already latent.

In regard to the curiositas problem, Scholasticism, placed between its two great authorities, Augustine and Aristotle, got into an extremely significant dilemma. The Aristotelian affirmation of the appetite for knowledge, on the one hand, and the restriction commanded by its Augustinian classification in the catalog of vices, on the other, appear to introduce into the system a contradiction that can only be reconciled or concealed by ingenious sophistries. But here one should not rely too quickly on the assumption that the elements of the tradition enter into and operate in the new constellation as constant factors. At least one of the preconditions under which the first sentence of Aristotle's
Metaphysics could have a legitimating function no longer persists unchanged and unquestioned for Scholasticism; that precondition is the premise, which was present in Aristotle but not made explicit, that the human capacity for knowledge is in principle equal and adequate to its natural object, so that at least there does not need to be a significant excess of what is knowable over what is actually known, and thus the element of necessary economy, with its discrimination between the necessary and the superfluous, does not come into play.

What this means immediately becomes clear when one considers the professedly strictly orthodox reception of Aristotle by the Paris Faculty of Arts, whose leading figure was Siger of Brabant (ca. 1235–ca. 1284). In connection with man's natural striving for knowledge, a question becomes central that Aristotle had never explicitly posed because under his assumptions it simply could not become acute: the question whether the pretension to knowledge can be fulfilled. If one were to affirm that knowledge of the world could be achieved as something finite and definitively complete, if the organ of knowledge and the object of knowledge could be shown to be coordinated in such a way that "the soul is potentially everything in existence," then the idea of superfluous knowledge, knowledge that does not concern man, would remain powerless over against that preformed congruence. Siger of Brabant offers exactly this solution to the problem. He asks whether man's ability to acquire experience and knowledge can be fully realized or whether it is a potentiality extending into the infinite and decides in favor of the possibility of consummating this capacity. Neither an infinity of the possible objects of knowledge nor an infinity of increasing degrees of knowledge is to be assumed; the number of the kinds of entities (species entis) is finite, and in confirmation of this there is a perfectio scientiae [perfection or completion of knowledge] as definition and proof.  

Thus Siger gave the clearest and most definite expression to the systematic principle inherent in the Scholastic Summa, and in fact precisely because he does not take into consideration the authority of the Augustinian idea of curiositas and its background, the situational definition of fallen man. The principle of the thoroughgoing rationality of a finite reality excludes the concept of a theoretical curiosity that is essentially restless and not to be satisfied by an attainable amount of knowledge, and cuts the ground from under its demonization. But the Middle Ages resisted this consciousness of a reality that could be
completed in itself; they viewed the orthodox Aristotelianism of the Faculty of Arts with suspicion and regarded restlessness in view of the infinitude of truth possession as an energy essentially aimed at transcendence. That unrest only needed to be protected from the risk of *curiositas* in order to be maintained as the permanent motor of the human need for transcendence. How 'conservative' the position of Siger of Brabant was in fact and could have been in its effects remained hidden from the age.

One will scarcely be able to maintain that the high esteem of Dante (1265–1321) for Siger of Brabant was due to a clear perception of this relation, especially if one accepts the most common interpretation of the figure from the *Inferno* that can most readily be associated with the idea of *curiositas*: the figure of Odysseus in the twenty-sixth canto. Here one meets not the hero of the Homeric saga who passes through the peril of the Sirens but rather the Odysseus whom Dante consistently 'further developed' and freely invented on the basis of the restlessness of his curiosity about the world, the Odysseus who does not return home to Ithaca but rather undertakes the final adventure of crossing the boundary of the known world, sails through the Pillars of Hercules, and after five months of voyaging across the ocean sights a mysterious mountain and is shipwrecked. Virgil and Dante meet the ancient hero in the eighth circle of hell among will-o’-the-wisp tongues of flame in the cesspool of the deceivers, and from him they learn the story of his last voyage.

Is this still the entirely medieval figure of reprobate curiosity or is it the first presentiment of its revaluation in the transition to the modern age? To begin with, it is clear that the specificity of the punishment in hell that befell Odysseus has nothing to do with his adventurous curiosity and his last venture. The Odysseus who is being punished is the deceitful adviser who coaxed Achilles into his fatal destiny before Troy and contrived the fall of the city by means of the fraud of the Trojan horse. The punishment makes amends to Virgil, the Roman, who in the *Aeneid* had traced the prehistory of the founding of Rome back to Aeneas, the Trojan, and who must have seen the Greek stratagem with the eyes of the Trojans and condemned it; in the *Aeneid*, Odysseus had been characterized as the inventor of criminal tricks. The tragic end of Dante's Odysseus in the ocean has in its turn the character of an 'appropriate' fate: The man who had awakened the curiosity of the Trojans by means of the wooden horse and thus
deceitfully brought about their downfall himself has a downfall into which his curiosity tempts him at the sight of a fateful objective, the dark mountain rising out of the ocean. Dante gives to the magnitude of this figure, who evidently fascinates him, a world scope that does not end at the Pillars of Hercules, that is, at the boundary of the known world. Odysseus is allowed to cross the ocean for five months more, in order—as he persuasively promises his companions—to acquire virtue and knowledge (per seguire virtute e conoscenza). Is this speech of Odysseus also deceitful counsel, for which he has to suffer in the inferno?

Dante leaves his Odysseus standing in twilight: The foolhardy venture (folle volo) does not lead to the sought-for discovery of an uninhabited world (mondo senza gente), but rather the rejoicing of the companions at the sight of the unknown land (nuova terra) dies amid turmoil and destruction. Dante takes pains to contrast his own curiosity about the realm of the hereafter with Odysseus’s disastrous independent boundary crossing; what he himself is deemed worthy of seeing is granted him by a higher power and made accessible by gracious guidance, and he takes care not to show himself unworthy of this dispensation. Dante can ascend the same mountain against which Odysseus was wrecked because he does not give himself up to his own will and to the appetite for experience but binds his venture to the direction of salvation. In each new region that is opened up to him, what he perceives is not primarily the theoretical quality of something that has never before been seen but rather the moral import of justice having been done, the contrapasso [retribution] between this world and the next. Thus curiosity still has need of a transcendent legitimation that is oriented toward something more than theory. In the Paradiso, Dante can ask Adam about the essence of the first sin, and it is explained to him as transgression of the sign (il trapassar del segno). Odysseus is the still unredeemed heir of the original sin that had been the transgression of the limits set for man: He transgresses the sign of the inhabitable world that is ‘assigned’ to man so as to penetrate into uninhabitable regions. He disregards the world’s partial providence for man.

Dante created a position in his ‘system’ that a new consciousness could reoccupy and revalue; in the latter part of the sixteenth century, Torquato Tasso in his Liberated Jerusalem could view and evaluate the passage beyond the Pillars of Hercules anew, in a clear allusion to the
twenty-sixth canto of the *Inferno*, because in the meantime Columbus had reached and set foot upon the *nuova terra* [new land]. The self-confirmation of human curiosity has become the form of its legitimation. The metaphysical premises are "outdated" by appeal to the success of what was unlooked for; history has become an authority to which to appeal against metaphysics. "Hercules didn't dare to cross the high seas. He set up a sign and confined the courage of the human spirit in an all-too-narrow cell. But Odysseus paid little heed to the established signs, in his craving to see and to know. He went beyond the Pillars and extended his audacious flight (*il volo audace*) over the open sea."

The self-consciousness of the modern age found in the image of the Pillars of Hercules and their order, *Nec plus ultra* [No further], which Dante's Odysseus still understood (and disregarded) as meaning "Man may not venture further here," the symbol of its new beginning and of its claim directed against what had been valid until then. On the title page of Bacon’s *Instauratio magna* [Great Renewal] of 1620, Odysseus's ship was to appear behind the Pillars of Hercules, interpreted by this self-confident motto: *Multi pertransibunt et augibetur scientia* [Many will pass through and knowledge will be increased].\(^1\) And in 1668 one of the first attempts to draw up a balance sheet of the new age of science will appear under the title *Plus ultra* [Further yet].\(^2\)

Dante's Odysseus is still not a figure of the Renaissance, of rebellion against the Middle Ages. If the dark mountain, at whose emergence from the sea the "foolhardy flight" finds its end, was meant as the mountain of the *Purgatorio* and of earthly paradise, still in any case Odysseus's hubris was not that of seeking and wanting to possess that earthly paradise. If it is not only in our eyes that this figure possesses tragic greatness, then this is noticeable in Dante at most in the restraint with which he applies his categories of value to this case; this damned soul is after all the only one in the circles of the inferno from whose mouth no word of self-accusation or self-coademnation comes. The figure regarding whose worldly curiosity Cicero and the patristic writers were already unable to reach a unanimous evaluative judgment here again signifies an undecidenedness, or at least the difficulty of measuring this attitude to the world, in particular, against the valid or still valid standards of the epoch. That would already suffice to say that something new is beginning to define itself. The metaphysical reservations no longer enjoy unquestioned validity. Even before practical experience comes into play, confinement in the given world that is sanctioned
by traditional cognizance is tested, in the imagination, for pervious and transparent zones that no longer lead into transcendence.

As one of the great moments that oscillate indecisively between the epochs, I would like to mark April 26, 1336, when Petrarch ascended Mont Ventoux—"purely out of the desire," as he writes, "to see the unusual altitude of this place." The comparatively modest excursion is stylized into a symbolic venture, in which desire verging on the sinful and pious timidity before what he had never set foot upon, daring and fear, presumption and self-recollection combine in an event whose attributes one could label "deeply medieval" just as much as "early modern." Petrarch's appeal to the ancient example of King Philip of Macedonia on Mount Haemus in Thessaly plays a role here, just as does the entirely Ciceronian justification that such a venture might be excusable for a young man who is not involved in public affairs (excusabile in iuvene privato). Nature offers resistance to the intrusion: Sola nobis obstabat natura loci. Petrarch's portrayal of his goings astray and exertions gives it the appearance of a prodigious undertaking (ingentem conatum). An old herdsman appears as a cautioner, who himself had once reached the summit under the impulse of youthful spirit but had brought away only repentance and hardship (penitentiam et laborem). One of the typical motives of curiositas—reservation and prohibition—enhances the appetite: Crescebat ex prohibitione cupiditas. All of this presents itself as a monstrous human temptation, and the experience on the summit accords with this: Stupenti similis steti [I stood as though amazed].

But this experience is not exhausted by the overwhelmed and deeply stirred contemplation of what had been anticipated and now lies in view; entirely within the schema set up by Augustine, memoria prevails over curiositas, inwardness over affectedness by the world, concern for salvation over the passion for theory, but also the temporal reference over the spatial situation. The competition between outside and inside, between the world and the soul, ends when Petrarch opens the pocket edition of Augustine's Confessions that he always carries with him and providentially hits upon a passage in the tenth book in which amazement at the heights of the mountains, the tides of the sea and flooding of streams, and the paths of the stars is set in sharp contrast to man's self-forgetfulness. Once again Petrarch is as though stupefied and is angry with himself for his admiration of earthly things; he rests content with what he has seen and turns his inner attention to himself.
he considers, in retrospect, the mountain that previously had attracted him, Nature now shrinks into insignificance: “Et vix unius cubiti altitudo visa est praec altitudine contemplationis humanae . . .” [And it appears scarcely a cubit in height in comparison to the loftiness of human contemplation].

This amazing transposition of the category of conversion onto the beginnings of a new consciousness of nature and the world, which was ostensibly put on paper on the evening of the same day and turned into a humanistically stylized communication, into conscious literature—which indeed was perhaps never anything more than literature, if the doubts regarding the reality of the event are correct—is an exemplary case of the supposed constancy of literary topoi [occasions, topics] and the methodological value of tracing them. What Petrarch describes is like a ritual with regard to which the ideas and justifications that gave it meaning are long vanished and which as a fixed sequence of proceedings can be carried out again with the legitimacy of the new, free endowment of meaning. The description of the ascent of Mont Ventoux exemplifies graphically what is meant by the ‘reality’ of history as the reoccupation of formal systems of positions. Even when Goethe climbed to the summit of the Brocken in December 1777 and saw “the environs of Germany” spread out below him, this had not yet become a commonplace diversion but was still, as he stylized it in writing to Merck in August 1778, “naturally a most adventurous undertaking.” The forester responsible for the area “could be persuaded only with difficulty” to guide him to the summit, and the letter writer claims to have observed that the forester “himself was lost in wonder . . . because while living many years at the foot of the mountain, he had always considered the ascent impossible.” Goethe carries no Confessions with him; he has to meet his own needs in this respect, through half a month of painstakingly staged withdrawal from the world: “There I was alone for fourteen days, and no man knew where I was.” The great gesture of Sturm und Drang still presupposes a ‘position’ of extraordinary behavior that had once been labeled blasphemous lingering.
Dante's Odysseus, shipwrecked in view of land that had never been seen before; Petrarch on the summit of Mont Ventoux, retracting his aesthetic curiosity about the world before it had scarcely begun—are they figures of the specific novelty in whose terms the modern age [die Neuzeit: the new age] was to recognize and form itself self-consciously? Raising this question once again calls for a further differentiation and a comparison with other transformations of the attitude to the world that were accomplished at the beginning of the fourteenth century.

Common to both figurations—the voyage into the uncertain, and the ascent of the mountain that resists access—is the goal of satisfaction through mere vision. Once again the ancient *theoria* [viewing, contemplating] is sought as existential fulfillment in the entwined categories—which are dissociated for the modern interpreter—of the theoretical and the aesthetic. It is easy to see that such *theoria* has practically nothing in common with the attitude to the reality of nature that was distinguished and idealized as 'scientific' at the beginning of the modern age. Opening up access to new outlooks on the given world may have been perceived as the daring of curiosity, but for that very reason it lacks the kind of position in the system of man's existential necessities that had to be established for it. Need for the world is excess, the free amplification of a margin around the core of what man by his nature had to be concerned about. Hence the attribute of the *folle volo* [foolhardy venture], hence the almost anxious recourse to Augustine's
Confessions, the message of which in both cases is man’s basic care for his salvation. Odysseus misses the deadline of five months on the world sea that might have been set for his timely turning back; Petrarch accomplishes his ‘conversion’ to inwardness with what is meant to be exemplary timeliness before losing himself to the overwhelming view of the world.

The curiositas schema based on the antithesis of necessaria [necessities] and supervacua [superfluities], with the effect of ‘withdrawing’ a cognitive appetite initially set free but then negated by contrast, is also found in a letter that Petrarch wrote a year later about the location of the mysterious island of Thule. After an exhaustive discourse of ostentatious humanistic erudition, Petrarch breaks off bruskly and converts theme and interest just as he did on Mont Ventoux: “The discord here is so great that the island seems to me to be no less hidden than the truth. But let it be. What we have sought with eager effort we may safely ignore. Let Thule remain hidden in the North, let the source of the Nile remain hidden in the South, if only virtue gains a firm footing in between them and does not remain hidden. . . . So let us not expend too great a labor in ascertaining the location of a place that we might perhaps gladly leave as soon as we found it. . . . Even if it is denied to me to search out these secret hiding places and to gain information about these distant regions, still it will be sufficient for me to know myself. It is here that I shall be open eyed and fix my gaze. . . .” Humanism and Christian humilitas [humility] mesh with one another, but they always ‘demonstrate’ this intermingling first of all as the breaking off of a substantially complete exertion, whose continuation promises nothing because the canon of the ancient tradition appears as the epitome of possible knowledge. The mention of one’s personal and new opinion on occasion is only a friendly concession to curiosity: “After all it really is curiosity, knowing the important opinions of the ancients, to want to hear my opinion as well. But friendship is after all curious through and through. . . .” Curiositas is also a category in the polemics of enmity; in his attack on an Aristotelianizing doctor, Petrarch employs this tool with malicious severity. An instructive aspect of this text is the change in function of the antithesis between necessarium and supervacuum as soon as it is a question of the necessity of poetry, which the doctor had disputed: The ars mechanica [mechanical art] of medicine does indeed concern itself with the necessarium of health, but precisely therein it does something bas-
ically superfluous because what is necessary is God-given; in connection with poetry, however, this criterion does not apply because poetry comes from man and for that reason alone cannot be 'necessary.' One can see the embarrassment into which such a schema leads but also how it can be functionally transformed so as to extract a justification from the embarrassment.

Curiositas could be rehabilitated only by freeing it of its characterization as 'caring' about superfluous matters. It had to be brought into the central precinct of human care. But that presupposed the resolution of the competition between the concern for salvation and the need for knowledge in a new conception.

This process was accomplished thanks to two preconditions. The first was that the concern for salvation was largely removed from the sphere over which man has disposition, the sphere of his free decision and just deserts. This alienation of the certainty of salvation from self-consciousness and self-realization was accomplished by a theology that traced justification and grace exclusively to the unfathomable divine decree of election, which is no longer bound to man's 'works.' Nominalistic voluntarism, with its central emphasis on predestination, made man's care appear impotent in relation to the requirement that one possess a faith that was no longer initiated by the autonomous summoning-up of human obedience. It is easy to see that an act like Petrarch's retraction of his aesthetic interest in the world had only been meaningful on the assumption that inner concentration on what a man most needed could also turn away his distress and 'take care of' his needs. The Middle Ages would have been unthinkable in the full range of their manifestations without this sustaining axiom. The radical displacement of the preconditions of salvation into transcendence could plunge man into uncertainty and fear, but it could no longer determine his action or the direction of his essential interests.

A second precondition of the rehabilitation of curiositas is closely connected to the first through its origin: The world as the creation could no longer be related to man as the expression of divine providence, nor could he understand it as the first and natural revelation. It was hermeneutically inaccessible, as though it had become speechless. Thus one's attitude to the world was no longer preformed by the object. The constitution of the objects of theory was now accomplished under conditions first posed by man in a system of his concepts and hypotheses, just as the constitution of the objects of practice was ac-
accomplished exclusively from the point of view of the power of dis-
position achieved at any given time and the constitution of aesthetic
objects was accomplished as the perception of a possibility that no
longer was presented but rather was accomplished in the perception,
succeeded only in the subject.

The self-assertive character of the theoretical attitude eradicated
the immediacy of contemplation [Anschauung], the meaningfulness of
watching the world from an attitude of repose, and required the
aggressive cognitive approach that goes behind appearances and pro-
poses and verifies at least their possible constitution. Theoretical cu-
riosity, and the confirmations that it was to provide for itself when it
was constituted as 'science,' could no longer appropriately be dis-
qualified as superfluous. The question, which had become open in
every respect, what one had to expect from reality did not (for instance)
repress the medieval concern for salvation; rather it took over the
position of the concern for salvation as the one thing left in which
man could center his interest and from which he could derive attitudes.

The element of cura [care] in curiositas now becomes the very root
of its meaning, which legitimizes the cognitive appetite as the atten-
tiveness that is provoked by the world. The modern age began, not
indeed as the epoch of the death of God, but as the epoch of the
hidden God, the deus absconditus—and a hidden God is pragmatically
as good as dead. The nominalist theology induces a human relation
to the world whose implicit content could have been formulated in
the postulate that man had to behave as though God were dead. This
induces a restless taking stock of the world, which can be designated
as the motive power of the age of science.

It is characteristic of such situations that every defense of the existing
state of affairs goes in the wrong direction; that is, it grows independent
in its function and ceases to serve the intended purpose. The second
half of the thirteenth century had as a conservative front-line defense
the rejection of the Aristotelian philosophy of nature. The high point
of this futile exertion was the condemnation of 219 Aristotelian prop-
ositions by Tempier, the bishop of Paris, in 1277. For the 'trial' of
theoretical curiosity, it is decisive that this index of the prohibited
actually functioned as the source and documentation of the license
not to identify the traditionally received knowledge about the cosmos
with the plan of creation. What was intended as a defense of theology
against physics became in its turn an authority for what was not well
established, an authority to which a new physics could appeal in defense of its right to 'play through' constructive hypotheses and thus to criticize a world model that had served High Scholasticism as the incontestable key to its rational theology. The diversion of interest from a world whose perspicuity was supposed to become doubtful, the intended radicalization of reliance on salvation, miscarried profoundly. The first sentence of Aristotle's *Metaphysics* could have been modified so as to say that man has to strive for knowledge, not indeed 'by nature,' but as the being who is exposed to this uncertain world, whose ground plan is hidden from him.

William of Ockham (ca. 1300–1349) takes it as an elementary stipulation that reason is hardly sufficient to provide what is needed for salvation. That could easily be reinterpreted as implying that the theological impotence of reason by no means excludes its theoretical potency when directed at the world. Raising theology to its maximal pretension over against reason had the unintended result of reducing theology's role in explaining the world to a minimum, and thus of preparing the competence of reason as the organ of a new kind of science that would liberate itself from the tradition.

Of course this science could no longer claim to penetrate into the thoughts of the hidden God and pose the question of the divine conception of the world. It had to restrict itself to explaining the phenomena by means of hypotheses and to give up any claim to the ideal of precise adequacy in its concepts and standards of measurement. Along with the Aristotelian cosmology, the absolute cognitive pretension of the Aristotelian theory of knowledge—the natural coordination of subject and object—had to be surrendered. But from the difference between a pretension to rational deduction and an admission of empirical provisionality and withdrawal into the hypothetical there emerged a new freedom from restriction for man's cognitive will. The problematic of the legitimacy of theory resolved itself on the level of a reduced pretension, which included from the outset the continual revisability of its results. But the implementation of this logic still lay far in the future; the loosening of the structure and widening of the margin of variation were not yet sufficient to put in question the Scholastic system in its totality, to make the reoccupation of its central positions unavoidable. After all, the Middle Ages did not come to an end in the fourteenth century.
The immediate fruitfulness of nominalism for natural science may be appraised as slight in comparison to the positive findings that were to be realized in the time between Copernicus and Newton; indirectly, though, the scientific progress of the early modern age is based on the destruction of the Aristotelian dogmas, on the one hand, and the new legitimation of interest in nature, on the other—both of which had been substantially accomplished by nominalism. The reproach that in spite of all its productivity in the philosophy of nature, Ockham’s school did not accomplish what it could have accomplished with the means it developed closely touches the subject of curiositas. To what extent did the demolition—motivated by the nominalist premises—of the barrier that was constituted by the notion of curiositas succeed in fact? I would like to discuss this in relation to the very involved question of why it was that nominalism did not employ the methods for the quantitative definition of objects, which it had developed in such widely circulated books as Bradwardine’s Tractatus proportionum (written before 1349) and Swineshead’s Liber calculationum (ca. 1350), in the measurement and description of physical phenomena.

There was a “sort of logical and physical casuistry,” in which extremely complicated and subtle processes were constructed, but the magnitudes inserted into these processes were always of purely speculative and nonempirical derivation. The ontological replacement of the category of substance by the category of quantity had indeed established the ideal of handling all possible problems by calculation; but in the generality of this groundwork, those intermediate methodical and technical steps had not yet been taken that could lead to the indirect determination of measurements. This concrete incapacity could have discredited a premature beginning very quickly, and one might almost be inclined to believe in a sort of self-protection on the part of the anticipation—pregnant with the future—of possibilities that had become conceivable in principle. But the Ockhamistic ‘physicists’ of the fourteenth century “carried out no measurements even where they could have done so without further ado.” Here a theologically motivated lack of courage was involved, which based itself on, of all things, the biblical saying that is so readily cited for the opposite purpose in the context of the Platonic tradition: Omnia in mensura, et numero, et pondere disposuisti [You have arranged everything by measure, number, and weight]. On the assumptions of nominalism, according to which human thought is not capable of penetrating into God’s
sovereign dispositions and there can no longer be Idealities possessing transcendent authority, this ancient cosmic formula itself deprives man of all pretension to equivalence. The nominalistic cognitive means could and should only be heterogeneous with respect to the unknown constitutive principles of the world. The entire nominalistic theory of knowledge and concept formation was based on this assumption and everywhere opposed human economy to divine abundance. The *calculationes* [calculations] too, being intellectual operations produced by man, had to have this same capricious character.

The example of the dictum cited from the Wisdom of Solomon illustrates clearly all the awkwardness and complexity of the historical relation between theology and the establishment of an autonomous theoretical consciousness: A saying derived from and based on Hellenistic thought that had found its way into a collection of sayings that was in any case perceived by the Christian tradition as out of place within the biblical canon, and was therefore readily cited by Platonizing metaphysics as evidence of the Christian suitability of the ancient conception of the cosmos, becomes on nominalistic assumptions an authority for the radically opposed position, for the essential hiddenness of the divine order of measure vis-à-vis human theory. God has indeed ordered the world according to measure, number, and weight; but this must now be read with a possessive pronoun: according to *His* measure, according to magnitudes reserved to Him and related to His intellect alone.

The sentence from the Wisdom of Solomon defined a theological, no longer rationally penetrable mystery; it put human reason, insofar as the latter considered itself capable of drawing conclusions from that sentence for its pretension to knowledge, at a distance from *curiositas*, in the sense (which now becomes significant) of the attempt to make objective theoretical sense of assertions imputed only to faith and withheld from all verification. To Augustine, the exact measurement and mathematical prediction of astronomical data had appeared as an example of an astonishing human achievement, which, however, precisely on account of its security, seduces man into *impia superbia* [impious pride] by making him forget its dependence on the participation in cosmic rationality that God bestows on man. The barrier of sinful *curiositas* that Augustine thought he had erected against the activation of this capacity was composed of moral and religious self-restriction, not resignation enforced by the subject matter itself. The
nominalistic theology shifted the hiatus between the regions of faith and knowledge, which had become more clearly demarcated during the centuries of Scholasticism; it no longer needed, like Augustine, to be convinced of the productivity of astronomy in contrast to cosmological speculation, since in the outgoing Middle Ages the disappointments of the supposed exactitude of astronomy had become palpable even in everyday life owing to the increasingly scandalous lack of a reliable calendar.

There is a position that in effect makes a dogma of the pre-Copernican situation. It found expression in the doctrine of the incommensurability of the movements of the heavens, for which Nicole of Oresme’s treatise *De commensurabilitate vel incommensurabilitate motuum caeli* (written before 1382) is the most important document. It is characteristic of the phenomenon of ‘physics without measurement’ that once Oresme has discussed the two antithetical possibilities of the problem as he poses it, he avoids any decision and denies man in principle the capacity to decide between them. In a poetic fiction he recounts how, when he was still brooding and absorbed in the problem, Apollo appeared to him in a dream, in the company of the Muses and the Sciences, and reproached him with troubling himself about a question whose solution exceeded man’s powers and with which he had plunged himself into an affliction of the spirit and interminable trouble. Since he nevertheless begs the god for an answer, Apollo commands the Muses and the Sciences to fulfill this request. Thereupon a disputation ensues between Arithmetic, who stands up for the thesis of commensurability, and Geometry, who defends the incommensurability of the movements of the heavens. But before Apollo, who appears in the role of the magister—the arbiter in the Scholastic disputation—has given his determinatio [determination of the result], the dreamer awakes, and the problem remains unsolved.

Oresme inclines, as can be seen in his *Traité du ciel et du monde*, toward the hypothesis that at least some of the components of the motion of the spheres of the heavens stand to one another in an irrational proportion of their speeds of rotation. This has the subjective consequence that ratio per numeros [reasoning with numbers] is necessarily futile; hence Apollo’s reprimand: *Pessima est tua occupatio, afflictio spiritus est et labor interminabilis*. No less important is the objective consequence: Each irrational proportion is a violation of the cyclical recurrence of a total cosmic constellation, the abolition of the finitude
of a greatest world period, and thus of the Aristotelian assumption of a symmetry between the beginning and the end of time—an assumption that had been used by the Averroistic Aristotelians to argue against the world's having a beginning, and whose refutation was used by Oresme to argue against its having a physically necessary end. Nature no longer provides history with an unambiguous periodization; the absolutely new and unpeated has become possible; it can come from man as his signature imprinted on each moment of time in its singularity. This concept of a world time that is not already structured, in which each point contains every opportunity for surpassing everything that has come before it, is one of the fundamental preconditions of the self-consciousness of the modern age.

The fourteenth century was dominated by the ideal of quantification. It possessed a logic of definition that was no longer intended to give substantial definitions of objects but rather to make it possible to give directions for their quantitative description. It possessed to a large extent the mathematical methods and instruments with whose help the seventeenth century was to accomplish the awakening of science. But it lacked an interpretation of the human spirit and the legitimacy of its theoretical pretensions that could have made possible then and there the realization—indipendently of the transcendence possessing by the Creator's knowledge of the world and independently of insight into the 'natural measures' given to nature—of a knowledge of nature that did not aspire to compete with the divine spirit in the domain of theory but only set itself the goal of man's mastery of his objects. Although the conventionality of units of measure was familiar in daily life, there continued to be an obstruction to the analogy that would permit one to rest content with arbitrarily chosen units of measure and approximate measurements in the knowledge of nature as well. The idea of what science should be was still under the spell of the ideal accuracy of the Aristotelian knowledge of essences. This requirement did not allow one to content oneself with an inaccuracy that was as accurate as possible. "Calculation with vague measures, that is, approximate values, with margins of error and negligible magnitudes, such as became a matter of course for physics later on, would have appeared to the Scholastic philosopher as a grave offense against the dignity of science. So they remained standing on the threshold of a genuine, measuring physics, without crossing it—in the last analysis,
because they could not make up their minds to renounce exactitude, a renunciation that alone makes possible an exact science of nature. 78

The pretension to exactitude conjured up visions of a collision with the theological index of the impossible and gave any application of the speculative calculations the character of curiositas; renunciation of exactitude, which could have stylized and justified itself as humilitas [humility], presupposed a break with the generally accepted ideal of science. From this point of view, what still had to happen between the fourteenth and the seventeenth centuries in order to lay the foundation for the formation of the modern age (this teleological mode of expression should be taken purely heuristically!) does not look like an intensification, or even an exaggeration, of the supposedly ‘modest’ cognitive pretensions of the Middle Ages—as it has readily been perceived, to the detriment of the integrity of the modern idea of science. Rather it looks like a very decisive renunciation, a resignation—which, while it was not skeptical, was still directed at the center of what had gone before—from continuing to measure oneself (in one’s theoretical relation to nature) against the norm of knowing the Creation from the angle of vision and with the categories of the Creator. The sentence about the measuredness and measurability of the world remained sterile for Scholasticism as a whole because it considered no measure to be applicable other than God’s own, and at the same time, on account of the assumptions embodied in its concept of God, it could not believe itself capable, or did not think it should believe itself capable, of ever knowing this measure, still less of making use of it. Consequently there could not be any igniting contact between the sphere of calculationes, with their speculatively fixed and only symbolically intended magnitudes, and practical experience of nature.

Robert Grosseteste (1175—1253) had already defined the actual infinite as a magnitude determinable in principle, as a certus numerus [fixed number], but had declared it to be unknowable by man. 9 What for God was countable certissime et finitissime [most certainly and finitely] was inaccessible to man’s computational operations. Walter Burleigh (who died about 1343), in his Commentary on the Physics, was the first to draw from this assumption of the transcendence of real quantifiability the conclusion that man could make use of a system of measure created by himself and artificially institutionalized, based on a minima mensura secundum institutionem [institutionalized minimum unit], but the problem raised by this, that of conventional stipulation and imple-
mentation, appeared to him to be insurmountable: "Circa istam institutionem potest esse error" [In that institution there can be an error]. This is at bottom the metrological solution of the modern age—a program of rational expediency, which is opposed to viewing reality as transcendent and renounces the cognitive ideal of adequacy [adequatio]—but this renunciation appeared impracticable to the doctor planus et perspicuus [plain and evident teacher] because it required the Scholastic system no longer to accept transcendence but rather to compensate for it with an artificial universality of human convention. Only the idea, rising toward articulation by Descartes, of 'method' as the transferable form of the process of knowledge made comprehensible the constitution of an overarching identity of inquiring individuals as a subject extending across space and time, an identity that might also be consolidated under conventions. The great idea in the Wisdom of Solomon of the God Who counts and measures, and the Platonism of absolute geometry, which together had helped and driven the process so far forward, had now admittedly become hindrances; the Cusan's doubts about divine mathematics, which were intended as an intensification of transcendence and a strengthening of human authenticity, could have removed a blockage here.

It cannot be maintained that the relation between claim [Anspruch] and renunciation in the foundation of the early modern idea of science came about through insight into the necessity of renunciation for the sake of satisfying an—admittedly newly formulated—claim. The renunciation, which is the recognition of the essentially insurmountable 'inaccuracy' of the theoretical approach, made its appearance as resignation with regard to the cognitive ideal that was authoritative for Scholasticism. And it did so in the twin functions of, on the one hand, a constituent part of the reawakened anti-Aristotelian, Platonizing metaphysics, with its definition of natural appearances by the transcendence of the Ideality imprinted in them, and, on the other hand, an element of a form of piety turned against Scholasticism that was spread by the Devotio moderna, b with its emphatic confession of the provisional character of human and earthly existence.

The great architectonic exertion of the Scholastic system to balance created nature and redemptive grace and not to allow them to be played off against one another was shattered by the internal logical inconsistency of the structure and by the disruptive force of the increasing absolutism of its theological components. The great attempts
made in the fifteenth century to withstand the tensions of the medieval systematic structure and to save the whole make that especially evident.

At the beginning of the fifteenth century, Jean Gerson (1363–1429), one of the controlling figures at the Council of Constance and distinguished by the honorary title of doctor christianissimus [most Christian teacher], made it his business to oppose futile curiosity; and for him, curiosity about the world and theological hairsplitting of the late-Scholastic type permeate one another in such a way that they constitute a single homogeneously motivated syndrome. This is a noteworthy point because in the theological speculation, many questions were developed, still in medieval guise, that were immediately to show themselves to be approachable by physics, for example, in the hypertrophic doctrine of the angels and their function in the divine guidance of the world. Here again the motive of curiosity is the Augustinian superbia [pride], the striving for self-validation, the flight from submission, and an element of the fantastic presumption of being initiated into God’s sovereign reserve. The ideals that are opposed to the Scholastic appetite for knowledge and passion for originality (singularitas) are humility and submission as the roots of faith.

But this argumentation alone no longer seems sufficiently convincing; curiosity has its immanent futility and punishes itself by diversion from what is useful, attainable, and provides man with security. Scholasticism’s drive toward system as an end in itself takes on the appearance of progress, in spite of the fact that firm limits are set to human knowledge, whose transgression by investigating nature must result in the loss of the helpful light, and thus in error. But the philosophers wanted more from nature than its testimony to God’s existence, for which it was intended and illuminated. It is significant how Gerson characterizes this ‘more,’ namely, as the desire for dependable regularities in spite of, or in view of, God’s freest possible disposition over nature.

Hidden in this text’s admonition to submit humbly to the unknown will of God is the great contradiction that is the point of departure for the modern age’s elementary theoretical claim: the lawfulness of nature, and then also of society and the state, as protections against arbitrariness and accident, against the fact that man’s fate is not totally at his disposition. What prominence natural philosophy already seemed to the contemporary admonisher to have gained can be seen from his taking it as his model for the rejection of theological curiosity.
Theological curiosity also surrenders to the illusion of possible progress, of reaching out for what is as yet unknown and untested, of conjecture and invention. The price of this surrender is the loss of orientation, the accumulation of problems arising from supposed solutions, and finally the collapse into skepticism.\textsuperscript{13} The content of these admonitions and apprehensions is familiar; what is new is the sharper definition of the opposing position, the direction of the defensive gesture at a tendency that stands out more clearly.

The Middle Ages—if I may be permitted this hypostatization—are beginning to feel threatened. The fifteenth century stands under the sign of the increasing concretization of this threat around the key concept of \textit{curiositas} and the reaction against it. Piety itself finds its anti-Scholastic formulas in the \textit{Devotio moderna}. Gerson rendered such formulas pithily: “Credite evangeli et sufficit” [Believe in the Gospel and it is enough]; “Esto contentus . . . sorte tua et materias sine Logica aut Philosophia intelligibiles apprehende” [Be content with . . . your lot and understand what is intelligible without the help of logic or philosophy]. The Aristotelian appeal to nature and to the cognitive drive it established became questionable because this motive could not be tied down to boundaries or restrained by the reservation of mysteries and the reproach of insatiability for the new, whereas man’s problem of salvation had remained the same old one ever since the beginning. The nature of which Aristotle had spoken is now supposed to be the corrupted nature of sinful man, containing a cognitive drive on which he who is in need of salvation may no longer rely.\textsuperscript{16}

The static concept of knowledge, the stabilization of the will to truth by the standard of tradition, was not the last word spoken in the fifteenth century in the attempt to save the Middle Ages. Nicholas of Cusa (1410—1464) was to make the most important attempt to combine recognition of the human craving for knowledge, in its unrestricted dynamics, with the humility of finitude that was specific to the Middle Ages. The tendency of this attempt was to turn Aristotelian Scholasticism’s concept of reason and nature against itself, it is true, but not for purposes of destruction—which it had long since shown itself to be capable of providing for itself—but rather as immanent criticism directed at the difference between motive and system, between function and tradition. In the formulation of ontological “imprecision” as the essence of “knowing ignorance,” the Cusan seems to be able once again to force together the tendencies of the late Middle Ages that
press toward divergence. The spirit’s insatiability finds its correlate in nature’s inexhaustibility, and indeed not just in the dimension of change and the novelty of objects but rather (which is much more to the point) in the intensifiability of every item of objective knowledge as such, insofar as in every object there is hidden the unattainable transcendence of its “precision.”

In the preface dedicating his Docta ignorantia [Of Learned Ignorance] to Cardinal Julian, Nicholas does not hesitate to appeal to the addressee’s appetite for knowledge and to claim for his work the primary attraction of unusualness, indeed of monstrosity: “Rara quidem, et si monstra sint, nos movere solent” [In fact unusual things, even if they are monstrous, usually excite us]. This is certainly also a gesture of modesty, but it is no accident that he chooses this one in particular. For the freedom with which reason surrenders itself to the ‘natural’ principle of its own completion and believes itself capable of finding rest only in the attainment of its cognitive goal no longer needs to be kept away from the neighborhood of animalistic metaphor. This very ‘instinctiveness’ is now the root of familiarity with the unattainable that makes itself present, as the image of infinity, only in the act of inquiry itself. The insatiability of the inquisitive instinct is no longer suspect, as it was in the patristic polemic against Gnosticism, as the desire neither to recognize the boundaries prescribed to our nature nor to obey the command to accept the proffered faith; it is rather the very opening of the unconstraint in which truth’s continual transcendence of man’s capacity for comprehension is represented and each item of acquired knowledge becomes an instance of “knowing ignorance,” a surpassable degree of accuracy.

The justification of the inquisitive instinct now is precisely not that the authority of nature stands, so to speak, behind it, and a teleologically coordinated and guaranteed objectivity before it, but rather that its own nature first begins to dawn on it, in the difference between pretension and the impossibility of complete realization, only when it does not resist this nature, does not set for it the limits that the discrimination against curiositas had wanted to erect. The paradox of the docta ignorantia lies in the fact that the knowledge to which the spirit gives itself in a loving embrace has always already been suspended [aufgehoben] in a knowledge about knowledge, which prohibits all definitiveness—and not only in relation to eschatological reservations. The inexhaustibility of the desire for knowledge in any stage of re-
alization that it can ever arrive at is the reason why we can achieve something more than knowledge, namely, wisdom, the knowledge of what knowledge still does not know." "Since everything of which we have knowledge can be known better and more completely, nothing is known as it could be known. God’s existence is indeed the reason why there is knowledge of the existence of all objects, but God’s reality, which cannot be exhausted in His knowability, is also the reason why the reality of all things is not known as it could be known."18 But it is not only this reflection of the infinite internal dimension of divinity in the objects of the world and the world itself that dominates the Cusan’s thinking but also and still more the imitation of divine self-reflexiveness in the way in which the subject is thrown back from its objects onto itself: "The more deeply the spirit knows itself in the world that is unfolded from it, the richer the fertilization it undergoes, its goal being after all the infinite reason, in which alone it will behold itself in its Being, as the sole measure of all reason, to which we become the better adapted the more deeply we become absorbed in our own spirit, whose single, life-bestowing center is that infinite spirit. And that is also the reason why our nature passionately desires perfection of knowledge."19

Counting, measuring, and weighing are the specific instruments of human knowledge of nature precisely because in their efficiency they simultaneously make evident the inaccuracy by whose means the spirit becomes conscious of the heterogeneity, in relation to its objects, of the parameters that it produces. Arithmetic and geometry leave an unrealized remainder in every application to real objects. The ideal construction and the real datum are not reducible to one another without remainder; however, the difference between them is not the difference between pregiven ideality and given reality but rather between the pretension of the knowing spirit and the knowledge attainable by it at any given time. When the Cusan criticizes Plato precisely for not distinguishing between the ideas that are given to us and that we can only assimilate and those that we ourselves produce and consequently fully understand, the conflict of possible truths that can be postulated here is decided in favor of the humanly authentic ideas because "our spirit, which creates the mathematical world, has in itself more of the truth and reality of what it can create than exists outside it."20
The late Scholastic blockage of the application of measurement to a world that had been created according to measure, number, and weight, which not only conformed to the theological reservation but also continued obedient to the Aristotelian idea of science, falls into the critical clutches of a new conception of the truth of arithmetic and geometry, which, precisely because it is constructed by strict analogy with the veritas ontologica [ontological truth] of Scholasticism, explodes the Scholastic system in which all truth depends on pregivenness. The axiom that the author of a thing could alone be the possessor of its complete truth had been applicable only to God, and this principle that solus scit qui fecit excluded man, as the being who even in regard to his productivity was confined within the horizon of the imitation of nature, from the truth in its strictest definition. In that sense the concept of creation emerged as a radicalized Platonism, apart from the fact that it drew all the pregiven realities together, as it were, in a single hand—which did not make much difference for man.

The Cusan rightly goes back to Plato and charges him with the error of having made the purely geometrical figure into something similar to what is visible, of having provided it with a quasi-perceptibility, like its replica in the world of things. But that the concept of a circle or of number is truer and more real in reason than anything else in nature that corresponds to it just is not due to a sort of gift of direct intuition of the Ideas according to which the world was made but rather to the fact that the human spirit itself produces them (mathematicalia fabricat), that we ourselves are the authors of this pure thought structure. 21

At least in the one exemplary treatise on The Experiments with the Balance, the Cusan described how for him measurement gains legitimacy as a means of access to the specific indicators of the nature of physical objects precisely because in the measured values the constant proportions of the essential characteristics do indeed come to light, but not those characteristics themselves. Thus the universe of divine creation is simultaneously made accessible and covered up by the universe of human conception. But this was just what the Cusan had defined at the end of the second book of the Docta ignorantia as the meaning of the human relation to the world: To the extent that we admire, devote ourselves to and draw near to the world, the world in turn is withdrawn from us. 22 There is no longer any need to put a taboo on theoretical curiosity, or to put moral restrictions on it, because the process of
theory itself continually destroys the illusion of its finite realizability. The same thing holds for the art of investigating nature with measurement that is said of every art, in a modified version of the Aristotelian formula: It imitates nature as far as it is able but can never penetrate to nature's precision.\textsuperscript{23}

This is especially true for astronomy; but it is no longer due to the elemental special nature of the heavenly bodies, as it had been for Aristotle and the Scholastics, but rather is taken up and retracted into the definition of the inner lawfulness of the theoretical process: “Caeli etiam dispositio . . . praecise scibilis non est” [The arrangement of the heavens is not precisely knowable]. Thus imprecision is assigned a higher metaphysical value as an index of all objectivity—referring us to the praecisa aequalitas [precise uniformity] of the absolute and to the heterogeneity of the parameters we produce—and at the same time it is made methodically admissible. Knowledge of nature does not succeed in fulfilling the Augustinian requirement of an inquiry mindful of its absolute definition—the requirement of religioso quaerere [to inquire piously]—merely by means of an additional, special act of reflection. This character is always already co thematic in its relation to its object. It finds confirmation and ratification of its achievement only by renouncing the claim of ‘adequate’ objectification, of mastery with no allowance for error.

For Scholasticism, the progress of theory through the cosmos had always had only the provisional function of gaining passage to the world cause by a finite number of steps. The justification of this procedure lay in its result; the motion of theory was legitimized by its point of rest. Any achievement of autonomy on the part of what was preparatory to this telos [end, purpose] was a functional failure, was, precisely, curiositas. The Cusan’s Docta ignorantia made the path, the process, that which as the ‘method’ was to become the key word of the beginning of the modern age, itself the essence of the theoretical function, and indeed precisely in what the Middle Ages had credited it with and expected of it: its capacity for self-surpassing. The emerging thematization of method was to actualize once again the difference between finitude and infinitude for human consciousness, and thus at first to remain within the horizon of that difference’s medieval serv­iceability for theology; but the way is at least being prepared for this point of view to be rendered autonomous as theoretical immanence and thus as a positivization of curiositas. In his dialogue On the Mind,
the Cusan makes the philosopher say to the layman, playing on the common etymology of *mens* and *mensura* [mind and measure], "I am surprised that the mind, which you say derives its name from measurement, proceeds with such eagerness to apply measures to things."

And the layman answers, "The meaning of this is that it wants to find the measure of itself. For the mind is a living standard of measurement, which becomes aware of its power of comprehension by applying its measure to other things. For it does everything in order to know itself. . . ."

**Translator's Notes**

a. "... dass die innere Konzentration auf das dem Menschen Notwendige auch seine Not zu wenden . . . vermochte," a play on words that cannot be rendered in English.

b. *Devotio moderna*: a movement of 'lay' spiritual revival that originated in Holland in the late fourteenth century and spread to parts of Germany, France, and Italy. Its classic expression was Thomas à Kempis's *Imitation of Christ*. 
The century of the Copernican reform of astronomy manifests not only a sudden change in the evaluation and justification of theoretical curiosity with respect to its object, which had been accentuated by the discrimination against it, but also the self-confirmation of theory's claim to precisely what, on the premises of the ancient physics and cosmology, was supposed to be naturally withheld from the reach of knowledge. To that extent, the fate of Aristotelian physics gets mixed up with that of the Augustinian and Scholastic morality of theoretical humility and self-restraint.

Copernicus became the protagonist of the new idea of science not so much because he replaced one world model with another, and thus showed by example what radical incisions into the substance of the tradition were possible, as because he established a new and absolutely universal claim to truth. Within the world there was no longer to be any boundary to attainable knowledge, and thus to the will to knowledge. The meaning of the Copernican claim to truth was admittedly only to appear and to be confirmed when Galileo and Newton, bringing mechanics to the aid of the anticipatory innovations in cosmology, sent Aristotelian physics into retirement.

None of the psychological attraction of penetrating into the region of the forbidden and the reserved, which characterizes the magical/Faustian underground current of the century, is noticeable in Copernicus. The opportunity to measure and to test himself against a theoretical task that until then had been considered insoluble may
have had some significance for him, but it could not penetrate the restrained style of his 'humanistic' mode of communication. Nevertheless one can discern that the achievement of theory maintains for him its relation to the self-determination of man’s position in the world. But it is no longer the objective structure of the universe and man’s localization within it that is evidential, as geocentrism had been for the Stoics; rather, the accomplishment of the cognitive task confirms for man that the world has been founded with consideration for his need for rationality. To be sure, this is no longer self-knowledge as recognition of a finite role in contrast to an infinite task; each step taken by theory becomes a self-confirmation, securing the possibility of the next one.

There is even a passage in the fourth chapter of the first book of the *Revolutiones* in which it looks as though Copernicus wants to recommend his cosmological solution as superior in the very language of the critique of *curiositas*. There he suggests that the attribution of heavenly phenomena to movements of the earth does not pretend to knowledge of the highest and most distant objects themselves but rather holds to what is nearest at hand and accessible—namely, the constellations of the earth with respect to the stars—and thus, so to speak, ‘brings the problem down’ from the zone where there is danger of *curiositas* to that of theoretical admissibility, transforming the task from a heavenly to an earthly one. But from the point of view of the traditional astronomical conception of truth, this was a formula more of theoretical insurance than of moral diffidence, a suggestion to the Aristotelians that they should come to terms with the new, even from the point of view of their own dogmatics.

Tactical and economical ‘understatement’ rules the early history of modern science, whose documents consequently seldom provide us with the formulas that we expect. In his preface to Pope Paul III, Copernicus lets it be known that he is prepared for opposition and ready to discuss it. The thoughts of the man who is philosophically inclined are withheld from the judgment of the multitude because his efforts are toward the truth in all things, insofar—and this restriction forestalls the reproach of *curiositas*, as though it were utterly irrelevant to everything that followed—as such is permitted to human reason by God: *quatenus id a deo rationi humanae permittit.* The sole concern following this restriction conceded in passing is the maxim that one should not pursue one’s own opinion too far away from what is correct.
That the science practiced here is good, that it turns away from the vices and guides the human spirit toward what is better, is stated without restriction in the prooemium [introduction] to the first book and placed with pagan candor alongside the "unbelievable pleasure of the spirit" that this activity furnishes in abundance.

The space in which the epoch pursues its curiosity about the world has its dimensions, its expanding width, height, and depth. Alongside the expansion of the classical oikumene [inhabited world] into the breadth of the oceans and the new land masses, and beside the fascination of the starry heavens, there is also a new interest in the depths, a desire to know what lies beneath the earth's surface. The mundus subterraneus [subterranean world] becomes a realm of fantasy, but also of empirical inquiry, which becomes conscious of its headstrong inquisitiveness with a shiver.

On the threshold of this century, an exemplary figure of the daring interest in what is remote, out of the way, unexamined, or traditionally prohibited was Leonardo da Vinci (1452-1519). His interest in the playfully varying nature that neither commits itself to its forms nor exhausts them, an interest in what had hitherto remained invisible to the onlooker at the world spectacle, in what was hidden deep in the sea and distant in time in a world that was growing older, and in the realm of the unrealized possibilities of nature and of human invention—all this is pure, as though crystallized, curiositas, which enjoys itself even when it stops short of its object at the last moment and leaves it alone. A characteristic example is given by the fragment on the investigation of a cave, which remained fragmentary not only by accident—in its form—but also by virtue of its outcome:

Unable to resist my eager desire (estrato dalla mia bramose voglia) and wanting to see the great profusion of the various and strange shapes made by formative nature, and having wandered some distance among gloomy rocks, I came to the entrance of a great cavern, in front of which I stood some time, astonished and unaware of such a thing. Bending my back into an arch I rested my left hand on my knee and held my right hand over my down-cast and contracted eye brows: often bending first one way and then the other, to see whether I could discover anything inside, and this being forbidden by the deep darkness within, and after having remained there some time, two contrary emotions arose in me, fear and desire—fear of the threatening dark cavern, desire to see whether there were any marvellous thing within it...
One must lay this fragment alongside Petrarch’s letter on the ascent of Mont Ventoux in order to perceive the independence and matter-of-course quality that curiosity has acquired and the way in which its reservations and its hesitation have been humanized and to recognize that Leonardo’s *Madonna of the Rocks* no longer has anything in common with Petrarch’s falling back on Augustine’s *Confessions*. On the other side one might add George Berkeley’s (1685–1753) description of the Cave of Dunmore, in which curiosity ("the curiosity to see it") is only an introductory flourish and readily combines with the description—free of all terror—of the object as “this wonderfull place.”

The darkness confronting Leonardo at the entrance to the cave as an index of natural concealment, which, however, is no longer respected as something intended by nature; and elemental difference in kind such as was ascribed to the stars by the traditional cosmology—these remain for the sixteenth century the basic forms of the limit set for theory, whose transgression constituted the nature and the problematic of theoretical curiosity. What still scarcely enters the horizon of possibility is a limitation on the range of theory as a contingent result of the limits of the human organ of vision—the threshold of visibility in both the macrocosm and the earthly micronature. It is not only that the optical auxiliaries, the telescope and the microscope, had not yet been invented and that their power was still unsuspected but even more that a realm of objects invisible on account of their distance or smallness was not considered at all possible or relevant even in speculation.

As long as the universe was represented as limited and closed by the outermost sphere of the fixed stars, the totality of the stars appearing above the horizon was considered to be surveyable with a single glance and exhausted by the stock already catalogued by Hipparchus. The geocentric system favored the unquestioned validity of this assumption by granting man visual conditions that were the same in all directions and constant. The supplementary teleological assumption that invisible things in nature would contradict the meaning of creation was current at least in the humanistic tradition and gave astronomy’s postulate of visibility a more than methodical/economic foundation, namely, a metaphysical one. That the world could contain things withdrawn and inaccessible to man’s natural optical capacity, not only at times and provisionally but definitively, was an idea unknown to the ancient world and the Middle Ages and also, by their philosophical assumptions,
an impossible one. The enrollment of curiositas in the catalog of vices was based on the moral self-restriction of human theory vis-à-vis constituents of nature that were certainly given in the phenomena, even if explanatory access to them might be difficult. It is true that it would have been quite consistent with the nominalist system, in which nature was no longer related to man's point of view, to assume the existence also of phenomenally concealed and unseen things in nature, indeed to presuppose that only a small or a vanishingly minute segment of reality was accessible to the human sense organs; but this conclusion was not immediately drawn.

Of course this state of affairs has remained incomprehensible to the subsequent age, with its mythified picture of the genesis of modern natural science; and, in the time-honored manner, it has tried to provide, by means of a new myth formation, what it felt was missing. In the third volume of Alexander von Humboldt's colossal picture (itself part of world literature) of the world of science, his Kosmos (1845–1862), there is a little-noticed passage regarding Copernicus that registers doubt regarding the statement that Copernicus foresaw the future discovery of the phases of Venus as inevitable and predictable. Humboldt ascribes this statement to the Optics of Robert Smith (published in 1738) and also mentions the check carried out by De Morgan in 1847, which turned up no evidence relating to this in Copernicus's works. Behind this skeptical note, which does not betray any urgent interest in itself settling the question, there stands a clever anecdote, whose dissemination and origin deserved investigation.

The earliest instance of the anecdote appears to be in John Keill's Introduction to the True Astronomy. There mention is made of an objection to Copernicus's doctrine, to which he himself had replied; specifically it had been held against him that on his assumptions Venus would have to exhibit the same alterations and phases as the moon. Copernicus had replied to this that perhaps the astronomers of subsequent ages actually would establish that Venus underwent such alterations—and this prophecy of Copernicus had been fulfilled by Galileo, who while observing Venus through the telescope had found the appearances, analogous to those of the moon, that Copernicus had predicted. In the later travels of Keill's anecdote, the prophetic trait ascribed to Copernicus became more articulate: The French astronomer Bailly, who presumably knew the French translation of Keill's book, makes Copernicus venture the declaration that if our eye possessed sufficient
power of vision to see the two planets nearest the sun exactly as it sees the moon, it would perceive the same sort of alterations in them as in the moon. But Jan Czynski, a Pole living in France, in his study of Copernicus of 1847—that is, the same year in which De Morgan’s search for appropriate documentation in Copernicus proved fruitless—was the first to invent the imaginary dialogue in which Copernicus replies to his opponents’ objection on the grounds of the unconfirmable phases of Venus that one would see precisely these phases if one could find the means to perfect man’s visual faculty. Camille Flammarion canonized the anecdote almost word for word in this form in his widely read biography of Copernicus, which was so influential for the nineteenth century’s picture of the astronomical reformer. Thus Copernicus’s prophetic proclamation of the telescope—scarcely even cryptic any longer—definitively entered the literature.

The ready audience that the anecdote found fits only too well in the picture of a historiography of science for which its epoch-making heroes seemed occasionally to possess too little self-consciousness. But it was only when Galileo’s discoveries with the telescope had become known that his one-time student Benedetto Castelli could inquire of him by letter in December 1610 whether perhaps he had confirmed by observation Venus’s suspected phases. Galileo answers him in the same month, saying that he had in fact reached certainty about the alterations in Venus’s shape a quarter of a year earlier; and this confirmation of the Copernican system by the telescope is accordingly brought into play in the “Third Day” of the Dialogue on the World Systems.

The root, in Copernicus’s works, of the anecdotal anticipation of the invisible being made visible lies in a passage in which he does in fact speak of the phases of Venus, not, however, in connection with the difference between his own system and the traditional one but rather in connection with the differences within the astronomical tradition itself regarding the position of Mercury and Venus, the two innermost planets. In the tenth chapter of the first book, which must have been the point of departure for the construction of the apocryphal anecdote, Copernicus deals with the sequence of the heavenly bodies of the solar system from outermost to innermost and discusses in the process the various opinions about Mercury and Venus, whose orbits Plato had placed outside that of the sun, but Ptolemy and many recent authors had placed within. According to which construction one chooses
and which explanation of the derivation of the planets' light one accepts, varying consequences result for the apparent phenomena. If the planets receive their light from the sun, then events similar to the phases of the moon should affect Mercury and Venus, and they should even undergo occasional transits through the sun's disk, if one wanted to fix their paths beneath the sun's path. But such phenomena had not been observed, and this had led this group of astronomers to place the paths of Mercury and Venus outside that of the sun. The adherents of Ptolemy, on the other hand, had good constructive grounds for posting Venus and Mercury in the space, which seemed to them too large and empty, between the moon's orbit and the sun's, and they defended themselves against the cited objections with the assumption that the planets are either self-illuminating bodies or of such transparency that the sunlight can stream through them. Thus this whole discussion operates exclusively on the basis of the geocentric system that Copernicus rejects. It has as yet nothing to do with the questions regarding the confirmation of Copernicus's own model. The statement that the observable proofs of Ptolemy's thesis that were to be expected were missing does not yet imply that Copernicus predicted such proofs for his own thesis, although his own system does likewise imply the appearance of phases in Mercury and Venus.

However, the anecdote does touch upon a central point of the Copernican achievement and its connection with the importance that the optical 'making visible of the invisible' was to acquire in the history of Copernicanism. There are clues in Copernicus's *Revolutiones*, unnoticed before now, that point to the hypothesis that the new conception of the solar system began with a partial constructive solution for the system of the sun, Mercury, and Venus and then generalized the schema arrived at in that connection. Within the Ptolemaic system, there were great difficulties in accommodating the imaginary spheres of the two planets that travel as though 'synchronized' with the sun; Copernicus mentions the enormous size of the secondary circle of Venus's orbit (*ingens ille Veneris epicyclus*)—that is, Venus's deviation from its primary orbit around the central body—and the characteristic that distinguishes the movements of the moon and the other planets from those of Venus and Mercury, namely, their independence of the movement of the sun. Here the very natural solution was to make not the earth but the sun the center of the orbits of Mercury and Venus and to introduce in this manner a partial heliocentrism in order
to save the *ordo orbium* [order of the spheres]: "Then one of two alternatives will have to be true. Either the earth is not the center to which the order of the planets and spheres is referred, or there really is no principle of arrangement. . . ." Here then lay the first decision regarding the possible rationality of the world system. Copernicus formulates it as a general dilemma, although his considerations in this passage limit themselves strictly to the arrangement of the orbits of these three heavenly bodies. Only the subsequent paragraph undertakes the extension and begins with a formula that is highly instructive in regard to the genesis of the system: "If anyone seizes this opportunity to link Saturn, Jupiter and Mars also to that center, provided he understands their spheres to be so large that together with Venus and Mercury the earth too is enclosed inside and encircled, he will not be mistaken, as is shown by the regular pattern of their motions." The discussion concludes with another reference to the transference of the partial construction that had been discovered first: "These facts are enough to show that their center [that of the outer planets] belongs more to the sun, and is identical with the center around which Venus and Mercury likewise execute their revolutions."

This excursus into one of the Copernican system’s genetic characteristics that we have been able to uncover was necessary in order to correct a false element of consistency in the history of the interest in the invisible. At the same time, it was meant to give at least an example of how the history of the early modern intellect is deformed by the endeavor to ascribe essential tendencies of the epoch to the daring and the anticipatory genius of its supposed protagonists. It was not by accident that the French *Encyclopédie* laid emphasis, in the article "Copernic" in its fourth volume (1754), on precisely this supposedly prophetic trait of Copernicus in regard to the phases of Mercury and Venus: "Il prédit qu’on les découvrirait un jour, et les télescopes ont vérifié sa prévision" [He predicted that they would be discovered some day, and the telescopes have verified his prediction]. It had to be shown, in contrast, that Copernicus could not base any hope for a definitive confirmation of his system on the future discovery of phases in Venus and Mercury. Thus the anecdote projects back onto Copernicus the expectations and pretensions that Galileo, with the telescope and the optical accessibility newly opened up by it, both awakened and fulfilled. For Copernicus the postulate of visibility continued in unbroken validity: If phases were not observable in Venus
and Mercury, then he had in mind an explanation of their physical nature that made such phenomena unnecessary for the new system too.

Thus there was no Copernican necessity for the telescope to be invented and no point of departure for a rational prophecy of that event. Theoretical curiosity did not hurry on ahead of the stock of the available possibilities of satisfying it by means of man's natural organs. It was precisely for that reason that Galileo's application of the new optical apparatus to astronomy induced such an original and surprising turning of man's interest and his assessment of its scope.

Galileo's use of the telescope marks a historical moment whose unsuspected result, the discovery of unseen realities in the universe, was to have radical consequences for the understanding of man's position in and toward nature. The most important consequence was that (so to speak) 'curiosity is rewarded'—the weighty significance of what had hitherto been withheld from man is confirmed, and thus the morality of self-restriction is disabused and put in the wrong, and its abandonment is a logical consequence. The sixteenth century as yet knows nothing of all this, even if it does see the emergence of the first timid speculative relaxation of the postulate of visibility precisely in the reception of the Copernican reform.

Copernicus had held to the bodily reality of the heavenly spheres not only for the planets but also for the vaulted heaven of the fixed stars, although he no longer had any need at all to assume the solidity of this structure once he had replaced the rotation of the sphere of the fixed stars by the daily rotation of the earth. The first chapter of the first book of the *Revolutiones* holds explicitly to the spherical form of the world body as the *forma perfectissima* [most perfect form]. It represents complete totality (*tota integritas*), to which one can add nothing and from which one can take nothing away, and at the same time the most capacious form (*capacissima figurarum*), which is best suited to containing and preserving everything. The chapter closes with the lapidary statement that no one will dispute that this is the form appropriate to the divinity of the heavenly bodies. Giordano Bruno was not the first to deduce from Copernicus the consequence of the dissolution of the finite system of spheres—this was already done in 1576 by the Englishman Thomas Digges, with his broadening of the Copernican principle that the appearances of astronomical phenomena are conditioned by the standpoint of the observer.
Digges was the first to account for the finitude of the world as a mere appearance resulting from the limited visibility of the fixed stars that are disposed freely in space beyond the outermost planetary sphere and stand at different distances from the earth. This assumption would still not require one explicitly and positively to assert the unlimitedness of the world; that is 'somewhat more' than the logical Copernican result. Digges arrives at the assertion, which is liable to cause dismay in relation to the postulate of visibility, that “the greatest part [of the heavenly bodies] rest by reason of their wonderfull distance invisible to us.” This idea, in its time monstrous, destroys for the first time the anthropocentric teleology that Copernicus had wanted to save. Digges’s text is, admittedly, contradictory, vacillating between two positions: At first he assures us that we could never sufficiently admire this world, which God intended, as His work, for our senses; but ultimately he revels in vindicating the overwhelming invisible regions as the glorious court of divinity itself, to whose unlimited power and majesty only infinite space is appropriate, while man possesses his little visible share of the world not to see and to enjoy but rather to extrapolate by conjecture into the invisible. The infinity of the world, which in Giordano Bruno was to signify a pagan rebellion, is here still something like man’s pious resignation from his full participation in the world. But from whatever motive and however contradictory it may be, it is a leap of the anticipatory expansion of reality in which as yet there is no trace of a suspicion that man’s auxiliary equipment could ever imitate this expansion even to the extent of making visible a single previously invisible star.

One cannot define Copernicanism so narrowly that one sees in it only the exchange between the sun and the earth of the central position in the system of planets and then adds to this the new speculation about unbounded space and the plurality of worlds as something entirely separate from that, something that set thought and imagination in motion independently. In Digges, it is plainly evident that the impetus—however welcome it may have been just then for other reasons—came from Copernicus, even if here as elsewhere the Pythagoreans are always named in the same breath. But conjecture regarding the invisible background of what is visible has as yet no virulence as a stimulus to curiosity. In the absence of ‘prospects’ lies the reservation of divinity; optical and metaphysical transcendence have one and the same threshold. But in this single step beyond
Copernicus, visibility has become a contingent fact. In the process, the ambivalence that characterizes such a subject in this no-man’s-land between the epochs has become clearly recognizable: The theological function assigned to a cognitive step, in accordance with which that step once again negates man’s certainty of the world, makes ready beforehand its human counterfunction. Theology destroys itself by staking its claim on the finality of a consciousness of finitude. By emphasizing the inconsiderateness and relentlessness of absolute power with respect to man, it makes it impossible for the progress of theory to be neutral, for technical accomplishment to be a matter of indifference, in this historical zone. By laying claim to supposed boundaries and impossibilities, theology exposes itself fatally, as it had done and was to do with the proof of God’s existence and with theodicy.

The synchrony of events and ideas is so incredibly concentrated by the assiduity of inquiry in the second half of the sixteenth century and the growing motivation and the technical equipment of theoretical curiosity have drawn so close together in time as seen from our distant vantage point that sequential relations occasionally seem to become reversible. It was almost inevitable that Thomas Digges’s dissolution of the sphere of the fixed stars should be seen as not the pure and immanent consequence of the Copernican idea but rather the earliest result of the use of the telescope, which already haunted these decades. In Digges’s Pantometria of 1571, there is found, both in the preface and in the twenty-first chapter of the first book, a description of the optical apparatus that his father Leonard Digges had invented and produced and with whose help distant objects could be observed. Before 1580 such instruments were already the object of widespread interest in England, and the technique of their production was thoroughly familiar. However, it is testimony to the unquestioned authority of the astronomical postulate of visibility that we possess no documentary basis for the assumption that any of these ‘perspective glasses,’ which already played their role as conveyers of new sights on the seafarers’ voyages of discovery, had ever been trained on an astronomical object.

The fact that as early as in the Opus maius of Roger Bacon—the thirteenth-century doctor mirabilis [marvelous teacher] and Faust figure, accused of heresy, who had set himself the goal of entirely exhausting the limits of the knowable—an indication of a system of lenses could be found by whose means one could fetch the sun, the moon,
the stars down to earth was no doubt, in its formulation alone, too suspect of magical motivation to allow one to appeal to or be motivated by it. The distance between the theoretical ideal of astronomy, as one of the seven *artes liberales* [liberal arts], and the *artes mechanicae* [mechanical arts] as the product of which the new instrument was introduced was still too great, in the prevalent conceptions of order, to allow the tool and the object to be brought together. The serviceability of technique for theory, the positively symbolic role of the telescope in the self-confirmation of theoretical curiosity, required an intellectual breakthrough of the boldness of the proclamation that Galileo was to make in March of 1610 with his *Sidereus Nuncius*.

Only a year before, in June 1609, in England, Thomas Harriot had demonstrably begun telescopic observation of the heavens and in the winter of 1609/1610 had already involved some of his friends and students in such observations and equipped them with instruments of their own. However, it was not only that the Englishmen appear to have restricted their observations to the moon that prevented the great breakthrough of astronomical curiosity from emanating from England. They evidently lacked not only Galileo’s ingenious and considered use of optics but also his ability to make the kind of concentrated literary proclamation that first made the result into an event.

Galileo not only described what he saw; he grasped the relevance of what he had seen for a new interpretation of and attitude to the world and formulated it into a conscious provocation to the tradition. In this phase of the history of the scientific attitude, the manner of literary proclamation is still inseparably bound up with the potential efficacy of the theoretical result itself. Galileo’s contemporaries and fellow members of the learned fraternity who refused to look through the telescope should not be understood in this attitude only as fearing confirmations of Copernicus; there one readily projects too much from Galileo’s later conflicts into the early situation following the publication of the *Sidereus Nuncius*. Galileo must have deceived himself, they thought, not only because he claimed to see things that seemed to contradict a particular cosmological theory—it was to emerge later how little the evidential strength of those Copernican analogies actually was—but because he claimed to see more by means of a device from the realm of lowly mechanical skills than was naturally accessible to man’s eyes.
The telescope could not be abolished or banished as an instrument of theoretical impertinence. It became a factor in the legitimation of theoretical curiosity precisely because, unlike any experimental intervention in the objects of nature, it could be adapted to the classical ideal of the contemplation of nature. The phenomena newly revealed by the telescope nourished and gave wings to the imagination, which sought to provide itself, by means of the 'plurality' of worlds, with continually self-surpassing limit conceptions of what was as yet undisclosed.

Still more important than this history of the effects of the telescope is that of its incorporation into the instrumentation of human theory, its vindication as part of the system of human attitudes and accomplishments. Through the telescope, the contemplation of the heavens acquires a historical character: In a situation in which the cosmic horizon of experience had been constant since primeval times, the discovery of the telescope signifies a caesura, beyond which a continuous increase in the accessible reality could be anticipated. Even Galileo did not dare to ground this epochal caesura on the mere contingency of an idea happening to occur to human reason. In the “Third Day” of the Dialogue on the World Systems, he puts in Salviati’s mouth a carefully weighed formula: At this time in particular it had pleased God to grant to human intelligence such a marvelous invention. If Copernicus had not yet been able to cite the differences in the apparent sizes of the planets, and the phases of Venus, in support of his theory, then the natural imperfection of the faculty of vision must be held responsible for this, the faculty whose objects had only been brought to full presence (visibilissimi) by the telescope. The imperfection of the human organic equipment even for the noblest activity, that of observing the heavens, is the ineluctable admission that man’s technical/inventive self-extension justifies.

Kepler, who seems not to have hesitated a moment in accepting and finding credible the news of the new discoveries in the heavens, sees in the telescope the sign of the domination granted to man over the earth. And the Jesuit Christoph Scheiner, who was engaged in a violent feud with Galileo, even attempts in his great work on the sunspots, Rosa Ursina (1630), to domesticate the telescope for Scholasticism by classifying it as an almost matter-of-course constituent part of the true and sure philosophical method, which after all has done nothing other than, and needs to do nothing but, go back from the
effect lying before our eyes to the unknown causes. In the case of the phenomena of the heavens, however, this is not possible for unequipped sense perception—solely on account of the all too great distance—so that the telescope, as a divine favor, has given us both access and the right of access to the realm of those hidden causes.19

Another historical classification of the telescope is given by Joseph Glanvill in The Vanity of Dogmatizing (1661): Adam before the fall had not yet needed “Galileo’s tube” in order to contemplate the “Celestial magnificence and bravery,” since the whole of nature stood open to him and his unaided eye, so that he was even able to see the influence of magnetism. On this theological assumption, in his first balance sheet of scientific and technical progress, Plus ultra (1668), Glanvill could praise the telescope as the most excellent invention ever made, which had extended the heavens for us and helped us to achieve nobler and better-grounded theories.20

Barthold Heinrich Brockes, in his Irdisches Vergnügen in Gott (1721–1748), classified the optical realm of the telescope as a third, independent revelation of God alongside the two others, that of the nature visible to the unaided eye and that of biblical revelation: “Die dritte zeiget offenbar in den Vergrößerungsgläsern sich/Und in den Telescopiis zum Ruhm des Schöpfers sichtbarlich;/Indem, wenn man in der Natur verborgene Gröss’ und Kleinheit steiget,/Bei einem heiligen Erstaunen der Schöpfer mehr als sonst sich zeiget.”21 [The third makes itself evident visibly in magnifying glasses/And in telescopes, to the glory of the Creator;/Since, when one ascends into the greatness and smallness that are hidden in nature,/The Creator shows Himself more than He does elsewhere, in a holy wonderment.] In the eleventh of the critical letters that Lessing appended to the first edition of his writings (in 1753), he discusses in detail an early and “extensive poem on the plurality of worlds,” in whose first canto he had spoken “of the deception of the senses”; here the relation between sensual appearance and rational judgment is compared to the difference between natural and technical optics:

Deswegen gab dir Gott des Geistes schärferes Auge,
Dass es das leibliche dir zu verbessern tauge.
Wann du mit deistem siehst, zieh jenes auch zu Rat,
Durch beides siehst du recht, wann eines Mängel hat.
Wie in dem Zauberrohr, wodurch man in der Ferne
Gleich als im Nahen sieht, wodurch man Mond und Sterne
Aus ihrer Höhen Klucht, ohn Segen, ohne Geist,
Und ohne Talisma, zu uns hernieder reisst.
Des Künstlers weise Hand ein doppelt Glas vereinet,
Und nur der Gegenstand durch beide klärer scheinet;
Da eines nie vor sich der Neugier Auge
Starkt
Das statt der Deutlichkeit in ihm nur Nebel merkt.22

[Consequently God gave you the spirit’s keener eye,/So that it would
serve to improve your bodily one./When you see with the latter, call
on the former also for counsel;/You see accurately through both to­
gether even if one of them has flaws./As in the magical tube, through
which one sees in the distance/Just as one does near at hand, through
which one brings moon and stars/From the abyss of their heights,
without blessing, without spiritual intervention,/And without a talisman,
down to us here below./The artisan’s wise hand unites a doubled
glass,/And only through both does the object appear clearer;/Since
one of them alone does not strengthen curiosity’s eye,/Which instead
of clarity sees only fog in it.]

The fact that the talk here is, quite unabashedly, of strengthening
“curiosity’s eye” with the artificial system of lenses indicates in the
clearest possible way the end of the process of justifying the telescope,
to which Goethe did indeed oppose a new and final doubt whether
it did not confuse “real human understanding,” without this having
anything to do with its original questionableness as an instrument of
curiosity.

Translator’s Note

a. The author discusses this turning in his introduction (“Das Fernrohr und die Ohnmacht der
Wahrheit”) to a German translation of Galileo’s Sidereus Nuncius. Nachricht von neuen Sternen
(Frankfurt: Insel, 1965) and in part III, chapter 6 (pp. 453–502), of his Die Genesis der kopernikanischen
Welt (Frankfurt: Suhrkamp, 1975).
Justifications of Curiosity as Preparation for the Enlightenment

The modern age has understood itself as the age in which reason, and thus man's natural vocation, definitively prevailed. The difficulty created by this self-interpretation was to explain the delayed appearance in history of the form of existence that, as a result of its identity with the nature of man, should have been ubiquitous and taken for granted throughout history. The conceptions of the historical process that try to overcome this problem can be categorized according to whether they describe the prehistory of the age of reason as the natural impotence or the forcible suppression of the power of rationality. Like many metaphors, those of the organic growth of rationality or the coming of the light of day after the long night of its absence have an initial but not a lasting plausibility. The idea of a continuous upward progress of rationality contradicted the fundamental idea of the radical, revolutionary self-empowerment of reason as an event of epoch-making, unexpected suddenness. The idea of reason liberating itself from its medieval servitude made it impossible to understand how such a servitude could ever have been inflicted upon the constitutive power of the human spirit and could have continued in force for centuries. Another dangerous implication of this explanation was that it was bound to inject doubt into the self-consciousness of reason's definitive victory and the impossibility of a repetition of its subjugation. Thus the picture of its own origin and possibility in history that the epoch of rationality made for itself remained peculiarly irrational. In the Enlightenment's understanding of history, the relation between
the Middle Ages and the modern age is characteristically dualistic, and this is expressed more than anywhere else in the conception formulated by Descartes of an absolute, radical new beginning, whose only prerequisites lay in the rational subject’s making sure of itself, and for which history could become a unity only under the dominance of ‘method.’

One could say that historical understanding and the historical attitude were formed precisely to the extent that this dualism, presupposed by the modern age’s pretension to spontaneity, was overcome and the Middle Ages were brought into a unified conception of history. But this result was achieved through the effacement of the epochal threshold by the demonstration that elements of what was supposedly new could be traced back to factors that could be shown to be ‘already’ present in the makeup of the Middle Ages. The transformation of the Middle Ages into a ‘Renaissance’ extending itself further and further back into history was the logical result of this historiographical dissolution of the dualism of the Enlightenment; it can be understood as the rationalization of the irrational element in rationality’s self-understanding, and thus as a logical result of the Enlightenment itself. But the consequence was that the modern age seemed to lose its definition as an epoch, and thus also the legitimacy of its claim to have led man into a new and final phase of self-possession and self-realization.

An attempt to comprehend the structure of the change of epoch with rational categories was not made by the Enlightenment and up to the present has remained stuck fast in the dilemma of nominalism versus realism in interpreting the validity of the concept of an epoch. Wölflin’s resigned attitude in his Kunstgeschichtliche Grundbegriffe of 1915 is characteristic of the state of theory: “Transition is everything, and it is difficult to contradict one who regards history as an endless flow. For us, intellectual survival requires that we arrange the unlimitedness of events according to a few points of reference.” A return to the self-interpretation of the Enlightenment, or merely to taking seriously the uniqueness of the character of the modern age as an epoch, as implied in that self-interpretation, is apparently impossible so long as even a vestige of this overwhelming ‘historicity’ is operative in our attitude to the interpretation of history. But must the validity of the epochal category and the rationality of historiographical object definition be in conflict with one another? The answer is plainly yes,
so long as the logic of continuity takes as its only alternative the constancy of what ‘was there all along’ or preformation extending as far back as documentation is possible.

The insight that all logic, both historically and systematically, is based on structures of dialogue has not yet been brought to bear in the construction of historical categories. If the modern age was not the monologue, beginning at point zero, of the absolute subject—as it pictures itself—but rather the system of efforts to answer in a new context questions that were posed to man in the Middle Ages, then this would entail new standards for interpreting what does in fact function as an answer to a question but does not represent itself as such an answer and may even conceal the fact that that is what it is. Every occurrence [Ereignis], in the widest sense of the term, is characterized by ‘correspondence’; it responds to a question, a challenge, a discomfort; it bridges over an inconsistency, relaxes a tension, or occupies a vacant position. In a cartoon by Jean Effel in L’Express, De Gaulle was pictured opening a press conference with the remark, “Gentlemen! Now will you please give me the questions to my answers!” Something along those lines would serve to describe the procedure that would have to be employed in interpreting the logic of a historical epoch in relation to the one preceding it. Nietzsche understood the modern age as the result of the intellectual pressure under which man had formerly lived, not at all, however, as the mere Cartesian “jeter par terre” [throwing down] of everything inherited, which was supposed to make possible the planned new construction, but rather as a specific correlate precisely focused on the prior demand and challenge. It is not difficult to eliminate the biologism of the idea of “training” from what Nietzsche says in Beyond Good and Evil: “The long unfreedom of the spirit, the mistrustful constraint in the communicability of thoughts, the discipline thinkers imposed on themselves to think within the directions laid down by a church or court, or under Aristotelian presuppositions, the long spiritual will to interpret all events under a Christian schema and to rediscover and justify the Christian God in every accident—all this, however forced, capricious, hard, gruesome, and anti-rational, has shown itself to be the means through which the European spirit has been trained to strength, ruthless curiosity, and subtle mobility...”1 If one translates character here into function and “strength” into argumentation, one arrives at a schema for a historiographical relation in which the Middle Ages have lost
the historiographical contingency vis-à-vis the modern age that they had in the Enlightenment's conception of history, their arbitrariness as an annoying episode of confusion and obscurity in the text of history, and in which they gain their historiographical relevance precisely from their being able to provide the key to the sum of the requirements, as the implicit satisfaction of which (whether the supposed or the actual satisfaction is of no concern) the modern age organized itself.

It is not an accident that Nietzsche names "ruthless curiosity" as one of the epochal characteristics of the modern age that can only be understood in its specificity and energy by reference to the passage through the Middle Ages. The 'theoretical attitude' may be a constant of European history since the awakening of the Ionians' interest in nature—a presupposition that Edmund Husserl made basic to his conception of a teleology of this history—but this attitude could only take on the explicitness of insistence on the will and the right to theoretical curiosity after contradiction, restriction, competition, and the exclusiveness of other essential human interests had been set up in opposition to it. After the Middle Ages, theory could no longer be a simple continuation of the theoretical ideal of antiquity, as if a mere disturbance of some centuries in length had intervened. Not only did pent-up energy have to be let out through curiosity once it was rehabilitated, a kind of energy that deprived the ancient ideal's contemplative repose of the qualities precisely of repose and calm; the medieval reservations had also defined and given direction to a concentration of the will to knowledge and of interest in specific realms of objects. To understand this concentration as a continuation of antiquity is to participate in a misunderstanding suggested by the unavoidable employment of traditional terminology and sanctioning formulas.

Among Goethe's aphorisms and fragments on the history of science, there is a sketch that attempts to display the epochs of the sciences systematically according to the spiritual powers of man engaged in them: Sensuality and imagination are the basis of a first, childish phase of the cognitive interest, which expresses itself in the form of poetic and superstitious views; in the second phase, sensuality and understanding are the basis of an empirical world interpretation, which is typified by curious and inquiring individuals; dogmatism and pedantry are the characteristics of a third epoch, in which understanding and reason combine for purposes that are predominantly didactic; in the fourth
and last epoch, reason and imagination enter into a constellation of
the ideal, whose opposing poles are designated as methodical and mystical. In this schema, the attributes of the individual epochs, which are equipped with polarizing signs, arise entirely from the changing interplay of human faculties. The tensions lie in the modes of expression of the epochs themselves; but there is no visible logic leading from tension to intensification, that is, for example, from the childish polarity between poetry and superstition in viewing the world to the empirical opening up of access to the world in the field between the negative pole of the curious and the positive pole of the inquiring attitude to the world. (The assignment of plus and minus signs is Goethe’s.) The peculiarly unhistorical character of the anthropologically compartmentalized schema conceals the historical logic in which attitudes of faith and superstition arrive at their own stages of dogmatic pedantry and, by means of the appearance of systematic completion and stability, block the view of what could endanger the system. But curiosity, the instinct of inquiry, empirical openness are awakened precisely by the tabooing coercion of the dogmatic system, which not only must deprive its adherents of certain questions and pretensions but grounds this renunciation on a particular appropriateness and serviceability of the system. The extent to which the impossibility of the system’s failing to answer questions loses self-evidence and to which the meritoriousness of renunciation or the viciousness of boundary infringement require argument is not only an index of the remaining unsatisfied curiosity or of the turning tide of awakening dissatisfaction but also reacts on this in a stimulating, accentuating, tendency-promoting fashion. The still ‘medieval’ concessions and restrictions with which the seventeenth century wants to secure a path and legitimacy for the cognitive appetite always operate at the same time as reflections on what still remained to be set free.

At the turn of the seventeenth century, theoretical curiosity gains typification, definition as a figure, wealth of gesture. In the poetic figure of Doctor Faustus there is created a bearer of its transformations and of the progress in its vindication. The original figure of Faust, in Johann Spies’s Historia of 1587, still embodies terror at the sinful cognitive appetite, which “took for itself eagle’s wings and wanted to investigate all the foundations of heaven and earth.” The English translator already moderated the epithets of moral reprehensibility, and Christopher Marlowe transformed the baseness of the cognitive
drive that is ready to risk anything into tragic greatness. Damnation
still remains the ultimate consequence, but doubt has set in whether
the spirit, when it surrenders itself entirely to its most characteristic
motive, can be sinful. The chorus closes the tragedy with the moral
that one should contemplate Faust's downfall so as to be warned by
his fate not "to wonder at unlawful things./ Whose deepness doth
entice such forward wits/ To practice more than heavenly power
permits" [in the German translation: "Zu tun, was hie und da der
Seele wenig nütz," to do what sometimes is not good for the soul].
Lessing's Faust was to be the first to find salvation; Goethe's Faust
also found it—but did salvation resolve the question that gave the
figure its epochal significance?

In his preface to Wilhelm Müller's translation of Marlowe's Faust
(1817), Achim von Arnim "reclaimed the freedom of the world, as it
matures, to rework this material" and grounded his assumption that
"not enough Fausts have yet been written" on the "enormous arrogance
of which the sciences of our time in their ingenious development are
guilty," without meaning to cast doubt on the effective power of
Goethe's version: "The further the lust for science spreads, the higher
grows the arrogance of the individuals who think they have accom­
plished something and then deify themselves, the more renunciation
science demands, the more the taste for science spreads—the deeper
will the earnest truth of Goethe's Faust be felt...."

When in 1940 Paul Valéry availed himself, in what was perhaps a
final, insurpassable instance, of the right to render the story incarnate
again, to assign to Faust and Mephistopheles their metamorphoses as
instruments de l'esprit universel [instruments of the universal spirit] in
history, to recognize in them the humanity and inhumanity of the
altered world—the result was a comedy with magic tricks. Why so?
Because it was no longer Faust who needed to be tempted but his
tempter: The process of knowledge itself had surpassed everything
that could make magic enticing. The great gesture of curiosity has
lost its scope when pointers indicate the instant at which to press a
button.

As Christopher Marlowe wrote his Faust, in 1588, Giordano Bruno
had already begun to pursue to the end his path of triumphant defiance
on behalf of curiositas. At least in what he believes man capable of
knowing about the world, he is the real Faust figure of the century,
in distance from the Middle Ages far in advance of his poetic colleague.
In the first dialogue of the *Ash Wednesday Supper*, he celebrates the work of knowledge, his knowledge, as the penetration of heaven and overstepping the bounds of the world, as the opening of the prison where truth was held in custody and the exposure of concealed nature—in other words, as the *coup de main* of the cognitive drive against its medieval enclosure and limitation. Augustine’s suspicion that behind astronomy stands the striving to elevate oneself to heaven by one’s own power seems to be confirmed in Bruno: “Non altrimente calcamo la stella, e siamo compresi noi dal cielo, che essi loro” [Just as we tread our star and are contained in our heaven, so are they], declares the introduction to his dialogues on the infinite universe. Knowledge of nature and possession of happiness are identical; but the Aristotelian formula regarding man’s cognitive drive, which Giordano Bruno places at the beginning of his interpretation of Aristotle’s physics, is now directed precisely against the closed universe of Aristotle and the Middle Ages; it has become a formula of liberation rather than justification. This liberating cognitive striving is no longer the common nature of all men—otherwise Bruno would not feel the loneliness and forlornness of his fate—but rather the business of the few whom he can pull along with him and draw into the ecstatic flight of curiosity: “O curiosi ingegni,/Peregrinate il mondo,/Cercate tutti i numerosi regni!” [Oh curious spirits,/Travel around the world,/Investigate all the numerous kingdoms!]

Francis Bacon defends theoretical curiosity entirely differently, more indolently, with juristic tricks and shrewd twists of hallowed arguments. Just as he treats the process of nature in juristic categories “exactly like a civil or criminal matter” (as Liebig observed), so also for him man’s relation to nature, in the entire range—whose breadth he was the first to perceive—over which theoretical and technical mastery can be achieved, emerged as a question of legal rights. The distinction, which is usually understood as merely a result of shifting terminology, between eternal laws of nature (*leges aeternae*) and their usual course (*cursus communis*) is established in strict accordance with the distinction between codified law and common law and serves precisely to delimit the possibilities of human intervention in nature. A parallel distinction appears in the roles assigned to metaphysics and physics: The former has as its object the unalterable law beyond man’s influence; the latter comprises all knowledge of the operative and material causes that man can transpose in order to influence given states of affairs.
Bacon recognizes no thoroughgoing lawful determination of nature, and I doubt whether today one still correctly understands his famous proposition that nature can only be mastered if one obeys her in the way one immediately assumes one can understand it, that is, by relating obedience and mastery to one and the same aspect of law.

The idea of an essential human right to knowledge, a right that has to be recovered, dominates Bacon’s *Novum organum* (1620). The preface deals with the stagnant condition of the contemporary sciences and promises to open a new and hitherto unknown path for the human spirit and to provide it with resources so that it can “exercise its right with respect to nature.” Mankind’s pretension to science is grounded in a divinely bestowed legal title, whose full power should now be exercised to the extent permitted by reason and “sound religion.” Bacon sees the satisfaction of the human appetite for knowledge with the achievements of the ancient world as a result not of conscious self-restriction in view of supposed limit settings but rather of an illusionary underestimation of one’s own powers and means, which at the same time can be described as an overestimation of what has been achieved. The pillars of Hercules, which are presented on the title page of the *Instauratio magna* as already being transcended by shipping traffic, are indeed a fateful boundary—but rather than representing a divine warning against hubris they represent the discouragement of desire and hope by myth.

Bacon avoids burdening the medieval sanction of the traditional world frame with the responsibility for man having allowed his possibilities to remain unexploited; as I will show, he must keep the theological premises unburdened so as to be able to derive from them a new legitimacy. Thus it is not religious humility and theological taboo that have brought about the great stagnation but rather man’s error regarding the scope of his potential power; imagined riches are one of the main causes of poverty: “Opinio copiae inter maximas causas inopiae.” False trust in the world in the present makes one neglect the available sources of assistance for the future. False trust in the world—that is the dominant concern in Bacon’s momentous exclusion of the teleological view of nature. But it is no longer the hidden and incomprehensibly sovereign God of nature Who denies man insight and intervention in nature but rather the historical indolence of man himself, who fails to recognize the goals of his interaction with nature and prematurely blocks the path of progress for himself
by his faith in a special favor accorded to him by nature. The positions of hubris and an appropriate assessment of one's worth are interchanged in Bacon's system; men's carelessness and indolence (socordia et inertia) made them accept and treat as an agreeable authority the self-confidence and presumption of an arrogant spirit (of Aristotle), qualities that saved them the trouble of further investigations.\(^8\)

This picture of the human spirit's historical indolence and unwillingness to progress presupposes of course an altered concept of theory itself, which no longer is the reposeful and bliss-conferring contemplation of things that present themselves—as the ancient world had regarded it—but rather is understood as work and a test of strength. It is no longer sufficient to draw the individual object into the focus of observation and, so to speak, expect it to give evidence about itself; only efforts to alter reality contribute to its explanation, and the patience of reposeful contemplation is useless.\(^9\) Here also, without any notice being taken of the telescope and the microscope, the relevance of the invisible is brought into play, not, however, as the relevance of what is too small or too distant but rather as the way in which nature's constitutive elements and powers are hidden behind the self-presentation of its surface.

The novelty of the method of induction is the way in which it directs one's attention primarily away from the object of interest itself. Reason left to itself, the intellectus sibi permissus, is impotent because it is consumed in the momentariness of supposed evidence that Bacon calls anticipatio. This evidence penetrates the intellect in the moment and fills up the imagination, whereas reason that is equipped with and controlled by method is directed at a factual material that has not yet been organized, a material that does not constitute a pre-given coherent context but must first be brought into one and whose interpretation only becomes possible in such a context.\(^10\) The critical side of this concept of knowledge is directed against the concept of reality as evidence in the present, and the new scheme rests entirely on the concept of reality as experimental consistency,\(^a\) in which the true nature of things—like that of the citizen in the state—shows itself only when they are withdrawn from their natural condition and exposed to, as it were, artificial disorder: cum quis in perturbatione ponitur.\(^11\) Here the turning is described, from which Galileo extracted greater consequences than Bacon, when he turned his back on 'natural' nature and out of curiosity had himself shown the arsenal of Venice, where
the 'artificial' nature embodied in the mechanisms of the instruments of war gave up its secrets. Bacon's ideal of knowledge still stands closer to the medieval undercurrent of magic than is the case with Galileo's physics. On the other hand, Galileo's confidence in the demonstrative power of optically strengthened observation, by means of the telescope, is more ancient in its concept of reality than our mythicized version of the scene makes it appear. Bacon's concept of indirect experience indicates the new path more explicitly here. The magic \textit{habitus} [manner, dress] is also in large part stylization, intoxication with metaphor—and not least of all an attempt to give color and concreteness to the paradisaic status of Adam as the typification of man's relation to nature, which, while admittedly lost, guarantees his title of right in history. The restitution of paradise, as the goal of history, was supposed to promise magical facility. Bacon's rejection of mathematics as the medium in which to formulate the knowledge of nature is connected with his definition of the paradisaic condition as mastery by means of the word.\textsuperscript{12}

Bacon wrote down the clearest outline of his justification of human curiosity by rearranging the biblical paradise as a utopian goal of human history as early as 1603 in the fragment entitled \textit{Valerius terminus}, which, however, was only published posthumously in 1734. It is the earliest form of the projected systematics of his major works. The first chapter of the fragment carries the heading "Of the Limits and End of Knowledge." This problem is immediately traced back to two analogous events of theological prehistory: the fall of the angels and the fall of man. The relation between the two events lies in the interchange of the motivations appropriate to the behavior of each species, motivations that thereby become culpable: The angels, destined for the pure contemplation of the divine truth, aspired to power; men, equipped in their paradisaic condition with power over nature, aspired to the pure and hidden knowledge.\textsuperscript{13}

At the same time, the relation between knowledge and power is prefigured in this mythical reversal. The angel of light, endowed with pure knowledge but destined to serve the highest power, reaches for the highest power itself; man, equipped with power over everything created, but not partaking of the deepest secrets of the divinity, confined as spirit in the body, succumbs to the temptation of the light and the liberty of knowledge.\textsuperscript{14} Now he is endangered by both things, the lost sovereignty over reality and the longing for purity of knowledge, which
for this being is as dangerous as stumbling upon a spring whose torrents of water gush forth without any prepared course. But the sacrilegiously arrogated knowledge is not that of things and nature; rather it is “moral knowledge,” the ability to distinguish between good and evil. This alone is God’s secret, which He wanted to reveal but not to expose to an autonomous grasp. By taking the biblical “tree of knowledge” literally, Bacon reserves the realm of morality for religion but gains nature as the harmless object of an inquiry that wants to and may regain for man his lost paradisaic dominion.

There is no hint of any doubt whether the regaining of the paradisaic power is compatible with the divine reservation in favor of revelation when the latter remains restricted to morality, since after all the lost paradise evidently had no need of morality and its discovery immediately entailed banishment. Bacon is not concerned with such inconsistency; it is enough for him that knowledge of nature was not the temptation that brought man to his fall. If God appeared to have His secrets in nature as well, then that meant no prohibition but rather something like the divine majesty’s delight in hiding His works, in the manner of innocent children’s games, in order to let them ultimately be discovered nonetheless. For Bacon, the great world hide-and-seek of the hidden God of late-medieval nominalism, which Descartes intensified into the suspicion of the universal deception of a Dieu trompeur [deceiving God] and sought to break through by grounding all certainty on absolute subjectivity, has exactly the innocence of a game laid out with the goal of eventual discovery and solution and free of any suggestion of jealousy of man’s insight into the secret of the creation.

The idea is foreign to Bacon that human knowledge might be an auxiliary construction in place of what is unknown, might be hypothesis and mere probability—a consideration that the seventeenth century used over and over again to conceal its cognitive pretension. For Bacon, the human spirit is a mirror capable of containing the image of the universe. The representation of this universe is determined by the idea of natural law (“law of nature”). The interpretation of this expression is still entirely bound to its metaphorical substratum, to the analogy of political law. This confines the idea within the horizon of the political thought of the time: The citizen does not enjoy insight into every aspect of the will of the ruler, but events and changes enable him to infer the reason that underlies the whole.
Bacon loves still another set of metaphors, those of organic growth. Here as elsewhere they have the function of justifying the continuation of a formative process, once begun, toward a totality. Knowledge is "a plant of God's own planting," and its development to blossom and fruit, laid out in its inner principle, is "appointed to this autumn of the world," the harvesttime that Bacon believes has arrived in his century, as the time when his philosophy is 'due,' and which announces itself in the opening of the world by seafaring and trade and in the awakening of knowledge. Religion, so he argues, should support and promote the knowledge of nature, since its neglect is an offense to God's majesty, as though, perhaps, one were to judge the accomplishments of an outstanding jeweler only by what he lays out in his show window. But in everything the lost paradise remains the regulative idea of cognition; knowledge continues to be functionalized for power, for "the benefit and relief of the state and society of man"; otherwise it degenerates and "maketh the mind of man to swell." Here "the pleasure of curiosity" appears once more in its medieval signification; but the expression describes not a particular variety and objective reference of knowledge itself but rather a standstill in the pursuit of knowledge, a forgetfulness of its original purpose, a refusal of its potential for the recovery of paradise. Knowledge that only satisfies itself fails to serve its organic purpose and takes on the characteristics of a sexual vice that produces no offspring.

The voyage beyond the Pillars of Hercules has lost its adventurousness and no longer aims only into the enticing indefiniteness of the ocean; the certainty of finding terra incognita on the other side of the ocean justifies the departure; indeed it renders it criminal to linger in the land-locked sea of what is known. The extent to which we are certain that we do not yet know and rule nature, that we are not yet near the lost paradise again, guarantees the future of new discoveries. The increment to the known world that had already come about in Bacon's time contracts, in the great framework of this speculative picture of history, into a mere beginning, a symptom of possibilities. Pure knowledge, whose idea coincides for Bacon with the ancient idea of theory, appears to him as an attitude of inescapable resignation because it has no motive for its progress but rather dwells persistently on each of its phenomena and loses itself in admiration of it. Curiositas has become a worldly 'sin,' the indolence of theory in theory itself, a failure in the extensiveness of the cognitive pretension as a result of
its intensiveness. The premature assertion, in the tradition, of boundaries to knowledge and capability was for Bacon the result of this ideal of pure theory.  

This position of Bacon’s entails a leveling off and homogenization of the world of objects. There are no preferred and no unworthy objects of theory. The teleological interpretation of knowledge itself excludes any teleological interpretation of its objects: what an object ‘imports’ first emerges only when it functions as a source of evidence to be assimilated by method, that is, not in what it is but in what it makes possible. Here a new concept of the ‘purity’ of theory is forming itself, one that no longer has anything to do with the ancient ideal but rather points to what we nowadays call ‘basic research,’ where we exclude only predefined purposes, but we certainly do assume that theoretical results themselves give rise to possible goals, open up the path to applications. The general goal of the reattainment of paradise cannot be made specific in the form of fixed goals for the individual component processes. Here also the image of the contemporary voyages of discovery dominates Bacon’s thought. No assumption of an unknown goal guides the ship’s voyage; rather the compass enables one to hold to a path on which, in the field of the unknown, new land will eventually appear. Which goals are attainable is something that emerges from and along the paths that are found; method is the unspecific potentiality of knowledge, the security of holding to the chosen direction and the clarification of the possibilities inherent in it.

The systematic topography of the paths guarantees that the accidents of things coming to light ultimately lead to a universal acquaintance with the world. The discovery of the compass enables one to imagine a net of coordinates laid over reality and independent of its structures, in which the unsuspected can be sought and arranged. So much had remained concealed from the human spirit throughout many centuries and was discovered neither by philosophy nor by the faculty of reason but rather by accident and favorable opportunity, because it was all too different and distant from what was familiar, so that no preconception (praenotio aliqua) could lead one to it. Thus one may hope that nature conceals in its womb still more, of greater importance, which lies entirely outside the familiar paths of the power of imagination (extra vias phantastae) and which one can only be sure of finding through the systematization of accident. The tendency of Bacon’s method is to set the human mind in controlled motion. Where nothing is un-
der taken, nothing can be achieved; and to expect representations of
the goal where imagination and conception fail is to be misled, with
standstill as a result. Paths must be entered upon and their “directions”
held to in order to find what is new.

The mythical construction of the fall of the angels and men and of
the immanent restoration of paradise, which serves Bacon as a jus-
tification of human curiosity with respect to nature, presupposes a
‘politomorphic’ conception of the world, that is, a conception in which
natural laws are interpreted as decreed by divine volition and the role
of created things is defined in the plan of creation in terms of service
and power. What lies open and what remains hidden, what results in
good or evil, is determined by this quasi-political state. Commandment
and law, which were promulgated over nature verbally and are carried
out according to the word, also have the word as their appropriate
medium of knowledge. The determined antithesis of this position is
constituted by the metaphysics of the mathematization of natural sci-
ence. It proceeds from the impossibility in principle of secrecy in
nature and things withheld from knowledge, to the extent that math-
ematical regularities are implemented in nature.

The mathematically comprehensible law of nature is not a decree
of divine volition but rather the essence of necessity, in which divine
and human spirit possess the same evidence, which as such excludes
the withholding that makes things inaccessible. Kepler and Galileo
gave the most compelling expression to this idea, more compelling
than Descartes, because Descartes had to take the indirect path of
securing certainty by means of the divine guarantee even for math-
ematics. The human spirit will correctly assess its powers, Kepler writes
to Mästlin on April 19, 1597, only when it understands “that God,
Who founded everything in the world according to the norm of quantity,
also gave man a mind that can grasp these norms. For like the eye
for color, the ear for sounds, so man’s mind is not meant for the
knowledge of whatever arbitrarily chosen things, but for that of mag-
nitudes; it understands something the more correctly, the more it
approaches pure quantities, as the origin of the thing.”

The basic nominalist idea of mathematics as a constructive makeshift
of knowledge over against the pure heterogeneousness of the world
is thus given up and a form of justification for curiosity is found, which
at bottom is the absence of any need for justification. Though Kepler
may still give the idea the pious form of a derivation from man’s
creation in God’s image, this is nevertheless inessential for the stringency of the argument; that we “gain a share in his own thoughts,” as Kepler writes to Herwart on April 9/10, 1599, depends on the essential ‘openness’ [Öffentlichkeit] of these thoughts themselves in their mathematical structure. In the knowledge of numbers and magnitudes, Kepler goes on, “our knowing, if piety permits one to say so, is of the same species as the divine knowing, at least insofar as we are able to grasp something of the latter in this mortal life. Only fools fear that we thereby make man into a god; for God’s decrees are unfathomable, but not His corporeal works.” Kepler has not yet loosed this idea from its medieval embedding in the idea of the preference given to man by providence; Leibniz was to be the first to accomplish this, by making the principle of sufficient reason into the criterion by which to verify the divine plan of creation objectively and basing on this the impossibility that the nature of the mathesis divina [divine mathematizing] should be arcane.25

This is no ‘secularization’ of man’s having been created in God’s image. The function of the thought emerges naked and undisguised and makes its historical derivation a matter of indifference: Knowledge has no need of justification; it justifies itself; it does not owe thanks for itself to God; it no longer has any tinge of illumination or graciously permitted participation but rests in its own evidence, from which God and man cannot escape. The Middle Ages of High Scholasticism had seen man’s relation to reality as a triangular relation mediated by the divinity. Cognitive certainty was possible because God guaranteed man’s participation in His creative rationality when He brought him into the fellowship of His world idea and wanted to furnish him, according to the measure of His grace, with insight into the conception of nature. Any autonomous step beyond this conception strained the relation of dependence and the debt of thanks. This triangular relation is now dissolved; human knowledge is commensurable with divine knowledge, on the basis, in fact, of the object itself and its necessity. Reality has its authentic, obligatory rationality and no longer has need of a guarantee of its adequate accessibility. The problematic of theoretical curiosity, which had depended on the idea of the world as a demonstration of divine power, and of human stupor as the corresponding effect, is paralyzed by the idea that knowledge is not a pretension to what is unfathomable but rather the laying open of necessity.
From the point of view of the stage that the argument was to reach with Leibniz, the position that Galileo occupies in developing it, and the burden that he had to bear in opposing the theological position, becomes clearer. At the end of the “First Day” of the Dialogue on the World Systems, the question of the existence of living beings on the moon is discussed. The human power of imagination, Salviati decides, is incapable of imagining such beings, since the riches of nature and the omnipotence of the Creator lead one to expect that they would be utterly different from the ones known to us. Sagredo agrees with him that it would be the highest audacity (estrema temerità) to make the human power of imagination the criterion of what can exist in nature. Only a complete lack of all knowledge would lead to the vain presumption (vana presunzione) of wanting to understand the whole. Docta ignorantia [learned ignorance], the Socratic knowledge of ignorance, is praised as the effect of true cognition; no state of knowledge attainable in fact could diminish the difference between human knowledge and divine knowledge in its infinity: “Il saper divino esser infinite volte infinito” [Divine knowledge is infinitely times infinite]. So far this could have been taken from a medieval treatise.

Galileo’s artful dialectic, however, consists in the fact that he puts in the mouth of the conservative figure of the Scholastic in his dialogue, Simplicio, the remark that gives the argumentation its turning. If this were how things lay with regard to human knowledge, Simplicio says, one would have to admit that even nature had not understood how to produce an intellect that understands.26 Salviati praises the acuteness of the otherwise dull mind, and this always means that he can catch ‘the Middle Ages’ in an inconsistency. As a matter of fact everything that one had heretofore admitted to be a weakness of the human spirit had been related to the extent of knowledge. But if one considered its intensity, that is to say, the degree of certainty of an individual proposition, then one would have to admit that the human intellect can grasp some truths just as perfectly, and possess certainty regarding them just as unconditional, as any that nature itself could possess.27 It is true that the divine spirit can grasp infinitely many more mathematical truths than the human spirit, namely, all of them, but knowledge of the few is equivalent in objective certainty (certezza obiettiva) to divine knowledge, even if the species of the cognitive act may be different.
And now follows the crucial sentence, which brings the whole train of thought into relief against the background of what was still medievally thinkable: The human knowledge of mathematical truths conceives them in their necessity, beyond which there can be no higher level of certainty. These statements are common property and free from the suspicion of presumptuousness or daring (sontane da ogni ombra di temerità o d'ardire). The dialogue has traversed the obligatory stretch of humility and earned its license to enhance the dignity and accomplishment of the human spirit. That nullity is not so null as to prevent the “First Day” of the dialogue from ending with a laudatio [eulogy] of the human spirit’s acuity and discoveries.

When Galileo had completed the *Dialogue on the World Systems*, he was once again, and forcibly, confronted with the question of the legitimacy of the cognitive will. The Roman censor imposed on him the stipulation that the theses of the work—especially the explanation of the tides by the movement of the earth, in the “Fourth Day,” a movement that is the physical and realistic correlate of the Copernicanism that was permitted only as an astronomical hypothesis—should be put under the proviso of the infinite possibilities open to omnipotence. One could say that this proviso of sovereignty forced upon Galileo did not affect the core of his epistemology because to all intents and purposes the whole dialogue made no use of the technique of mathematical astronomy; that is, it did not even touch that highest intensive dignity of the intellect, for which Galileo had postulated an evidence common to God and man. The irony of the situation lies in the fact that the Pope had informed Galileo, through the inquisitor of Florence, that the mathematical presentation of the Copernican doctrine remained entirely open to him. But Galileo gathers together all the materials that he himself, according to his classification, would have to ascribe to the extensive accomplishment of knowledge and thus render suspect of the weakness that is proper to knowledge wherever it does not become mathematical.

Admittedly, where the Copernican matter is concerned, Galileo’s own criteria leave him in the lurch. The formula that Galileo had to work into the text does not contain, as has been asserted, something like Urban VIII’s personal countertheory to Galileo’s explanation of the tides; rather it is an ‘antitheory’ altogether, opposed to physical theory of any kind. In it the difference between the thought of the spent Middle Ages and the new pretension of the scientific explanation
of nature comes undisguisedly to light. Offense was to be taken at the
fact that Galileo placed this vexatious formula in the mouth of Simplicio,
that is, of the figure in the dialogue who is the loser in the end. There
is, he says, always present in his mind a teaching that was once given
him by a highly learned and highly placed person and that he regards
as unshakeably well established, namely, that God can also produce
a phenomenon in nature in a different way than is made to appear
plausible by a particular explanation. Consequently it would be in-
admissible daring (soverchia arditezza) to want to narrow down and
commit divine power and wisdom to a particular idea by asserting
that single explanation to be true.

This general proviso throws man back, as far as he is concerned
with theoretical truth, to a hopeless position. For him the world would
continue to have an unperspicuous structure, whose laws had to remain
unknown to him and for which any theoretical exertion would stand
under the threat of the revocation of the condition of its possibility.
Of course for the theologian Maffeo Barberini, who sat upon the papal
chair, God could be an uncertainty factor in knowledge, since at the
same time He offered man His revelation as the sole salvation-bringing
certainty and had the right not to allow its uniqueness to be leveled
off or supplanted by other supposed certainties.

It is evident that what Galileo had to deal with here was the charge—
which had now reached the stage of ‘taking measures’—embody in
the verdict against curiositas. The discipline with which Galileo makes
Salviati answer that this is an admirable and truly angelic doctrine
allows him a new bit of dialectic: It is perfectly in harmony with this
to award us permission to investigate the construction of the world,
even if we may not pretend fully to understand the work, as it comes
forth from the divine hands, since otherwise the activity of the human
spirit might perhaps grow weak and be exhausted.50 Theoretical cur-
iosity, it seems to be argued here, has its economy between the futility
to which the omnipotence proviso means to relegate it and the de-
finiteness in which belief in the completed possession of knowledge
would fix it. Galileo’s resistance to the omnipotence proviso suggests
that it is only and especially the movement of the intellect, as progress
in its understanding and its formulation of problems, that guarantees
consciousness of the finitude of knowledge over against the infinitude
of what, though it is never irreducible, is nevertheless kept in reserve
at any given time, whereas the mere appeal to the infinitude of the
intrinsically noncontradictory possibilities open to omnipotence destroys any consciousness of a relation between what is already known and what is still to be known and thrusts reason back into the indifference of resignation. The project of infinite progress does indeed direct itself against reason's theological resignation but not against reflection on its finitude, which can only be experienced precisely in the accomplishment of its possibilities.

The role that the progress of knowledge begins to play in the justification of curiosity stands out in the negative at the close of the Dialogo: It is not what the progress of knowledge has already yielded and is yielding now that legitimates the cognitive drive that keeps it in motion but rather the function for consciousness of what lies before it at any given time, which gives everything that has been achieved the mark of finitude and provisionality. "Sir, my science is still greedy for knowledge!" says Bertolt Brecht's Galileo in bargaining with the curator of the University of Padua, who would like to divert his wish for income to the more lucrative provision of private tuition. The declaration that Brecht puts in Galileo's mouth here objectivizes curiosity and makes it into a mark of the imperfect status of his science; this corresponds to the objectivity of the conflict of systems in which Galileo and Urban VIII are the exponents. But Brecht does not stick consistently to this objectivization of curiosity. He writes in his Notes on the "Life of Galileo," "The inquisitive drive, a social phenomenon scarcely less lustful or dictatorial than the procreative drive, directs Galileo into this dangerous territory, drives him into painful conflict with his intense wishes for other satisfactions. He lifts the telescope to the stars and delivers himself over to torture. In the end, he practices his science like a vice, secretly, probably with pangs of conscience. In view of such a situation, one can scarcely be bent on either only praising Galileo or only damning him."31

Such a late reintroduction of theoretical curiosity into the catalog of vices has, of course, its new premises: Where it converts itself, as motive power, into science, it gives this science an imprint of 'purity' and apragmatic disregard for consequences that makes it appear just as questionable from the humane or social point of view as it was under the primacy of the exclusiveness assigned to the question of salvation by theology. Galileo, writes Brecht, "enriched astronomy and physics by simultaneously robbing these sciences of the greater part of their social meaning. . . . Galileo's crime can be regarded as
the ‘original sin’ of the modern natural sciences. From the new astronomy, which deeply interested a new class, the bourgeoisie, since it afforded assistance to the revolutionary social currents of the time, he made a sharply circumscribed specialized science, which of course precisely on account of its ‘purity,’ that is, its indifference to the mode of production, could develop with relative freedom from disturbance. The atom bomb, as both a technical and a social phenomenon, is the classical end product of his scientific accomplishment and his social failure.” The difference between the two statements about Galileo—the one in the play and the one in the notes on the play—gives us a key to the new shape of the problem of theoretical curiosity in the seventeenth century. In my opinion, the most precise comprehension of the actual state of affairs is extracted in the short statement to the Paduan curator: Curiosity is not only no longer able to be one of the vices of the individual in need of redemption; it has already separated itself from the structure of personality, from the psychic motive forces, and has become the mark of the hectic unrest of the scientific process itself.

Admittedly this corresponds neither to the picture that Galileo made for himself of his own type of mental eagerness nor to what his contemporaries saw in him. The digressiveness that dominates the style of both of his great dialogues and is so distant from the linear methodology that Descartes was to project for the new idea of science indulges, with emphatic unconcern for system, in the psychological attraction of each new curiosità [curiosity] as almost an isolated quality of the objects themselves. New truths are found off the side of the direct path of what method anticipates, by seizing accidental opportunities, by being ready to drop the thread of principles already established. The opposite type is represented by the people who could not be curious enough to look through the telescope because they believed themselves to know too accurately already what one could not see with it. When in the “Third Day” of the Dialogue on the World Systems the discussion comes to William Gilbert’s theory of magnetism, Galileo makes Salviati say that against the authority of the inherited conceptions, only a curiosity comparable to his own (una curiosità simile alla mia) and the suspicion of an infinite reserve of unknown things in nature could maintain inner freedom and openness toward what is new. Martin Horky, the pamphleteer against the moons of Jupiter who was put forward by Magini, already placed Galileo’s eye trouble,
which was ultimately to lead to blindness, in an infamous relation
with his curiosity: "... optici nervi, qvia nimis curiose et pompose
scrupula circa Jovem observavit, rupti..." [. . . optical nerves, which
have observed Jupiter with too much curious and ostentatious scrutiny,
broken...]. And Galileo’s first biographer, Vincenzio Viviani, made
filosofica curiosità [philosophical curiosity] the key term in his character-
ization of his teacher.

But the crucial objection—precisely because it was no longer
medieval—against curiosity as the power that was definitive for Galileo’s
style of inquiry was first raised and could only have been raised by
Descartes, who for his part gave the new science not indeed its aims
and contents but certainly its form and agenda. He writes regarding
Galileo to Mersenne, “His error is that he continually disgresses and
never stops to expound his material thoroughly, which shows that he
never examined it in an orderly fashion and that without considering
the primary causes of nature, he merely sought the causes of some
particular effects, so that he built without a foundation.” The motor
quality of theoretical curiosity appears in Descartes to be threatened
by objective irritations, to which it all too easily succumbs, by being
made to forget the basic and presuppositional questions, the foundations
and critical reinforcements, to which a thinker of the Cartesian type
devotes himself entirely. Here there arises a sort of intrascientific
morality, a rigorism of systematic logic, to which the unbridled appetite
for knowledge is bound to be suspect.

With decisiveness equal to that with which he excluded teleology
from the canon of possible questions directed at nature, Descartes
gave human knowledge the teleological character of a strenuous ex-
ertion, united by the Method, toward the attainment of the definitive
morality, which as the epitome of materially appropriate behavior in
the world presupposes the perfection of factual knowledge. The em-
ployment of the terms curiosité and curieux [curiosity and curious person]
in Descartes has neither pathos nor specificity; the rational goal of
knowledge excludes any other justification of the energies that must
be expended for its achievement. The curieux takes on the professional
quality of the scholar, who is characterized more by the methodically
secured or attainable possession of knowledge than by the elemental
need for knowledge, even if something of the infamy of the sciences
curieuses [curious sciences] may still adhere to the disciplines, such as
anatomy or chemistry, that are now entering the orderly ranks of
scholarship. The predicate formerly attached to the solitary daring of individuals is made harmless as the designation of an interested public and as the characterization of the equally harmless activities of the collector and the amateur, which are carried along with the great train of scientific progress and protected by it. Part of the process of the legitimation of theoretical curiosity is its effort to rediscover itself, or a preformation of itself, in the region where something new would in any case look for evidence to demonstrate that it is nothing new, before a consciousness that novelty is permissible had stabilized itself in history—namely, in antiquity.

The early historiography of philosophy—represented in its most lasting form by the widely read Jakob Brucker, who defined the picture of the philosophical tradition for, for example, Kant—already poses the question of what was special about the conditions under which something like ‘philosophy’ could arise among the Greeks as the epitome of theoretical procedure—a question that was to be approached in many ways, for instance, that of expounding the disposition of the Greek language for the development of philosophical modes of thought. Here one must recognize to what an extent the beginnings of the historiography of philosophy depend directly on the testimony of the sources themselves, since the critical thinning out of the tradition, which begins with Bayle, affects the anecdotal material more than the study of doctrine; but it affects the latter even more than it does the statements, withdrawn from verification, about the origin and the motives of the theoretical attitude.

In the nominally short, actually seven-volume long Kurtze Fragen aus der Philosophischen Historie [Short Questions from the History of Philosophy], whose first volume was published in Ulm in 1731, Brucker too asks the question (formulated in the manner of a Scholastic quaestio): “What was the beginning of philosophy like, with the Greeks?” Brucker regularly answers such questions initially with a single, and therefore usually not very informative, sentence, as in this case: “Rather scanty, and very obscure as well.” “Wide-awake” Greeks had gone to the Orient, and there had seen the “establishments” of people “who were considered learned”; and in the reverse direction, foreigners had settled in Greece and given instruction. The philosophy of the barbarians is characterized as philosophia traditiva [traditional philosophy], as a canon of learned answers, handed down unthinkingly, to established questions. The Greeks, however, were moved to reflection by this teaching. This
version of the relation is important because it does not adopt the
dogma that philosophy was an inheritance from the East but rather
defines a new beginning in relation to this inheritance, and not even
as a result of unmediated wonder at nature and pressure from the
questions that it poses. It is remarkable how little use is made here
of Greek philosophy’s interpretation of itself, whether it be the des-
ignation of wonder as its original affect or the discovery of the supposed
allegorical hidden meaning of mythology.

For Brucker, neither immediacy nor tradition can be the reason for
this beginning. What is important for him is “the curiosity of the
Greek nation.” This is in harmony with the manner of speaking that
prevailed in his century. Fontenelle will still insert this characterization
of the Greeks into his Cartesian schema of the difference between
raison [reason] and esprit [wit, intelligence], thus attributing to the origin
of philosophy the quality that was supposed to have prevented it, until
Descartes, from performing its plain function: “Les Grecs en general
avoient extremement de l’esprit, mais ils étoient fort legers, curieux,
inquiets, incapable de se moderer sur rien; et pour dire tout ce que
j’en pense, ils avoient tant d’esprit, que leur raison en soufroit un
peu.”33 [The Greeks in general had a great deal of wit, but they were
very fickle, curious, agitated, incapable of restraining themselves in
any area; and, to be frank, they had so much wit that their reason
suffered somewhat as a result.] Brucker does not see the quality of
curiosity in terms of the antithesis between intellectual excitement and
controlled rationality. Philosophy seems to him to be the result of a
setting free of energies over against traditional doctrine. Consequently
it is important that the motive of curiosity appears here in what was
an unusual, if not a unique association for the time: in association with
favorable political circumstances. Under a “form of government in
which anyone could think, say, and teach whatever he wanted to,”
the impulse of curiosity develops into science. Allegorical interpretation
and esoteric doctrine become mere residues of the earlier traditional
form of philosophy, “vestiges of the secret type of teaching.”

So as to make more evident the contrast between Brucker’s analysis
of the origin of curiosity and the traditional harnessing together of
the immediate impact of nature with theoretical excitation, I want to
quote the very conventional formulations from J. G. Sulzer’s Gedanken
über den Ursprung und die verschiedenen Bestimmungen der Wissenschaften
... an innocent curiosity and the desire to gain a complete acquaintance with the phenomena of nature provided the occasion for their genesis; and no doubt this occurred later than the birth of the arts. Nature is a vast theater that presents amazing objects and events on all sides. Could men, once they were free of their initial struggle for sustenance and had gained some free time, for long regard this magnificent edifice of the world without thinking of the unseen power that brought forth such a thing and the dexterous hand that organized the parts into a whole? Could the old inhabitants of these fortunate regions, where a pure and peaceful air always leaves the heavens unobscured, for long view this marvellous vault in which so many stars sparkle, of which any one would be sufficient to fix our gaze, without asking themselves what all these lights may be?³⁹

Nevertheless, for Sulzer too the disposition to such immediate admiration of nature is not present in everyone: “There are entire peoples in whom one finds not a trace of this curiosity, which is a mother of science. The stupid Hottentot and the miserable native of Greenland regard the wonders of nature with an amazing indifference.”

When Brucker comes back to this topic in the second volume of his work, in the “Additions and Improvements,” the connection between curiosity and democracy becomes clearer: It destroys the form of the philosophia traditiva [traditional philosophy] as a wisdom guarded by priests, which conveys only dicta but not “the cause, the connection of the reasons with the conclusions... And just as soon as the ancient Greeks had laid aside bestiality and the savage state, they themselves began to reflect...” In this process, the politician took the place of the priest: “The investigation of truth got away from the priests, and soon politiki [statesmen] applied themselves to it...” This is very remarkable because it reverses, historically, the direction of the relation of foundation between philosophy and politics in the metaphysical tradition. This tradition had always seen the theoretical attitude as depending on leisure. Theoretical curiosity did not require any other public conditions than the negative one of freedom from the pressure of need; it did not require the possibility of satisfaction of the cognitive interest by virtue of the competence of everyone to inquire into everything.
Translator’s Note

Curiosity and the Claim to Happiness: Voltaire to Kant

The problematic of theoretical curiosity seemed to Descartes to be exhausted. The superior power of the logic with which the idea of science forces its way is such that it can afford to ignore the splinter and reflex effects of its epochal interest. But in view of the connection taken for granted as existing between knowledge and usefulness in life, a question remains unposed that at first sight appears to bring forward ancient concerns again—no longer, to be sure, the question of the identity of theory and eudemonia, but rather the question of the dependence of man’s happiness on knowledge, or even, taken a step further, the question whether man’s happiness is not endangered by knowledge.

The objectivization of theoretical curiosity, its disappearance into the logic of the methodical process of scientific cognition, is implied in both of the basic demands of the Cartesian philosophy: the postulate of the radically new foundation of cognitive certainty and the project of the regulated procedure of all cognitive acts. The elementary concern for the possibility of any secure knowledge at all made the traditional rank orderings of its objects utterly irrelevant for the realization of knowledge. Henceforth the theoretical dignity of the object and its position in the cognitive process depend entirely on the extent to which man assures himself of his results in each case. The function that both the individual and his object have in the context of the process is regulated by reference to the idea of the whole—and Descartes still held to the perfectability of the totality of knowledge.
This model of a process transcending individuals in respect to both their lifetimes and their vital interests transfers the motivation of the movement of knowledge into the process itself and rationalizes not only the latter's methodology and choice of objects but also the subjects as its functionaries; while they do provide for the happiness of a mankind that is to be brought to its definitive morality, they can never lay claim for themselves, or for the time in which they live, to fulfillment of life through knowledge. The equality of men is postulated as not the equality of their claim to justice and happiness but the reduction of both individual motives and individual prospects to their functional share in the overarching process. In this way inquiry takes on the characteristics of a professional office, the character of work, which is also always a form of justification as long as the suspicion of mere enjoyment does not fit into the picture of an obligation to serve a higher purpose.

Truth is not only, as Bacon had said, the daughter of time. This could still involve the fundamental idea of organic growth and maturing, or the experience of the astronomers that very small changes in the heavens become observable only over very great lengths of time. Truth has become the result of a renunciation for the modern age also, a renunciation that lies in the separation between cognitive achievement and the production of happiness. This separation could be accepted as a temporary one as long as the integration of theoretical accomplishments still seemed attainable or indeed insofar as one considered one's own present situation to be quite near to the summit of the ascent. But this separation also begins—with increasing doubt about the convergence of knowledge and happiness—to be set up as an ideal: Lack of consideration for happiness becomes the stigma of truth itself, a homage to its absolutism. Nietzsche was to try out the category of 'secularization,' without using this term, on this very characteristic of modern science; scientific truth appeared to him to be a concealed form of the 'ascetic ideal,' a late form of the renunciations, inimical to life, that Platonism and Christianity had demanded of man. But the question of the compatibility of scientific truth with humanity, of the legitimacy of theoretical curiosity as a 'reckless' effort, was already posed at the high point of the Enlightenment and its scientific optimism.

Here curiosity appears split into two roles: It is both the original driving power in the unlimited proceedings that mankind conducts, without consideration of the individual, toward the illumination and
mastery of reality, and also the agent that disturbs and diverges from this process, that makes the individual insist on access to the truth that will guarantee his happiness. This antithesis is the basis of not only what one could describe as the Enlightenment’s predominantly indulgent dealings with the remnants of the Middle Ages but also the unmediated coexistence of new science and old metaphysics, or the continual conversion of theoretical world models into world pictures useful for life. The continuing absence of convergence between the total representation of nature, on the one hand, and the determinate purpose of the totality of knowledge of nature, on the other, enforced translations and transformations; the universe of modern physics, as completed in the first instance by Newton, yielded for the eighteenth century a conclusive schema of leading ideas for everything from political theory to moral philosophy.

What Voltaire (1694–1778) accomplished with the philosophical paradigmatization of Newton is more than the popular distribution of esoteric scientific goods. But the same Newton who used the unanswerability of the question regarding the cause of the direction of the planets’ orbits around the sun as a point at which to admit theological voluntarism into his system of nature becomes for Voltaire the anecdotal prototype of an economical skepticism that is meant to reduce the luxury of theoretical curiosity to the magnitude serviceable for life.

Curiosity is the mark of a finite being with infinite pretensions; its absurdity is demonstrated in the cosmic projection of the philosophical novel Micromégas. The astronaut from Sirius learns from the secretary of the Saturn Academy that the people on this planet have seventy-two senses and still complain daily that they possess so few. “We imagine more needs than we have, and with our seventy-two senses, our Saturn ring, and our five moons, we feel far too confined, since in spite of our curiosity and the numerous passions that result from our seventy-two senses, we still have plenty of time to get bored.” The traveler from Sirius replies that in his homeland, where one has almost a thousand senses, it is no different and there, also, there remains an undefined yearning and unrest: “Je ne sais quel désir vague, je ne sais quelle inquiétude” [I know not what vague desire, what disquiet]. When, at the end, the Saturnian wants to continue the journey with his friend from Sirius, his mistress, who has got wind of his departure, assails him with a passionate complaint, culminating in these words: “... va, tu n’es qu’un curieux, tu n’a jamais eu
d’amour...” [... go on, you are nothing but a curiosity seeker; you have never experienced love]. That, expressed in one of the typical scenes of the Contes philosophiques, is the antithesis between curiosity and happiness in life.

The magnified scale of the cosmic anecdote shows that in the context of the infinite, approximation is impossible, and that the same problems repeat themselves on each level in the same proportions. The instability of this situation is due not to a drive to transgress limits with respect to a tabooed transcendence; it consists rather in the turn toward dogmatization of what has supposedly been attained; the intolerability of unrest produces scholastics, leads to intolerance. If Fontenelle had still said, in the Discourse on the Plurality of Worlds (1686), that the whole of philosophy rests on two things: the curiosity of the spirit and the shortsightedness of the eyes, then Voltaire’s thesis is that even a thousand eyes, and eyes that were a thousand times better, would not improve the prospects for satisfying the unrest of the cognitive will. Curiosity alienates man from his true basic problem, which is a problem of behavior, not of knowledge: “Oh man! this God gave you understanding so that you should behave well, and not to enable you to penetrate into the essence of the things He created.” Allowing for a small, but crucial alteration, which is not ‘secularization,’ this could have been taken from a medieval treatise reminding us of the priority of salvation over knowledge.

The abbé Galiani, in a letter to Mme. de Epinay dated August 31, 1771, urged in opposition to Voltaire’s article on “Curiosité” that the feeling of happiness did not indeed result from the satisfaction of curiosity, but rather, conversely, curiosity is the surest symptom of happiness. The happier a nation, the more curious it is, and a curious people is a good testimonial for its government. Consequently Paris is the capital city of curiosity. It is a little theory of the origin of culture from the anthropological characteristic of curiosity, which distinguishes man from beast: The curious man is more a man than others are. The whole antithesis to Voltaire becomes clear when this anthropology of curiosity opens into the aesthetic situation of the spectator in a theater, which is defined by his position’s invulnerability to the danger and confusion of the action that he watches running its course on the stage. This comfortable private box, which is reached by neither rain
nor sun, this artificial maximum of the distance between reality and the standpoint of the spectator, for whom his inaction and the absence of any need for him to act are the conditions of his feeling happy, this Archimedean point is not available to man as Voltaire sees him. Hence for Voltaire aesthetics cannot be exemplary for man’s relation to the world. Even Galiani’s theater is not really the world theater, even when he makes Newton investigate the causes of the moon’s motion and of the tides out of pure curiosity and concludes in summary that “almost all sciences are only curiosities, and the key to the whole is that from the beginning the curious being must be secure and in a comfortable condition.” Mme. de Epinay, one may note in passing, gave this letter the ample answer that her dog was also curious.6

Pierre Louis Moreau de Maupertuis, who accomplished Newton’s triumph in France less through literature (in the manner of Voltaire) than by means of painstaking labor and organizational skill, embodied curiosité as the energy of his century in a manner that is unique because in him it becomes both a capacity to imagine problems and also a political appeal to the powerful people of his time, and not least of all because he proposed a theory of its unappeased and unappeasable excitability and unrest.

He himself stylizes the prototypical role of the functionary and hero of curiosité for himself when he portrays the terrible hardships that he had to withstand during the meridian measurements in Lapland, by means of which he wanted to furnish the definitive proof of the oblateness of the earth spheroid, and thus the definitive proof of the truth of Newton’s physics. This modern martyrdom of curiosity, which forces the perceptual demonstration of the truth, reads as follows: “Moving through the snow, which was two feet deep, laden with the heavy measuring rods, which had continually to be laid down and picked up again, in a cold in which tongues and lips immediately froze to the cup and could only be torn away bleeding, when one wanted to drink brandy, which was the only fluid that remained fluid enough to be drinkable. . . . While our limbs were benumbed, the exertion made us sweat.”

Maupertuis had an eye for the hitherto entirely untried type of research problem that required collective and international cooperation extending across territories and oceans, and thus required a certain political substructure: France, he wrote, had made the greatest contribution that had ever been made to the sciences when it sent out
troops of experts to determine the shape of the globe; in the same manner it should bring about a determination of the parallax of the moon by means of observations from distant points on the earth, and thus lay the foundation for an exact measurement of the universe; it should set in motion a systematic search for parallaxes of fixed stars, by means, in fact, of an international division of the heavens into zones to be observed by a great number of participating astronomers. On the basis of what for him is the obviously fundamental human attitude of curiosity, he believed he had only to offer such tasks to the nations and the princes of his time in order to set in motion the instruments of a routine that had become sluggish. He reproaches even the pharaohs, whom he assesses, like the princes of his own times, as naturally “curious,” with having squandered the immense quantities of labor that went into erecting the pyramids, which they should rather have put to work in excavating and investigating the interior of the earth. For this notion, too, Voltaire will ridicule him terribly in his satire on “Dr. Akakia.” Part of the consciousness of the Enlightenment is that for the first time it has become aware of the fact that man lives ‘only on the surface of [i.e., “superficially” on] the earth’ and that this is perhaps an indication that in general he exists on and orients himself to what is only the surface of a hidden reality. I need only mention the importance that this idea has for Lichtenberg. This suspicion is the impulse to accelerate the convenience of inquiry, to gather together forces, to develop parameters, methods, and modes of organization for pressing forward into the depths of the unknown. The pyramids too, which were apostrophized as useless, are only a model of this situation: “... what a small part of such an edifice is the part that has been discovered! Is it not probable that many other things are shut up in there?” A “Calife curieux” had already had a pyramid opened once. That was in the ninth century. But now it would be possible to unveil the entire mystery: “L’usage de la poudre rendroit aujourd’hui facile le bouleversement total d’une de ces pyramides ... [Today the use of gunpowder would make it easy to overthrow one of these pyramids entirely]. Here, perhaps for the first time, the use of gunpowder for theory is recommended, as a means of laying open a path to the unknown within; and the political conditions are not forgotten—they are favorable: “... le Grand-Seigneur les abandonneroit sans peine à la moindre curiosité d’un Roi de France” [... the Sultan would abandon them without any difficulty to the least curiosity
of a King of France]. Curiosity has become expansive, grandiose, and occasionally violent.

Hardly anyone has drawn up such a complete catalog of conjectures that could stimulate curiosity as Maupertuis did in this “Letter on the Progress of the Sciences.” *Coniectura* [conjecture] and *curiositas* converge here in projects sketched in the grand style. This curiosity still continues to promise the astonishment produced by what is simply monstrous, the nature that departs from every postulate of homogeneity: unknown materials in the deepest interior of the earth; hitherto unseen stars unveiled by new telescopes; and in Patagonia things that are entirely different from elsewhere, to suspect which does not make one guilty of *curiosité ridicule* [ridiculous curiosity], just as the interior of Africa, which already offers us such wonderful things in the marginal regions that we are acquainted with, would without doubt be *bien digne de notre curiosité* [well deserving of our curiosity].

Human curiosity still finds itself quite at the edge of reality—again and again this same basic idea!—in regard to the conditions that arise in temperatures that are higher than those accessible to our experience on earth.

With our wood, our charcoal, all our most combustible materials, we cannot augment the effects of fire beyond a certain degree, which is not much compared to the degree of heat that the earth seems to have undergone or that certain comets undergo in their closest approaches to the sun. The most powerful fires of our chemists may be too feeble as agents to form and to decompose bodies. And this may have the result that we take for the most intimate union or the most complete decomposition what may be nothing but an imperfect mixture or a gross separation of certain parts. The discovery of the mirror of Archimedes, which Monsieur de Busson has made, shows us that one could construct burning towers, or amphitheaters filled with mirrors, that would produce a fire whose violence would, so to speak, have no limits but those that the sun itself has.

The earth, which as our most immediate realm of experience is known to us only superficially and marginally, is in its turn only a marginal phenomenon in the cosmos in regard to the conditions it offers for observation that is not technically enhanced and equipped.

Finally man himself, in the form in which he is most immediately open to study—as the civilized being of the European type—is in his turn only a marginal phenomenon of the total reality called man. The
experience—which had such a lasting influence on the Enlightenment—of exotic men, of the noble savage, the original antitype of human possibilities before and outside of one's own cultural matrix, is proposed by Maupertuis as an experience that could be consolidated organizationally. The president of the Berlin Akademie would like to see an inventory of everything possessed by man in a sort of academy of exotic sciences. "A college where one would find assembled men of these nations, well instructed in the sciences of their countries, and whom one could instruct in the language of our country, would undoubtedly be a fine institution, and should not be too difficult to establish. Perhaps one should not exclude from it the most savage nations."\(^{14}\) It is consistent with Maupertuis's (still to be discussed) theory of *curiosité* that curiosity concern itself especially intensely with phenomena of transition, of intervening stages, where these can still be found in nature. Beyond the horizon of the experience of other human beings that is to be expanded into a balance sheet of humanity, there emerges the preliminary stage of man, for on islands in the southern oceans there are still supposed to be "shaggy men, with long tails, an intermediate species between us and the apes. I would rather have an hour of conversation with them than with the cleverest intellect in Europe."\(^ {15}\)

This desired conversation with the ape-man stands, in Maupertuis's thought, on the border between learning directly from what is present and experimenting with induced effects, and thereby marks a problematic of *curiosité* that presents itself especially intensely with phenomena of transition, of intervening stages, where these can still be found in nature. Beyond the horizon of the experience of other human beings that is to be expanded into a balance sheet of humanity, there emerges the preliminary stage of man, for on islands in the southern oceans there are still supposed to be "shaggy men, with long tails, an intermediate species between us and the apes. I would rather have an hour of conversation with them than with the cleverest intellect in Europe."\(^ {15}\)
limited to its instructing us regarding the origin of languages; it could teach us many other things, even about the origin of ideas and about the fundamental notions in the human mind. We have listened long enough to philosophers, whose science is nothing but a use and a certain bending of the mind, without having become any cleverer. . . .”

Experiments on living people here appear as the logical consequence of a *curiosité* that posits itself as absolute.

The curiosity that is no longer a revolt against a reservation—unless it is against the reservation constituted by human indolence vis-à-vis what has not been investigated, the excess of what is supposedly inaccessible, or against princely reluctance to finance the necessary large-scale organized attack on what are now becoming the ‘public’ tasks of theory—this curiosity cannot produce from itself any criterion for its restriction. In Maupertuis it becomes evident that curiosity understands even the limits of its pretension at any given time as only ‘factual’ [that is, not necessary], conditioned perhaps by historical circumstances not yet understood. Thus Maupertuis projects experiments with living subjects. The *curiosité* that developed out of the later Renaissance’s enjoyment of the ‘curiosity cabinet’ presupposed that nature performs experiments, as it were, for man and in his place; think of Bacon’s rule that one should register *monstra* [monstrosities] as indications of nature’s scope for variation, of the difference between its positive law (*lex naturae*) and common law (*cursus communis*). The results of such experimentation are gathered together in the museum, which now becomes important; and man himself does nothing more than to exercise care in housing and increasing this stock.

Maupertuis calls for experiments with animals. The traditional biological morphology offers nothing more than “pictures that are pleasant to look at.” If natural history is to become a “true science,” it cannot accept as given the forms of the organisms that are present but must rather uncover “the general proceedings of nature in their production and conservation.” And again the appeal to the princes: Hitherto they had constructed menageries for amusement, now they had only to entrust “expert naturalists” with carrying out the correct experiments on these collections. And “experiments” (*expériences*) here means the breeding of the kind of curiosities that previously were only collected—intentional, methodical, artful breeding, by means of “artificial unions” (for example, of the bull with the she-ass, of which
it is said that it happens even in nature, if only the space at the watering
place is narrow enough).

*Curiositas* is no longer only the interest in discoverable *curiosa* [curiosities]; it generates them itself. That is what is new. "Rien ne seroit plus curieux que ces experiences: cependant la negligence sur cela est si grande..." [Nothing would be more curious than these experiments, though the negligence in these matters is so great...]. The appeal to princely munificence is strengthened by the flattering prospect of being able to exhibit "monstrous beasts" as *unica* and *rarissima* [unique species], as long as that diligence and skill are at work, creating occasions for mating, nor shrinking from "forced procreations."

What license does the program of *curiosité*, as the motor of the progress of the sciences, give itself? Maupertuis proposes experiments not only with living men but on a living man. He appeals to the penal theory of his century, which sees the "good of society" as the purpose of the punishment of criminals; this goal can be achieved to an even greater degree if the convict contributes to the progress of the sciences. The risk, which, to be sure, he does not freely choose, should bring about the pardon of the convict who survives it. For what purpose? For the testing of "the possibility or impossibility of various operations that Art does not dare to undertake"—in other words, a clear break with the traditional ethos of medicine. Maupertuis will listen to no objections; what passes itself off as humanity is only the professional indolence of the established art: "On aime mieux croire l’Art parfait, que de travailler à le perfectionner" [People would rather consider their art to be perfect than work to perfect it]. What is not in the books should be possible; but in medicine too, as already in experimental zoology, nature must be forced if it is to submit. In this connection, in spite of this violence, the teleological background characteristic of Maupertuis still shows through—a teleology, admittedly, that no longer seems to function ‘of itself’ for man’s benefit but must, as it were, be set free by him: "La Nature par des moyens qu’ils ignorent travaillera toujours de concert avec eux" [Nature, by means unknown to them, will always work in concert with them]. In these circumstances *curiosité* appears as the very power that drives through the barriers to setting free the shared activity of nature and man.

This universal promise, which is held out to such uninhibited experimentation, is made precise by mention of the most audacious problem that could be posed, and perhaps solved, in this connection.
This most extreme object that medical curiosity could hope to hit upon here would be—believe it or not—the clarification of the connections between body and soul, “if one dared to seek these bonds in the brain of a living man.” He who shrinks from this proposal succumbs to the mere “appearance of cruelty.” This humanity permits itself a high degree of abstraction; mankind justifies putting a man’s life in the balance: “Un homme n’est rien, comparé à l’espece humaine; un criminel est encore moins que rien” [A man is nothing, compared to the human species; a criminal is even less than nothing]. We rightly made fun, says Maupertuis at the end of this section, of some peoples who, out of a misconceived respect for humanity, denied themselves the knowledge they could have arrived at through the dissection of cadavers; but we ourselves are perhaps even less reasonable when we do not turn to account a punishment from which the public could draw great benefit and that could prove advantageous even to him who has to undergo it.

Having read this, one is amazed at the title of the final section of the “Letter on the Progress of the Sciences,” the “Recherches à interdire” [investigations that should be prohibited]. What could possibly remain to be prohibited? It is startling to find that Maupertuis wishes three problems to be excluded from this point onward because he considers it certain that they are “chimeras of the sciences”: the philosopher’s stone, the squaring of the circle, and perpetual motion. The reason for having such comparatively harmless hobbies prohibited lies in the squandering of energy and funds that could be devoted to other undertakings that are deemed deserving; this holds especially for those who, while they do not chase after such illusions themselves, do lose their time in examining the supposed results of those illusions. One final time: It is the princes to whom such economy is supposed to appear useful. What a remnant of the judgment against curiositas, a judgment whose tradition seems comparatively noble in comparison to this!

If one now keeps in mind what Maupertuis’s “Letter on the Progress of the Sciences” really contains, one is struck by the superficiality of Voltaire’s argument with the ideas of this self-same letter in his Diatribe du Docteur Akakia. One becomes inclined to agree with the interpretation according to which this feud with the president of the Berlin Academy was only a convenient means for Voltaire to extort permission to depart from Berlin or, as the case might be, to make it unnecessary
by provoking the king three times in succession. Whatever the issue was that was being decided, nothing was settled in relation to the subject of the dispute. Voltaire was not able to define the point at which Maupertuis’s faculty of projecting problems goes too far, the point where it begins to threaten humanity. Instead he sticks to superficial effects, like the dimensions of the hole by which his opponent—now reduced to the level of a charlatan—wanted to gain access to the inside of the earth.

The focus of Voltaire’s ridicule, however, was above all on the *Essai de Cosmologie* that Maupertuis had published in Berlin in 1750. This treatise also contains Maupertuis’s distinctive theory of *curiosité*. Toward the end of the third part, he discusses a state of affairs that one could describe as the ‘ruined condition’ of nature in the present day. Leibniz’s thesis of the continuum of beings stands in the background, combined here with a sort of catastrophe theory. Productive nature seeks to produce every kind of being, but the actual or changing conditions of existence mercilessly separate out the forms that cannot stand up to them. What we see before us today in nature is already the result of such breaches in the chain of beings, a chain that exhibits gaps and interruptions everywhere. This theory of nature’s infinite capacity for variation and of the selective effect of actual and changing external conditions, as a theory, need not concern us further here. But the conclusion that follows, for the possibility and the urgency of knowledge, from this actual state of nature as it presents itself to us, has a decisive effect on the concept of *curiosité*.

If nature were complete, present to us in the totality of its productions and transitions, it would at the same time be a nature that is intelligible through perception. Insofar as reason is the faculty of representing a totality in space and time, a reality that has become fragmentary through a process of selection must lack immediacy of access for reason but must at the same time stimulate it to undertake the reconstruction that sums up the process of a kind of knowledge that in any case is still possible. Our curiosity is the measure of our backwardness vis-à-vis the ideal of a knowledge that, in relation to a nature that had not yet become fragmentary, would have to adopt an unmediated and intuitive/perceptual approach—the form of knowledge of paradise, so to speak. One can observe the shock effect of the early findings of biology, which had uncovered the “marques incontestables des changemens arrivés à notre planete.... Ces terres fracassées, ces
lits de différentes sortes de matières interrompus et sans ordre...”
[inconestable marks of changes that have affected our planet...].
These shattered soils, these layers of different types of material, interrupted and without order...

The isolated forms, as remnants of the continuum of nature, can neither delight us nor convey knowledge of what has been lost. A building struck by lightning no longer offers us the aspect of anything but a ruin, in which one can recognize neither the symmetry of the parts nor the architect’s plan. Monstrosity, which attracted the curiosity of early modern times, is no longer the rare and sensational special case in nature; rather it is the stigma of the entire actual stock of remnants of nature: “... la plupart des êtres ne nous paroissent que comme des monstres, et nous ne trouvons qu’obscurité dans nos connaissances”[... the majority of beings appear to us as nothing but monsters, and we find nothing but obscurity in our knowledge of things].

But it is not only the objects of our knowledge of nature that are isolated and broken loose from their original context; the subject of this knowledge is also isolated and pushed out into unconnectedness. Leibniz’s world, after its destruction, becomes a sphere of unappeasable curiosity. “Between the beings that we are still able to perceive, there are interruptions that deprive us of most of the aid they could have afforded us. For the interval between us and the last beings below us is no less an invincible obstacle for our knowledge than is the distance that separates us from beings superior to us.” What holds for the spatial order of simultaneously existing kinds holds also for man’s orientation and position in time. At the beginning of the infamous Venus physique (1745), Maupertuis discussed this position of curiosité in time as well. The de facto finite temporal extent of the life of the individual does not induce man to fill this period in the best way he can but rather to extend his will to knowledge over the time periods in which he did not yet exist or will no longer exist: “... l’amour propre et la curiosité veulent y suppléer, en nous appropriant les temps qui viendront lorsque nous ne serons plus, et ceux qui s’écoutoient lorsque nous n’étions pas encore”[... self-love and curiosity want to supplement it, by appropriating for us the times to come, when we will no longer exist, and the past times when we were not present either]. Curiosity is the constitutional condition of a being that is no longer able to see its original connections, that collides with its de facto locatedness in space and time. It is the stigma of a nature that
no longer fulfills the requirements of harmony, whose history is a
function precisely of this “no longer.” Maupertuis summed up in a
single sentence the elements of his theory of theoretical curiosity as
the will to restore a genetic totality: “When I consider the narrow
limits within which our knowledge is confined, the extreme desire
that we have for knowledge, and our incapacity to instruct ourselves,
I could be tempted to believe that this disproportion, which exists
today between our knowledge and our curiosity, could be the result
of a corresponding disordering [event].”23

If Voltaire had agreed with Pascal that man was made for infinity
(“qui n'est produit que pour l'infini”) but had drawn from this the
opposite conclusion—namely, that this was his weakness, not his dignity
and opportunity—then Rousseau (1712–1778) denies that there was
in man an original tension with his given state of nature, that he got
onto the track of the progress of the arts and sciences as a result of
his essence and genuine need. He praises the happy ignorance (l'heureuse
ignorance) in which an eternal wisdom submerged men and out of
which only ambitious violence (efforts orgueilleux) made them emerge.
Nature wanted to protect man from science, as a mother protects her
child from the misuse of a dangerous weapon. The obscurity with
which she keeps her secrets hidden is not to be ascribed to jealousy
of man's shared knowledge of them but rather was meant as a warning
of the fruitlessness of the exertion of theory.24

The picture that Rousseau gives of man's original state is charac-
terized by the idyllic absence of tension—and by concealed teleological
implications. The original man is not tempted to alter his state and
to take in hand the conditions of his situation; nor has he the means
to do so. His existence is restricted to proximity and immediacy, and
the satisfaction of his needs to the zone of the accessible. He does not
wonder at what is present, and for what is not present he lacks the
power of imagination. Forethought and curiosity are foreign to him
because they already presuppose the quantity of knowledge necessary
for producing the questions corresponding to further cognitive steps:
“... nor is it in his mind that we can expect to find that philosophy
man needs, if he is to know how to notice for once what he sees every
day. His soul, which nothing disturbs, is wholly wrapped up in the
feeling of its present existence, without any idea of the future, however
near at hand. ...”25 The logical circle implicit in the idea that the
cognitive will already presupposes knowledge, that curiosity arises only
out of curiosity, can of course only be broken by the assertion of a unique mythical act of aberration. But the critical principle that Rousseau gains from his picture of the beginning of human history becomes ineffective as a criterion for all subsequent steps because it assigns all the responsibility to the mysterious first step; his indictment of culture finds no guilty parties who would have to ascribe it to themselves. It is a philosophy from which no consequences can be derived.

So much the more logically does Rousseau establish the principle of the irreversibility of history, and thus of the inapplicability of his critique to the social conditions of the time; and ultimately he finds himself again with the postulate of the total execution of the law that is operative in the process of culture. Replying to his critic, Diderot, he calls for not the return to nature that is ascribed to him but the consistent and thorough execution of the turning away from nature that determines human socialization, the perfection of technicity: “Montrons-lui, dans l’art perfectionné, la réparation des maux que l’art commencé fit à la nature…” [Let us make amends, in the perfection of art, for the wrongs that art in the beginning did to nature].

Here becomes evident a conception of history that combines insight into the irreversibility of history with cultural and social criticism but through this combination can only confirm, and thereby intensify, the dynamics of the inner tendencies of the modern age. For the agent of its scientific aspect, for theoretical curiosity, this means that each of its results strengthens its motivating power; that each situation conditioned by science can only be compensated, in its deficiency, by more science, that history finally remains possible only as the continuation of what it already is. The same schema holds for the process of technicization: The problems posed by technology at any given time, and the dangers that it brings with it, can only be parried by a higher degree of technicization. The truth about history is a matter of indifference for history—and this is only a partial working out of the implications of doubt about the essentiality of the human need for truth.

Rousseau sees man as bent over the edge of a well, in which—in an image originating in Democritus—the truth has withdrawn. “Sommes-nous donc faits pour mourir attachés sur les bords du puit où la vérité s’est retirée?” [Were we made, then, to live and to die on the brink of that well at the bottom of which truth lies hid?] This consideration alone, he thinks, should be enough to discourage any
man who seriously endeavors to instruct himself by the study of philosophy. According to an old tradition that the Greeks had from the Egyptians, the inventor of the sciences was a god whose intention was hostile to man’s repose ("un dieu ennemi du repos des hommes"). And that is only an allegory for the principle that the sciences arose from man’s vices: astronomy from superstition; rhetoric from ambition, hatred, flattery, and lying; geometry from avarice; physics from idle curiosity ("la physique d’un vain curiosité"); and even ethics from human ambition. He who seeks the truth is obviously at a disadvantage, since what is false can be combined in an infinite number of ways, whereas the truth is present in only one way. The path of knowledge leads through an abundance of error, whose damage the truth cannot make up for by its usefulness.

In that case, can one believe that anyone seriously seeks it? And finally: On the assumption that by a lucky accident we do find it, which one of us will be able to make proper use of it? Rousseau’s pragmatic version of the simile of the truth in the well is, briefly, that we should let it stay there. But he himself, for his own truth, did not want to abide by this advice.

For the German Enlightenment, the earthquake at Lisbon (1755) was distant and Leibniz was nearer. The metaphysically guaranteed correspondence between curiosity about the world and the sufficient reason for the world seemed to exclude any problematic in regard to the human need for happiness. Hermann Samuel Reimarus (1694–1768)—the author of the Schutzschrift für die vernünftigen Verehrer Gottes [Apology for the Rational Worshippers of God], the masterpiece of the German Enlightenment, which was first printed in full in 1972 and from which Lessing drew the explosive material of the Wolfenbüttel fragments—Reimarus wrote, already a year before Rousseau’s First Discourse, the anticipatory German counter-Rousseau, in which he rejects “Lucretius’s groundless complaint against nature,” that it does not offer itself so as to make the satisfaction of man’s needs effortless. “How badly Lucretius knows human nature, after all! How poorly he appreciates the value of work! If every fruit grew in our mouths without any effort, then a general laziness and a universal idleness would have developed because no one would have had to concern himself about his necessities. Such a mode of life would put to sleep and stifle all men’s nobler powers, so that they would think of no arts and sciences because they would not receive even the first impulse in that direction from necessity. . . .” In this apology for ‘industriousness,’
man's natural motives are detached from their points of reference to reality and retracted into an inner economy: Man's powers must be activated.

In the case of curiosity, David Hume had already developed this point of view in the *Treatise on Human Nature* of 1739/1740, in a special chapter "Of curiosity, or the Love of Truth." There he compared the role of truth to the quarry in the passion for hunting and to winnings in the passion for games—that is, to goals that do indeed induce these activities but by no means give them their sense and justification: "The pleasure of study consists chiefly in the action of the mind..."
The structural analogy common to hunting, philosophy, and gambling—actions without consequences—is a consequence of a basic human situation that no longer is definable in terms of the riches or deficiency of the world but rather presents itself as the inner quality of "uneasiness." Human life is laid claim to by neither what it needs nor what it admires; it can be made happy by neither usefulness nor truth; it is monotony and lack of spontaneity, and every impulse that sets it in motion provides pleasure even, and especially, if it involves effort.29

The German 'Enlightener' Reimarau puts work in place of "pleasure" and providence in place of the immemorially melancholy basic situation. "If his lively powers do not occupy themselves with anything, then he is a burden to himself, then time seems long to him, then he declines into a dumb ignorance, into a lazy and base voluptuousness and all sorts of other vices. A task, on the other hand, is suitable to his natural exertion and gives him pleasure if it is successful and useful; indeed all the more so, the more difficulties have to be overcome in the process and the more art, wit, reflection, foresight, and science are applied in it." In Reimanuus, the Stoicizing formulas of world admiration enter into a peculiar mixture with the suspicion that pure theoretical wonder at the world order could all too readily be accompanied by idleness. To fit even the world's deficiency in easily accessible goods and enjoyments into a teleology that protects man from becoming burdensome to himself and from vice fulfills the highest systematic pretension of this philosophy.

But truth as the *fruit* of knowledge itself remains peculiarly unattractive in comparison to the *work* of knowledge. The solid pleasure of knowledge, based on work, has its justification in itself, in the manner of its acquisition, as it were, and cannot become problematical on account of its consequences: "... who can say of true knowledge
that it is too much, that it is immoderate, that it is harmful? On the contrary it makes us ever more perfect, and never causes us to repent of our efforts. . . . The pleasure found in truths and the desire for knowledge accompany us until death; indeed they extend far beyond the limit of our life and our present capacity.” On the basis of this position, Reimarus conducts in the later editions of his philosophy of religion his explicit critique of Rousseau, in whose picture of the ‘animal-man’ he points out a whole catalog of contradictions, among them the following: “The original man is supposed to have a freedom above all other animals, and yet he has no reason or reflection, which is the basis of a free choice. . . . He is supposed to try to make himself more perfect, and yet his circumstances are such that he cannot make himself more perfect by any means. . . . His principal natural gifts are supposed to be freedom and perfectability, and these very prerogatives serve for nothing else, in his opinion, than to make each person and the entire species unhappy. What contradictions!”

From this perspective one may be able to insert Lessing’s great saying, “Wenn Gott in seiner Rechten . . . ,” more intelligibly into the Enlightenment context. One should also read the preparatory argument that precedes the much quoted passage: “The worth of a man does not consist in the truth he possesses but in the sincere effort he has applied in order to attain that truth. For his powers are extended not through possession but through the search for truth. In this alone his ever growing perfection consists. Possession makes him lazy, indolent, and proud.” The dominant concept in these sentences is not truth but the “worth of a man.” The extent to which truth should have been given to man is not determined by the inner value of this truth in itself but by its moving and intensifying function for man’s powers of self-development and self-realization. The ‘work’ characteristic of truth—the “sincere effort” to be applied to it—is fully apprehended here and appropriated, so much so that the process compensates for the inaccessibility of the result: “Absolute truth is for thee alone!” Lessing makes himself say to God finally in the same passage.

The problem of the human relation to truth occupied Lessing throughout his life. This is already very explicitly declared in the early comedy Der Freigeist [The Freethinker] of 1749, in the dialogue between Adrastus and Juliane. Adrastus defends himself against the reproach that he wants to infect other people with his ideas: “If I have often defended them loudly and with a certain vehemence, then I did it
with the intention of justifying myself, not of persuading others.” In libertinism he seeks the taste of the extraordinary, not for the sake of the quality of the ‘interesting’ as such, but rather because he believes that the truth simply cannot become a universal possession, and concludes from this that where an opinion has become generally accepted, one should abandon it and adopt the opposite:

JULIANE: So you seek only what is strange?

ADRASTUS: No, not what is strange, but merely what is true; and there is nothing I can do about it if the former characteristic—unfortunately!—follows from the latter. It is impossible for me to believe that the truth could be common—just as impossible as it is to believe that it could be daytime in the whole world at once. That which worms its way around among all peoples in the guise of the truth and is accepted even by the most idiotic among them is surely no truth, and one need only confidently lay one’s hand upon it to unclothe it, to see the most atrocious error stand naked before one.

JULIANE: How miserable are men and how unjust their Creator if you are right, Adrastus! There should either be no truth at all or it should be of such a nature that it can be perceived by most, indeed by all, at least in essential respects.

ADRASTUS: It is not the fault of the truth that it cannot be perceived thus but rather of man.—We are meant to live happily in the world; it is for this that we were created, for this and this alone. Whenever the truth is a hindrance to this great final purpose, one is bound to set it aside, for only a few spirits can find their happiness in the truth itself. . . .”

In the final version of the Education of the Human Race (1780), this controversy has become philosophy of history. But one should not allow oneself to be deceived by the title; the humanity whose paideutic process is reduced to theses is not the functional unity of the equal rational subjects that Descartes had projected in his method. For Lessing, ‘humanity’ is an aggregate of diachronic, individual longitudinal sections, in which the relation between external divine educational aids and the inner logic of the process of reason can reach entirely different stages at the same times. This is the basis of the deficiency of rational intersubjectivity in history; it is not the case that anyone can reach agreement with anyone else about anything at any time. If everything depends on the inner soundness of the process itself, then philosophy, no differently from religion, can be only a formal
auxiliary but cannot itself be the substance of a truth to be communicated.

Missionary and didactic pathos are forbidden to this German 'Enlightener.' He sees himself "placed upon a hill, from which he thinks he can survey something more than the allotted path of his present day's journey." But he also sees people on their paths and does not trust himself to call to them and correct their directions of travel according to a unified sense: "... he does not call away from his path any wanderer who in his haste wishes only to reach his night's lodging quickly. He does not demand that the view that delights him should also delight every other eye." In this diversity of paths and points of view, there is no longer any valid general criterion of the boundary transgressions of cognition; paths, not regions, determine what befits the individual and what, when integrated, can be precisely the "education of the human race." The image at the end, of the great, slow wheel and the smaller, faster wheels, is meant, even if with some unclarity, to illustrate that fact: "The very route by which the species reaches its perfection must first be traversed by each individual man (this one sooner, that one later)." The man is an enthusiast who looks into the future but cannot await this future. The consequence is that it is only as an individual process, not as an epochal total breakthrough of reason, that enlightenment can be accomplished and the discord of the truth that is untimely for an individual be avoided: "... take care that you do not let your weaker fellow students notice what you scent or have already begun to see." The point is to awaken impulses and powers to that "sincere effort," also to tempt them with the truth that is carefully concealed and held back; and here curiosity is reason's capacity for stimulation, to which appeal must be made: "What I mean by an 'allusion' is something intended merely to excite curiosity and give rise to a question..."

"Wisdom itself has obtained most of its admirers through curiosity," Lessing writes to Moses Mendelssohn on December 8, 1755, in connection with the news that people at court had become curious to make Mendelssohn's acquaintance. Mendelssohn for his part writes on the importance of curiosity in the process of education, "Children's appetite for knowledge must be excited either by fame or curiosity; for the love of truth operates very weakly in youthful minds, and knowledge of it still gives them all too little pleasure for them to subject themselves to troublesome labor for its sake. One sees from
this how little one gains with children when one teaches them easily what others have brought out by means of painful investigations. One stifles their curiosity by satisfying it too early. ... A strong influence on Mendelssohn was exercised by Edmund Burke’s youthful work of 1756, *A Philosophical Inquiry into the Origin of Our Ideas of the Sublime and Beautiful* (translated into German by Garve in 1773), in which a little study of the psychology of curiosity in children was to be found.\(^5\)

In the eleventh of his *Briefe, die neueste Literatur betreffend* [Letters Concerning Recent Literature], Lessing discusses Wieland’s programmatic work entitled *Plan einer Akademie zur Bildung des Verstandes und Herzens junger Leute* [Plan of an Academy for the Formation of the Understanding and Heart of Young People]. Here the subjective form of “sincere effort” combines with a formal definition of the object of curiosity in such a way that it turns away from Leibniz’s principle of sufficient reason as summing up the justification of all ‘Why?’ questioning and approaches the ‘How?’ of the Kantian *Critiques*:

The great mystery of making the human soul perfect through exercise... consists solely in keeping it constantly striving after the truth through its own reflection. The motives for this are ambition and curiosity; and the reward is the pleasure of knowledge of the truth. But if one imparts historical knowledge to youth right away at the beginning, then one puts their minds to sleep; curiosity is satisfied prematurely, and the path to finding the truth through one’s own reflection is closed all at once. By nature we are far more desirous to know How than Why.... The truths themselves lose in our eyes all attraction unless perhaps we are driven by ourselves, at a more mature age, to investigate the causes of the truths we apprehend.

What is shattered with Lessing is philosophical knowledge’s ideal of definitiveness, the idea that—of course not here and now, tomorrow or the day after, but still potentially—knowledge exhausts itself with the evidence of its objects and the truth is definitively obtained. It is the ideal of the absolute truth as a given quality, oriented toward the limiting case of divine knowledge. This idea had its basis in the ancient concept of reality; but it no longer corresponded to the reality concept of the open context, which anticipates reality as the always incomplete result of a realization, as dependability constituting itself successively, as never definitive and absolutely granted consistency. This concept of reality, which legitimizes the quality of the new, of the surprising and unfamiliar element, as both a theoretical and an aesthetic quality,
for the first time makes intelligible the linguistic preference for Neugierde
[curiosity; literally: desire for the new] over Wissbegierde [curiosity; li-
terally: desire for knowledge].

A confirmation, verging on the anecdotal but no less instructive for
that reason, of this profound alteration in the basis of the human
relation to reality is given by the peculiar change in the idea of im-
mortality, which in the eighteenth century—with clear traces even in
Kant—once again takes up the mythical schema of the transmigration
of souls. The repose of the dead in the finality of contemplation of
the truth, which was part of the status gloriae [state of glory] for the
Middle Ages, is transformed into a continuation of the movement of
life, a striving from condition to condition, from star to star.

Queen Sophie Charlotte of Prussia, who stood in a close spiritual
relation to Leibniz, died in 1705 with these words: “Do not pity me,
for I go now to satisfy my curiosity about things that Leibniz was
never able to explain to me, about space, the infinite, being and
nothingness. . . .” That is curiosity in its modern form, in the guise of
an expectation of finality that is still medieval.

When Lessing published the Vermischte Schriften of his friend Christlob
Mylius in 1754, he wrote in the first of the six letters that are attached
to the preface,

It is true that he was interrupted in the middle of a great project but
not in such a way that he should have had to give it up entirely. His
eagerness to become more closely acquainted with the works of om-
nipotence drove him from his native country. And this very eagerness
now conducts his liberated soul from one planet to another, from one
world structure to another. He gains in his loss, and is perhaps busy
even now in investigating, with his eyes alight, whether Newton hit
upon the right idea and whether Bradley measured accurately. An
instantaneous change has perhaps made him equal to men whom he
could not admire sufficiently when he was here. Without doubt he
already knows more than he could ever have conceived on earth.

To think less of happiness than of “sincere effort” and the inaccessible
truth and always to wrest more winnings from the latter’s inexhaustible
reserve is not a preliminary, merely earthly, suspendable, surpassable
idea of existential fulfillment. Lessing can conceive no other bliss for
man than this. In the letter describing Lessing’s Faust plan, published
by the councilor von Blankenburg in 1784, the first scene is depicted
as a conference of the spirits of hell, in which it is reported to the
supreme devil regarding Doctor Faust, "He has only one instinct, only
one inclination, an unquenchable thirst for sciences and for experience.
—Ha! exclaims the supreme devil, then he is mine, and for ever mine
and more securely mine than with any other passion!" In the trium-
phant songs of the hellish hosts in the fifth act, the apparition of an
angel was supposed to break in and cry, "Do not celebrate your
triumph, you have not conquered mankind and science; the Divinity
did not give man the noblest of instincts so as to make him eternally
unhappy..."

The Faustian element became a questionable attribute of curiosity
of not so much the human as the German stamp. The intervention
of the deus ex machina in the end releases it from the demonic entan-
glement, but fundamentally it answers the question of human existential
fulfillment in the negative. The salvation of Faust is no solution to the
questions that the Education of the Human Race had left open. Faust's
salvation still has the medieval premises of the answerability of curiosity
before a transcendent authority and of the possibility of an act of
grace on the part of this authority. If the Faustian grasp at knowledge
and power by means of magic and a pact with the devil does not
fulfill the condition of "sincere effort" that Lessing had posed, then
the heavenly veto against hell's enforcement of its legal title just is
not the century's last word on the 'trial' of theoretical curiosity. Friedrich
Theodor Vischer, whom dissatisfaction with the conclusion of Goethe's
Faust was to move, in the nineteenth century, to a new unavailing
effort,' had recourse to another name when in 1832 he spoke of the
"Lichtenbergian curiosity of a brooding self-consciousness" in char-
acterizing the nature common to himself and Mörke. 85

Lichtenberg, in fact, is a figure of reflected curiosity on the threshold
of an age that was to turn resolutely away from the problem of the
justification of the pretension to knowledge, in order to be consumed
entirely in the indifference and unwaveringness of cognitive success.
Between experiment and diary, he takes up and reexamines what are
soon to be the matters of course of cognition as it passes into the
form of industry. The "great moral aim" of all knowledge of nature
is his subject. Between the necessity of his needs and the excess of
his pretensions, he sees man altering the surface of the earth. What
man brings about in the process still appears small to him in comparison
with the powers of nature. "We cannot establish volcanoes; we lack
the power, and if we had the power, we would still lack the under-
standing to put it in obedient operation. (If only we always lacked the power, where the understanding is lacking!) If we finally had the power and the understanding at once, then we would no longer be the men of whom alone we are speaking here and of whom, unhappily, one knows that activities in which their power is in step with their understanding simply are not always their favorite pursuits. Work, as the alteration of nature, is the characteristic mark of a being that does not and will not know the purposes into which it may be dovetailed. “What then can man do here, where he recognizes so clearly that the whole plan does not lie before him? Answer: Nothing more than faithfully and actively work up the part of the plan that he has before him. What an idea, to try to assist an unknown plan by means of laziness!” To be scientific is to deal with this situation of the hidden universe and its unknown total idea. But just this inability to plumb the depths—the ability only, after the analogy of “plough, spade, and axe,” to scratch at the surface—points us to the moral task of synchronizing understanding and power.

It is in this dimension of the surface, measured against the volume of nature, that the task of science and its coordination with the “great moral aim” must be seen. The cognitive drive as such has the innocence of a biological characteristic; it makes man into the “causal animal”: “If other animals are equipped only with instincts and powers that aim merely at the maintenance and propagation of the species, this peculiar creature possesses beyond all that some more, whose real aims are not quite so clear. Among these is an instinct to seek out relations that it entitles causes, and to concern itself with a multitude of things that appear not to affect it at all in God’s wide world, as though perhaps because there are causes there for the causal animal to hunt, to which it is continually spurred on by a sort of spiritual hunger, by curiosity.” This state of affairs, the restriction to the ‘surface’ of nature that is imposed on man, can be expressed by Lichtenberg in the language of the old prohibition of curiositas, but with an explicit barring of the inward path—the path of self-knowledge and salvation of the soul—as the alternative: “To us mortals, Nature seems as it were to prohibit profound investigations and to draw our attention forcibly to this prohibition; for what else could she have meant when she formed us in such a way that we do not even know whether we possess a soul, except that since it is not even necessary
for us to know ourselves, it is much less necessary to know what the unreasoning animals, the stones, and the stars are.”

The double fruitlessness of theoretical exertion—with regard to knowledge of nature and with regard to self-knowledge—nowhere imprints on Lichtenberg the trait of resignation. The retraction of knowledge’s forward positions, the return from the depths to the surface, already has for him—even before he encounters Kant—the critical function not of dictating boundaries but of discovering them, of establishing why it is that we cannot know more. To want to find the truth continues for him to be a “source of merit, even if one goes astray from the path.” But Lichtenberg ironically dissolves just this idea of the “path” to the truth, and thus deprives “going astray” of its contingent status, its correctability: “That so many people seek the truth and do not find it surely follows from the fact that the paths to the truth, like those from one place to another in the Nogaic steppes, are just as broad as they are long. Likewise on the sea.” The error that in this topography has become the norm of human cognitive movement still has its economy, its antidogmatic effect: “Even our frequent errors are useful in that in the end they accustom us to believing that everything could be otherwise than we conceive it to be. . . .”

Doubt about the possibility of arriving at the truth—to the extent that we do not remain on that “surface,” the environment of the “seeker of causes,” but instead pose the larger and the largest questions—is due not only to the uncertainty of the paths but also to the impossibility of imagining the arrival itself. Not even revelation could help us here because it would have to be accomplished in the language of the ideas we have gained from the surface of nature. Lichtenberg tries this thought experiment: “If one day a higher being told us how the world came into existence, I really wonder whether we would be in a position to understand it.” In the case of one of the other great questions, that of the origin of motion, Lichtenberg tries to demonstrate not only that we know nothing but also why we know nothing; and he thinks that “this could be an accurate criterion of where one should begin or desist. . . . There is here a more definite boundary than elsewhere because it seems to be not so much a lack of experience as rather an absolute dividing wall, or at least a suggestion of where that wall should be sought.” And the consequence: “It is a shame that the best minds venture so eagerly into what is unfathomable and are
glad to hear when the crowd is amazed at their daring, and would rather be called daredevils than peaceful cultivators of a ground whose solidity the whole world admits.”

Lichtenberg’s metaphor of the “peaceful cultivator,” of “cultivation of the surface,” is, in opposition to Bacon’s images of seafaring into the uncertain, a metaphor of terra firma, of cultivating labor, with the idea of organic growth and spatially restricted economy in the background. But also the hunt, by which man keeps active without having to reckon up the expense and the return, still belongs to this metaphorical world: “Since the middle of the year 1791 something has been stirring in my whole thought economy that I cannot describe properly yet. I intend only to bring up some of it and in future to pay more attention to it. It is an extraordinary mistrust, almost proceeding to literary acts of violence, of all human knowledge, with the exception of mathematics. What still binds me to (the) study of physics is the hope of discovering something useful to the human species. For we must concern ourselves with causes and explanations, because I see no other means at all, without this exertion, of keeping us in action. Of course someone can go hunting for weeks at a time and shoot nothing; but so much is certain: He would not have shot anything at home either, and that with certainty, since after all it is only in the field that he has probability on his side, however little it may be…”

What lies beneath the surface, the hidden depth of nature, is for Lichtenberg always also man in his role as an enigma to himself. The scornful critic of the fashionable physiognomics had arrived by his own path at Kant’s doctrine of the phenomenality even of inner experience, and here the paradox held for him, just as much as with outer experience, that drawing closer to reality can suddenly turn into a withdrawal from it. Regarding Sömmering’s book Über das Organ der Seele [On the Organ of the Soul], he notes in 1796,

Is it not strange that when, for example, one reads about the organ of the soul in Sömmering’s excellent work, one does not feel more at home than one does in a work on the purposes of Saturn’s rings. And yet if one can speak here of place, that is what lies nearest to us. But nearness is no help, since the thing which we can approach is not the one that we want to approach. When, while watching the sun go down, I take a step in its direction, then I approach it, even if only by a little. In the case of the organ of the soul it is entirely otherwise. Indeed it is possible that by an all too close approach, for example,
with the microscope, one would remove oneself even from what one can approach. For example, I see in the distance, on a mountain, a strange mass; I come nearer and find that it is a castle; still nearer I discover windows; and so forth. That would be enough; if I were unfamiliar with the purpose of the whole, and sought still further, then I would end up in analysis of the stones, which would lead me further away.46

In sum, “all study of nature” does indeed lead “… unnoticed, to a great moral end,”47 but this end no longer results from knowledge itself, nor is it reached, of its own accord, as a side effect of the striving for knowledge; rather it lies precisely in what knowledge denies to man. The world that is no longer made for man’s knowledge, and the human nature that no longer fulfills itself in its striving for knowledge, enter into a new relation, reversing the direction of the claim. It is this, the turning of the human interest to itself, that Lichtenberg thinks he has learned from Kant: “The world is there not to be known by us but rather to form us in it. That is a Kantian idea.”48

The boundary of knowledge, which knowledge finds and acknowledges, had become the object of the appetite for theoretical knowledge itself in Kant’s ‘critique.’ The autonomy of reason meant even—indeed particularly—here to carry out the restriction of the pretension to knowledge as a result of understanding instead of submitting to the de facto forbiddenness of boundary transgressions. For Kant, the hypertrophy of the appetite for knowledge is the root of all the spiritual phenomena whose negation is called “enlightenment.” ‘Passive reason,’ in its instinct to go beyond what has been achieved without regard to what can be achieved, must be helplessly inclined toward prejudice and superstition. Enlightenment, as not a private but a public postulate, one that defines the condition of an age and a society, is more than ‘thinking for oneself’; it is the removal, as it were, of the opportunities for the passivity and thus the seduceability of reason.

In the determination of the “public mode of thought” lies the necessity of the perfected, the irreversible, Enlightenment, but also its intrinsic difficulty. On the relation between the appetite for knowledge and enlightenment, Kant made the decisive point in a note to section 40 of the *Critique of Judgment* (1790):

We readily see that enlightenment, while easy, no doubt, *in thesi*, in *hypothesi* is difficult and slow of realization. For not to be passive with one’s reason, but always to be self-legislative, is doubtless quite an
easy matter for a man who only desires to be adapted to his essential end and does not seek to know what is beyond his understanding. But as the tendency in the latter direction is hardly avoidable, and others are always coming and promising with full assurance that they are able to satisfy one's appetite for knowledge, it must be very difficult to preserve or restore in the mode of thought (and particularly in the public mode of thought) that merely negative attitude (which constitutes enlightenment proper).  

With this annotation to the Critique of Judgment, Kant revises the philosophical 'immediate expectation' of the completion of his critical enlightenment, as he had projected it at the end of the Critique of Pure Reason (1781), in the fourth chapter of the "Doctrine of Method," as the extrapolation of a "History of Pure Reason." Here he had more than suggested to his readers that they draw from his result, that the "critical path... alone is still open," the conclusion of cooperating toward the end of "making this footpath into a highway." The problem of accomplishing enlightenment does not yet have the weight of having to bring about the transformation of the "public mode of thought," and thus to withhold from the passivity of reason the conditions contributing to an overhasty satisfaction of its appetite for knowledge. The judgment of his readers seems to him sufficient to achieve "before the end of the present century what many centuries have not been able to accomplish, namely, to secure for human reason complete satisfaction in regard to that with which its appetite for knowledge has occupied itself at all times, though hitherto in vain." Here the appetite for knowledge is still the organ of enlightenment itself, the unrest that needs only to be brought onto the correct and sole path remaining open in order to find in the near future its adequate and definitive fulfillment. There is no apparent suspicion that the appetite for knowledge could be an excessive impetus, that it could disturb and endanger the critical business of the self-limitation of reason by its claims to the solution of the too great questions and to the inaccessible certainties—that is, that it could be the agent of reason’s seducability.

What Kant published in the Berliner Monatsschrift in 1784, "An Answer to the Question: What Is Enlightenment?," is already at a skeptical distance from such immediate expectation of the parousia [presence, arrival] of critical reason. The conflict between the requirement of a transformation of the "public mode of thought" and the requirement of obedience to public authority, in his political philosophy, has become
noticeable. What he had expected in 1781 from the rapid judgment and agreement of the reader to the author's purpose has passed over into the resigned conclusion that "a public can only slowly arrive at enlightenment" and that this depends in the last analysis on the precondition of freedom in the state "to make public use of one's reason in every respect." Such public use of reason is defined by the manner in which "someone, as a man of learning," exercises it as his calling "... before the whole reading public." But to this publicity in the use of reason there is opposed its "private use," such as has to be practiced by teachers who are public employees and who, in their paid office, represent and disseminate doctrines that, as persons of learning, they would be qualified and entitled to criticize. Thus the use of reason in the service of public purposes, or in preventing the disruption of those purposes, can paradoxically be called a private use.

The character of slowness that enlightenment assumes in the force field between these two agencies has become a reassuring guarantee that excludes the suddenness or even violence of revolution, through which "true reform in ways of thinking will never come about," but rather "new prejudices will serve quite as well as the old ones as a leash to control the great unthinking mass." On the other hand Kant convinces himself, equally reassuringly, that the slowing down of enlightenment cannot pass over into a complete standstill, or better, that one factor cannot have any right to slow down or halt the other: "A man may for his own person, and even then only for a limited period, postpone enlightening himself in matters he ought to know about. But to renounce such enlightenment completely, whether for his own person or even more so for later generations, means violating and trampling underfoot the sacred rights of mankind." The laborious argument for the right to enlightenment has taken the place of the assurance of its early imminence. His contesting the permissibility of a conspiracy to perpetuate "self-incurred tutelage" reveals that Kant saw before him a more dangerous problematic than that of the cognitive appetite of a 'passive reason' and sought to ward it off with the ceremonious gesture of appeal to inalienable rights: "One age cannot enter into an alliance on oath to put the next age in a position where it would be impossible for it to extend and correct its knowledge, particularly on such important matters, or to make any progress whatsoever in enlightenment. This would be a crime against human nature, whose original destiny lies precisely in such progress. Later generations are
thus perfectly entitled to dismiss these agreements as unauthorized and criminal.”

In such a projection of the problem into the huge dimensions of forces struggling over man, the fact becomes lost from view that the Dialectic of the *Critique of Pure Reason* had exhibited the endogenous pathology of the cognitive appetite of reason itself. Only in the light of the idea that reason, as a result of one of its own instinctive elements, degenerates, so to speak, and falls into self-loss does it become understandable that reason’s critique of itself, as acknowledgment of its restriction, does not become humble resignation or a disillusioned tarnishing of its image, but rather can be presented as the final and definitive discovery of its own dignity. But Kant conforms more accurately to the severity of the historical situation of reason in which he intervenes when he speaks of the self-preservation of reason rather than its dignity. The platitude of “healthy reason” then acquires a precise character: The reason that is capable on its own of preserving itself is healthy.

In the last footnote of the essay of 1786 entitled “Was heisst, sich im Denken orientieren?” [What Does It Mean to Orient Oneself in Thought?], Kant formulates the “Maxims of the Self-Preservation of Reason,” in accordance, in fact, with the logical structure of the categorical imperative: “To make use of one’s own reason means nothing more than to ask oneself, in the case of anything that one is asked to assume, whether one would indeed find it practicable to make the reason why one assumes something or the rule that follows from what one assumes into the general principle of one’s use of reason.” If enlightenment is nothing other than this very self-preservation of reason, then the freedom of cognition that it demands is not an arbitrary but a lawful freedom. In this analogy to moral philosophy, with its doctrine of the inability of practical reason to move itself to action—in spite of its capacity to determine the action lawfully—therefore, curiosity is put in its definitive systematic place. Need sets in motion, but it does not orient; it is legitimate, but it does not legitimize.

Kant’s strict separation of theoretical from practical reason did indeed lead him to analogies between the two, but not to a morality of theory itself—except insofar as the self-criticism of pure reason was supposed to make room for morality. The analogy is expressed as follows: “Reason does not feel; it understands its lack and produces through the cognitive drive the feeling of need. Here the matter stands as it
does with moral feeling, which no moral law brings about (for the
moral laws arise entirely from reason) but which is nevertheless caused
and produced by moral laws, and consequently by reason, since the
active and yet free will needs definite reasons.” The freedom of reason,
insofar as it does not subject itself to its own law but rather surrenders
itself to its cognitive drive, is anarchic, so that in consequence “it must
bend under the yoke of the laws that another gives it; for without
some law or other, nothing, not even the greatest nonsense, can play
its game for long.” The cognitive drive can stand in opposition to the
interest of reason, can degenerate into “maxims of the independence
of reason from its own need.”

Here the expression “self-incurred tutelage” acquires its political
coloring; what is meant is not only the comfortableness of being in-
competent, the lack of resolution and courage of which Kant had
spoken at the beginning of the essay “What Is Enlightenment?,” but
also the provocation that the reason that has become ‘noopathic’ ex-
ercises on the external forces of order. One sees how Kant’s char-
acteristic concept of the state is systematically entwined with the
problematic he saw in the cognitive drive and how the regression of
his faith in the imminence of enlightenment takes political recourse
to emergency measures into its calculations: “Here the authorities
enter the game, so that civil concerns themselves do not get into the
greatest disorder; and since the handiest but also the most vigorous
means is precisely the best for them, they suspend even the freedom
to think and subject this, like other trades, to government regulations.
And thus freedom of thought, if it wants to operate independently
even of laws of reason, finally destroys itself.”

In the same year, 1786, in the concluding sentences of the Metaphysische
Anfangsgründe der Naturwissenschaft [Metaphysical Elements of Natural Sci-
ce], Kant brought the ‘trial’ of theoretical curiosity to a close that,
as a systematic explication, was not to be superseded or revised again.
Augustine, who had provided the motives and the rhetoric for dis-
criminating against curiosity, had gone no further than the requirement
that one renounce the curiosity that turns outward and instead direct
one’s spiritual attentiveness inward. That is, he had constructed a
disjunction of self-knowledge and curiosity, a disjunction that was
largely taken over by the Middle Ages. When the modern age rejected
the medieval discrimination against the appetite for knowledge, its
freedom was limited by these prepared alternatives to the extent that
all that it could do was to avail itself of the opposite. Kant now shows
that these are not alternatives at all but instead—that the motive of
curiosity itself, consistently pursued, by reaching for the totality of the
conditions of objectivity finally makes self-knowledge its necessary
subject. The metaphysical doctrine of bodies that Kant develops in
the Anfangsgründe inevitably ends with the subject of empty space,
and thus with an object as inconceivable as it is unavoidable. The
discussion shows that the denial of absolute empty space is just as
hypothetical as its assertion. Reason's effort to grasp the conditioned
through its conditions, and thus finally to reach the unconditioned,
ends in an absolute embarrassment: being expected to comprehend
something that is not subject to the conditions of comprehensibility
and nevertheless not being able to leave off at some arbitrarily chosen
earlier stage with an object that, because conditioned, is in fact com-
prehensible. Nothing remains for reason "when curiosity calls upon
it to grasp the absolute totality of all conditions except . . . to return
from the objects to itself, in order to investigate and define, instead
of the ultimate limits of things, the ultimate limit of its own capacity,
when left to its own resources." That is no longer Augustine's pre-
scription, since it legitimates resolutely carrying out the theoretical
pretension right up to its final consequence and justifies turning away
from the objects only through evidence of dialectical indecidability.

Translator's Notes

a. These were selections from Reimarus critical of orthodox Christianity that Lessing published
as the writings of an "unknown" author, together with his own commentaries, in his Contributions
to Literature and History from the Ducal Library at Wolfenbüttel (of which he was the librarian), in
1774 and 1777. They generated a protracted storm of controversy.

b. "If God held all truth in his right hand and in his left the everlasting striving after truth,
so that I should always and eternally be mistaken, and said to me, 'Choose,' with humility
I would pick on the left hand and say, 'Father, grant me that. Absolute truth is for thee alone.'"
From Eine Duifik (see author's note 32). The passage is translated by Henry Chadwick in

c. Vischer published a Dritte Teil des Faust [Third Part of Faust]—a sequel to Goethe's two parts—in
1862 and a revised version in 1886.

I: Critique of Aesthetic Judgement," p. 152. The translation is slightly revised.
Chapter 10

e. The author requested the substitution of the last two sentences in this paragraph for the last sentence in the text as published in Der Prozess der theoretischen Neugierde (Frankfurt: Suhrkamp, 1973), p. 249, stating that the same change would be made in future German editions.

The Integration into Anthropology: *Feuerbach and Freud*

In the process of the ‘trial’ through which it was legitimated, the concept of theoretical curiosity was concentrated, in terms of its objects, on nature, and especially on the areas of nature whose natural inaccessibility and difficulty of objectification had become ‘canonical.’ One of the indications of the fact that this ‘trial’ was concluded and won is the diffusion of the term to other realms, ultimately to any realm whatever, a process in which consciousness of the daring of such employment—which after all was the impression that the linguistic transfer was originally intended to convey—quickly disappears. The pluralism of curiosity calls for specifications—in language, for adjectives. The plural form of the term, as used quite as a matter of course by Paul Valéry to characterize the contemporary age, “curiosités de toute espèce” [every kind of curiosity], is uncommon.¹

As an extreme case let me mention “military curiosity.” Alexander von Humboldt used this term in 1848 to criticize the participation of the Prussian prince Waldemar in the conflict of the English with the Sikhs in 1845, in which enterprise the prince’s escort, Hofmeister, had been killed. The prince’s participation in this battle in distant Asia was praised as a heroic deed in military circles and at court in Berlin. “Humboldt’s opinion was different. He called Prince Waldemar’s behavior on this occasion imprudent; to stake one’s life out of pure military curiosity was no heroism. . . .” What the term “curiosity” means in this context is pointed up when it is compared to a text half a century older; it comes from the *Abhandlung von dem Einflusse der*
theoretischen Philosophie in die Gesellschaft [Treatise on the Influence of Theoretical Philosophy in Society] of the Göttingen mathematician Abraham Gotthelf Kästner, published in 1742: "And if Pliny's manner of life seems to us somewhat too tranquil, then think of the duke of Marsigli, who gathered the material for his description of the Danube River not by any curious travels but rather in the course of a bloody campaign. How often did he exchange the sword for the anatomist's scalpel! How often did he venture, in order to observe the circumstances of a place or a remarkable natural feature, into regions where the philosopher would not have penetrated if he had not been accompanied by a hero! How many discoveries did he make that, now that he has made them, are still unknown to many a scholar who, in his study, considers that he is acquainted with the whole of nature." The curiosity that is no longer subject to disparagement is indeed permitted to undertake any journey, but frivolity is not becoming to it; it does better as a form of rigorous work or as the digression of a hero in the course of a campaign.

Delight in monstrosities stands on the threshold of a new form of seriousness—even if it is a seriousness of enjoyment—for which it sets up an initial aesthetic: "An object of an unknown kind that has something peculiar and unusual about it is therefore new, but only to a modest degree—unless its peculiarity almost turns it into another kind of thing, in which case its novelty is very great. A child born with teeth and long hair is an object worthy of our curiosity [Neubegierde (eighteenth-century term) = Neugierde (contemporary) = appetite for novelty, curiosity], but still more so is a monster of which one knows not whether it is a man or beast and that seems to have an equal claim to membership in both categories." But there is still another reason why theoretical curiosity shifts its location rather than becoming differentiated as, for instance, also an aesthetic involvement: The increasing institutionalization of theoretical activity in the form of science, of workings that are carried forward by an immanent logic, allows the theoretical process less and less to appear as conditioned by motives.

There are exceptions, as long as there are still the great solitary figures embodying initiation into theory like that same Alexander von Humboldt, who most nearly typifies curiosity for the first half of the nineteenth century. As such a figure, he was treated with respect even when he was interrupted, at work on his Kosmos (like Archimedes at the storming of Syracuse), by the Berlin barricade fighters of March
1848. Humboldt had to deal with a new form of curiosity, a species—all too often journalistically stimulated and then satisfied by unsupervised means—that he called “popular curiosity.” A false table of geographical altitudes had appeared in the *Leipziger Illustrierte Zeitung* ([Leipzig Illustrated News]) and Humboldt writes to Heinrich Berghaus on December 18, 1849, “Is it not enough to drive one to despair, dear professor, to have to see how all of our efforts to disseminate accurate geographical data among the people are in vain? How an object of popular curiosity is botched, you can see from the issue of the *Illustrated News* that I have enclosed. I brought the paper home with me this evening from a royal reception...” The energy of curiosity has turned out to be also a potential for being led astray by new media. And it is just this double aspect that Humboldt expresses by his distinction between curiosity ([*Neugier*]) and the appetite for knowledge ([*Wissbegierde*]) in a spoken remark from the year 1850 reported by Berghaus: “I am, as you know and as everyone knows, an advocate of the free movement of talent and intellectual gifts, wherever they appear; I am an opponent of all the preliminary and repeated tests that the state considers necessary in order to serve it or society in general, a mania for examinations that extends, no doubt, all the way to field watchmen and night watchmen—with the ridiculous aim of ascertaining (at least) their political convictions. Thus I am anything but a friend of the tutelage that the state assumes to such a terrible extent over us poor fellows; but if it cannot or will not desist from its examination system, then it should direct its attention to the people who, as editors of the sort of unfactual, imaginative publication of which the *Illustrated News* is one, take on the office of instructor of the people. What does this newspaper aim at? The momentary satisfaction of curiosity, not of the appetite for knowledge, and of course deeper learning is entirely out of the question.” The huge impression produced by his *Kosmos* confronted Humboldt with the potential that was present here. Here I cannot even touch on the history of the influence of this work; Humboldt himself spoke of the “*Kosmos mania*” that spread from the court, through the society of the capitol, all the way to the countryside and the parsonages. The echo came in the form of whole piles of speculative manuscripts on constellations, planetary disturbances, and general world views: “Everyone wanted to be pregnant with a *Kosmos* at once...” Just as the author of the *Kosmos* felt no affiliation from the stars when he regarded the cosmos itself, so also
the curiosity of his readers was directed not at the cosmos directly but rather at his Kosmos: "... in the salons of fashionable ladies, Kosmos lay uppermost on the coffee table, and opened, so as to show visitors that one had actually read in the learned work of the great philosopher!"

The modern age's initial passage beyond the Pillars of Hercules, its breaking through the Nec plus ultra, was supposed to open once and for all the borders of a hitherto unknown reality. But was the terra incognita that was aimed at there—that of a nature that was finally to be dominated—the final reserve of the unknown? Was Francis Bacon's interpretation of curiosis as a spatial or spatially metaphorizable motivational syndrome the only one possible? It was to become evident that there could be other systematic orientations toward the unknown and the undisclosed, and thus other possible ways of going beyond boundaries. The beginning of the modern age turned out to be a repeatable, or at least an imitable, paradigm.

Ludwig Feuerbach's concept of the "knowledge drive" [Wissenstrieb] reminds one, in its diagnosis of the situation to which it relates, of Bacon's curiosity, but with the difference that its background metaphor is temporal rather than spatial. Like Bacon, Feuerbach, too, characteristically resists the definitive status of a preexisting 'ancient world' and demands that we imagine what lies beyond its limits. But this time the definitiveness cannot be surpassed 'geographically' or integrated into an overall conception, a globus intellectualis. The definitiveness at which Feuerbach takes offense is that of the Hegelian philosophy as the consolidation that, according to Rudolf Haym's formulation, compelled the Hegelians at the beginning of the decade of the 1830s to discuss "in complete and bitter earnest" the question "what the further content of world history could very well be, now that, in Hegel's philosophy, the world spirit had penetrated to its goal, to knowledge of itself." This reminds one of the doubt with which Bacon had to deal, whether after the achievements of the ancients anything at all was left to be discovered or invented.

The motive of curiosity, for Feuerbach, can be described by one of his favorite terms as an aggregate of acts of "anticipation." Even where the knowledge drive seems to be an interest in history, it relates to history as not a dimension of memory and preservation but rather an arsenal and onset of anticipations and projections. At bottom the interest in history is essentially metaphorical, or, more precisely, directed at making accessible what is still metaphorical. The model is
theology as the historical form of a metaphorical, and therefore still withheld, anthropology—the metaphor of an anthropology that evidently was able neither to express itself nor to operate as such, that needed projection into a foreign medium, into the exaggerated dimensions of transcendence, in order to articulate itself. The divinity of this theology is, unbeknownst to it, "only the logically consistent soul," the "unashamed" human will. Theology is "the true, the objective, the manifest, the complete psychology," a "hyperbolical psychology." But the treasures squandered in heaven are not only brought back as what they were and have remained. One could say that the whole great episode of projection was like a phase of incubation, that the original idea was, as it were, propagated in vitro [in the laboratory]. Hyperbole makes knowledge possible: The possibility and necessity of magnification, of making the invisible visible, is not restricted to optics—consciousness too has a need for exaggeration as a means of articulation. Theology was a magnifying lense; without it we would have learned less about ourselves. The ancient efforts to understand the infinite, the absolute, the self-sufficient, the self-enjoying, the end in itself, turn out to be necessarily roundabout attempts by man to grasp himself as absolute, to conceive of himself as an end in himself, as having a right to self-enjoyment, and to experience his own sensuality in "purposeless looking at the stars" as the "living superlative of sensualism." As the retraction of the unique transfer of ununderstood self-understanding, the "realization of Christianity ... [is] its negation." True to this fundamental conception, Feuerbach's temporalization of curiosity was 'learned' early on from the assertion, classified as Platonic and Christian, that man has a "knowledge drive" by which, on teleological premises, his immortality is guaranteed and given meaning. Feuerbach's counterthesis is the critical extraction of the anthropological core hidden in the projection of immortality: The immortality extrapolated as the fulfillment of theory is the product of the difference, which is still not understood, between the "knowledge drive," which relates to the species man, and its unsatisfied actual state in the individual man. Here the spatial metaphor of curiositas is not only set aside but decisively contradicted; and this applies even to Kant's 'setting of limits' for reason over against its restless impulse toward hypertrophy, and thus toward self-delusion.
Man, according to his species, simply does not want to know what he cannot know; rather he wants to know what is in fact not yet known by himself and men in general but can be known. The knowledge drive does not want to push forward into the inaccessible, which is anthropologically irrelevant, but rather to anticipate what is possible for man, which is the future. "There is nothing that man is further from possessing than a supernatural knowledge drive, such as Christianity or Platonism attributes to him; he has no drive that exceeds the measure of human nature, which admittedly is not a measure that can be gauged by the compasses of a philosophical system, a finite measure; his knowledge drive extends only to things that are knowable by man, in other words, to human objects, which find their completion in the course of history."

The 'beyond' of religion and metaphysical systems is therefore an elementary, though not a fruitless, misunderstanding. The idea of immortality is curiosity that does not yet understand itself in its rational economy; it is the negation of history, insofar as history withholds things from every present time. Man only wants to know what man can know. "What lies beyond this region has no existence whatever for him; so for him it is also the object of no drive or wish whatsoever.... What man does not occupy himself with and know here, he does not want to know anything about in the 'beyond' either." Immortality is the uncomprehended aspect of temporality, which translates the externality of the future into the quasi-spatial externality of a nonworldly fulfillment, the utopia in which the totality of human experience falls to the individual. "What man desires to know in the 'beyond' is not something that in itself cannot be known in this world; it is only what he does not know now. He only wants to see the boundaries, the difficulties that he has encountered in his province, set aside."

Thus curiosity is anticipation, not arrogation. The idea of immortality is the mythical representative of such anticipation, the placeholder for an as yet undeveloped consciousness. Here it would not be very helpful to speak of "secularization," to say, for instance, that the explosive expansion of rehabilitated theoretical curiosity in the form of science was the secularization of the idea of immortality, of the energies that were directed at and attracted by that idea. Immortality is undeniably brought into a worldly context as its future, not, however, as the extraction of an idea from its 'genuine' source, but rather as the
retraction of a projection, which was not understood, into its origin, into the ground of the need that is involved in it. Admittedly this is expressed, at the moment of the retraction, in a language that is remarkably 'secularized' precisely because it has to point out the identity of the need whose position is being reoccupied: "Thus the foolish Christian, fixed on the heaven in the 'beyond,' overlooks the heaven on earth, the heaven of the historical future, in which all doubts, all obscurities and difficulties that afflicted the short-sighted present and past, are to dissolve in light."

But the decisive fact is that the idea of immortality that Feuerbach supposedly secularizes is not the Christian one at all but rather the one belonging to the Enlightenment and German Classicism, which is already historicized, that is, set in relation to the understanding of history as the progress of the species, as a human unity. The idea of immortality that is 'prepared' in this way is what gives Feuerbach the right to speak of anticipation. It is true that the scholastic visio beatifica [beatific vision] is also a combination of theory and eudemonia, but the "vision" is a static possession of the absolute, more its glorification than its penetration, a static infinity of the saturating presence of the truth. Here the Enlightenment and Classicism fastened much more concretely on knowledge experienced as movement, and of course also, especially in Kant, with the practical problematic that is unraveled as progress. The important thing here is that it is no longer God Who is the primary 'object' of one's attention in the 'beyond.' On the contrary, that attention continues the theoretical interests and moral obligations of this world; that is, it loses its quasi-worshipful character so as to satisfy, instead, what one's finite individual life denies to one.

The basic idea that is emerging here and that underlies the Enlightenment's retention of the idea of immortality could be formulated as follows: It is precisely the asserted and confirmed possibility of the progress of knowledge that makes the contingency of the individual's share in this progress unbearable. One should not water down this connection, in order to make it serve a supposedly higher purpose, by means of the secularization thesis. Hermann Samuel Reimarus gave it the following formulation: "What help are truth and science to us in relation to the kind of contentment that we wish for, when with every little increase in them we only perceive all the more how much we do not know, or disturb ourselves with that much more doubt, and in any case in this life we can never satisfy our appetite for
acquaintance with and certainty about the multifarious things in the world? But if this earth, this first house that we inhabit, is only a school in which we grasp the elementary principles of the sciences, so as subsequently to be led to higher things, then this knowledge lays the foundation for further insight, and from this slight foretaste of truth we can already conjure up the sweet image of the way in which, in days to come in the realm of light, we shall behold the whole of nature, and all the divine secrets that are still hidden, with more enlightened eyes." 16 Perfection in the scope provided by immortality is pushed forward by Lessing, Kant, and Herder to the point of the idea of reincarnation; but at the same time it is moralized, in fact for the simple reason that for the perfection of theory, the identity of anamnésis would be necessary, whereas for moral perfection, an unconscious, self-forgetful identity is sufficient. 17

Feuerbach’s “knowledge drive” reflects what, since Descartes, has been the essence of ‘method’: In the progress of knowledge, individuals are only functionaries, who operate within the totality of the process as transmitters, without ever partaking of this totality. Not immortality but rather the finality of death is the real catalyst for that concentration of existence that at least resists the quality of a mere episode, refuses to be consumed in its functional role. “Away with lamentations over the brevity of life! It is a trick of the deity to make an inroad into our minds and hearts in order to tap the best of our sap for the benefit of others. . . . The shorter our lives, and the less time there is at our disposal, the more time we really have; for the lack of time doubles our powers, makes us concentrate only on what is necessary and essential, and gives us presence of mind, initiative, tact, and determination. There is, therefore, no excuse worse than that of lack of time. There is nothing over which man has greater disposition than he has over time.” 18 The “knowledge drive” is the energy of this concentration of disposition over time. It supports the structure of ‘methodical’ cooperation in history; but it also resists it as something nonsensical and beyond what can be expected of the individual.

Feuerbach biologizes curiosity as a “drive,” and consequently also teleologizes it into a sort of temporal instinct by which the interests of the species are imposed on the individual as an obligation but through which at the same time the individual lays claim to a counterinterest. The knowing subject, the individual, “experiences only those lacks and gaps in his knowledge—and these are the ones he
experiences most painfully—that are demonstrated by the existence and the necessity of an earthly, but not a heavenly, ‘beyond’; for he only wants those boundaries of his knowledge done away with that the future generations who pursue his subject really do away with. . . . What mankind desires in the youth that is the past, it possesses in abundance in the old age that is the future.\textsuperscript{20}

It is not by accident that at this point Copernicus appears as the prototype of this knowledge drive as it begins to actualize itself in its temporal dimension. The triumph and the melancholy of pretension and resignation lie immediately alongside one another when Feuerbach makes Galileo call after Copernicus, “Oh, if you . . . could have lived to see the new additions to and confirmations of your system, what delight you would have derived from them! Thus speaks the man from the real ‘next world,’ the man of the future, to the man of the past.” While legend, since the beginning of the eighteenth century, had ascribed to Copernicus the prediction of Venus’s changes of phase, Feuerbach knows of still another utterance, pressing forward, as it were, toward the telescope, about the deficiency of the unaided human eye—an utterance whose derivation is unknown to me: “Copernicus is supposed to have mourned, on his very deathbed, that in his entire life he had never once seen Mercury, despite all his efforts to do so. Today the astronomers, with their excellent telescopes, see Mercury at broad noon.” And here Feuerbach adds the sentence that is central to his theory of anticipatory curiosity: “Thus the future heals the pains of the past’s unsatisfied knowledge drive.”

The Copernicus anecdote is so fertile for Feuerbach because it determines the relation between thought and sense perception teleologically, in a way that is not self-evident. Vision and touch are not reason’s ‘raw material,’ its substrate, but rather the essence of the fully realized human relation to reality. Only to have reflected on the planet Mercury constructively, but never to have seen it, is supposed to have filled the dying astronomer with sorrow, with the consciousness of a deficiency that only the telescope would have been able to remove. Reason is not the perfection of sensuality but only its anticipation and prelude, the instrument of its ‘conjectures.’ “Thought is only an expanded feeling, extended to distant or absent things, a feeling of something unseen.” And appended to this is a question that, under the premises of this anthropological teleology, would have to be answered in the negative: “Is there anything absolutely invisible?”\textsuperscript{20} The
unwritten history of the invisible, as the reservoir rather than the futility of reason, reaches one of its culmination points in this question.

For Feuerbach, the simple negation of theology's reservations vis-à-vis the will to knowledge leads logically to the philosophical position of pantheism as "the essence of the modern era and its philosophy. We owe all the great discoveries and achievements of the modern era in arts and science only to the pantheistic view of the world. For how can it be possible for man to be enthusiastic about the world if the world is an entity different and excluded from God—an ungodly entity? For all enthusiasm is deification." Only if history is not at an end, if the termination of history by the Hegelian philosophy is invalidated, can the knowledge drive fulfill its anthropological function, can the kind of significance that Galileo's telescope had for the unappeased curiosity of the dying Copernicus be continually repeated.

The theory of the knowledge drive is integrated into a more general theory of needs as the indicators of objective possibilities in history. "It is precisely the concept of need that raises a creature above the limits of its subjectivity." The elementary misconception in the theology of a God without needs Who is supposed to be a God of love was the denial of its anthropological involvement, a denial that had negated the reference to history involved in 'needs.' However self-supporting and independent you consider God to be, if you endow Him with love, then you endow Him with need. Love that derives from the superabundance of perfection is a luxury—love is true and deep only when a being makes up its own deficiency through it. Need is the index of the way in which history becomes the dimension of the fulfillment of the human claim to happiness. Only here does the knowledge drive have its ultimate anthropological foundation: "The happiness drive [Glückseligkeitstrieb] is the drive of drives. Every drive is an anonymous form of the happiness drive, anonymous because it is named only by reference to the object in which man locates his happiness. Even the knowledge drive is only the happiness drive, at first satisfying itself by means of the mind, and later in the course of the development of culture, where the knowledge drive becomes a separate drive, satisfying itself in the mind."

The expression "knowledge drive," with the implication of anticipatory certainty of something attainable, is already found in Novalis—"The combination of will and knowledge drive—is faith"—but under the entirely different premises of "creative observation," of the verum/
factum principle: “We know something only insofar as we make it.” The pantheistic premise that there is no longer a reserve of truth withheld from human knowledge is preempted here by a principle of equivalence pushed beyond Galileo’s identification of the evidence of mathematics for God and man to a universalized ‘poetics’: “God creates in a way no different from our own—He merely combines... We can come to know the Creation, as His work, only to the extent that we ourselves are God—we do not know it, to the extent that we ourselves are ‘world’—our knowledge advances, the more we become God...”25 For Feuerbach, the anticipatory character of the knowledge drive is absolute, so that ‘making’ is only imitative: “Man wants to know how something happens or is made so as, if possible, to be able to make it with his own hands—the knowledge drive is originally an imitation drive—or, if that is not possible, at least to mimic it in ideas. But power and ownership—and to own, to be master of what cannot be possessed in bodily form, is, precisely, to know—are objects of the happiness drive.”26 Here the knowledge drive does not ‘complete’ the making of the object; rather it ‘intends’ the title to its physically completed possession, or at least to an imaginative surrogate for such possession. Truth is the unfulfilled ‘intention’ of having the object in one’s hands.

From Feuerbach’s “knowledge drive” [Wissenstrieb] to Freud’s [Wiss­trieb] is not merely an associative leap. They have a common element in the secondary and derivative character assigned to the forms that they take in reality. For Feuerbach, the force that propels the species toward the totality of experience in time, in history, manifests itself in indefinite forms in the individual; for Freud, the model of the psychic mechanism makes an unspecified curiosity result from a central libidinal potency. As a motive for psychoanalysis too, the knowledge appetite has, as it did for Feuerbach, a protective function approaching that of instinct, a function due to the subject’s deception by the unconscious, which the knowledge appetite exposes. What is novel in Freud is the combination of theory and therapy in a simultaneous functioning that could hardly be kept free from conflict. This problematic was already present in Breuer’s hypnotism, from which Freud inherited it: “Thus one and the same procedure served simultaneously the purposes of investigating and of getting rid of the ailment; and this unusual conjunction was later retained in psychoanalysis.”27 In comparison with the physical therapy of nervous disturbances, the hypnotic therapy
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was "incomparably more attractive" because it "combined an automatic mode of operation with the satisfaction of scientific curiosity [Wissbegierde]." Freud characterizes the peculiarly 'unintentional' genesis of the Interpretation of Dreams (which agrees with his methodology) negatively: "My desire for knowledge [Wissbegierde] had not at the start been directed toward understanding dreams. I do not know of any outside influence which drew my interest to them or inspired me with any helpful expectations." We will begin with such self-ascriptions of knowledge appetite before we come to its theory.

A significant example is found in a transitional passage in Beyond the Pleasure Principle: "What follows is speculation, often far-fetched speculation, which the reader will consider or dismiss according to his individual predilection. It is further an attempt to follow out an idea consistently, out of curiosity to see where it will lead." Such combinations of warnings to the reader not to overstrain the credit that he has accorded to the author, while admitting his curiosity, are frequently found in Freud. Here is one further, very clear, example, which accompanies the assertion of the regressive nature of instincts and indicates a cool distance from the demonic connotations of curiosity: "It may be asked whether and how far I am myself convinced of the hypotheses that have been set out in these pages. My answer would be that I am not convinced myself and that I do not seek to persuade other people to believe in them. Or, more precisely, that I do not know how far I believe in them. There is no reason, as it seems to me, why the emotional factor of conviction should enter into this question at all. It is surely possible to throw oneself into a line of thought and to follow it wherever it leads out of simple scientific curiosity, or, if the reader prefers, as an advocatus diaboli [devil's advocate], who is not on that account himself sold to the devil." Such sentences ought to be placed alongside the positivistic formulas forbidding the taking of speculative liberties, such as were set up by, for example, Auguste Comte.

The distance inherent in a curiosity that expands in the space between introspection and speculation, and the proximity inherent in therapeutic engagement [involvement] do not compete in Freud because rational insight and self-appropriation [Selbstgewinn] converge. "Freud does not describe the unconscious side of our nature from any simple intellectual curiosity: he wishes us to become aware of it, to control it, to be as self-aware as possible." But this convergence of goals does not prevent
it from being the case that the original motivation passes over into the therapeutic attitude only secondarily: “After the analyst’s curiosity [Wissbegierde] had, as it were, been gratified by the elaboration of the technique of interpretation, it was inevitable that interest should turn to the problem of discovering the most effective way of influencing the patient.” The model of the Unconscious allows one to ascribe to an agent actions of which he knows nothing and things undergone of which he has no experience. One may think of the schema of Plato’s allegory of the cave as the elementary typification of all processes of ‘enlightenment’: Those who are chained inside know nothing of the deceptive character and shadow quality of the reality present to them—first one of them has to be set free and forcibly brought from the cave into the open air of authentic reality. But the allegory leaves unclear and unstated what motive it is that leads to the accomplishment of liberation and undeceiving—the first event is the return of the one ‘undeceived’ person into the cave, in order to disenchant the others. This transition from theory (pure contemplation) to practice (teaching) is indirectly made intelligible by the political context of the Republic but at the same time falls under the suspicion that accompanies the acquisition of a relation of power. Psychoanalysis is profoundly involved with this same problem. What motive takes the place of curiosity when it has been satisfied?

Theoretical curiosity is a topic and a problem in psychoanalysis in two ways. On the one hand, in relation to the definition of psychoanalysis as therapy, its origin from a ‘cathartic procedure’: “Psychoanalysis is a medical procedure which aims at the cure of certain forms of nervous disease (the neuroses) by a psychological technique.” However, a therapy based to such a large extent on extracting from concealment material that withdraws and hides itself through a mechanism of camouflages falls easily into the danger—and the suspicion—of regression into what is nothing more than a theoretical interest. This is especially so if—and that is the second aspect—it itself provides a theory of this kind of interest as a transformation of what is by nature an unspecific energy, the libido.

It is the infantile active sexual curiosity to see, from which “curiosity branches off later on.” If the “pregenital sexual organization” prepared dispositions toward both sublimation and neurotic compensation for repression, then it is understandable that what Freud entitled the “Wisstrieb” [knowledge drive] is, on the one hand, “at bottom a sub-
limated offshoot of the instinct of mastery exalted into something intellectual,” while on the other hand, it can “actually take the place of sadism in the mechanism of obsessional neurosis” (because in this mechanism the genetic “forerunner” becomes the compensatory “representative”).36 The unsuccessful sublimation can be replaced by regressions of an infantile character; Freud exhibited this impressively, in connection with theoretical curiosity, in the case of Leonardo da Vinci, who became an investigator “at first still in the service of his art, but later independently of it and away from it”;37 “The investigator in him never in the course of his development left the artist entirely free, but often made severe encroachments on him and perhaps in the end suppressed him.” This interpretation takes seriously the legendary verdict of the dying Leonardo, reported in Vasari’s Life of Leonardo, that he had done wrong to God and man, “non avendo operato nell’arte come si convenia” [not having worked in his art as he ought]. Conflict between the artist and the investigator in Leonardo appears first as inhibition, in the slowness of his work, and the frequent resignation that left it fragmentary. Freud refuses to believe Leonardo’s statement in the Trattato [Trattato della Pittura: Treatise on Painting] that in order to be able to love the Inventor of the world, he had first wanted to get to know His works. The affective energy, he believes, stands at the beginning and is already involved in the ‘intellectual interest.’ Here the metaphor of a hydraulic machine is characteristic, a metaphor showing that for Freud the cognitive craving can only be a secondary diversion of an original unspecific energy: “He had merely converted his passion into a thirst for knowledge; he then applied himself to investigation with the persistence, constancy and penetration which is derived from passion, and at the climax [auf der Höhe] of intellectual labor, when knowledge had been won, he allowed the long restrained affect to break loose and to flow away freely, as a stream of water drawn from a river is allowed to flow away when its work is done.”38 But the metaphor has to be kept at the highest level [auf der Höhe] of the writer’s own understanding: In the psychic, as in the physical process of conversion, losses take place in the energy accounts that cannot be made up: “A conversion of psychical instinctual force into various forms of activity can perhaps no more be achieved without loss than a conversion of physical forces.” What this means for the comprehension of Leonardo is that “the postponement of loving until
full knowledge is acquired ends in a substitution of the latter for the former."

It is important to see that this evaluation of the relation between the drive directed at theoretical knowledge and the artist’s productivity still contains, or renews, something of the old conflict between pure theory and the practice that promotes salvation. Theoretical curiosity is already a regression of the highest sublimation—which is not, or is no longer, successful—in the aesthetic work, a regression announced by those symptoms of inhibition and difficulty in creation. Curiosity is an escape from the failure of full maturity: “Investigating has also been known to take the place of acting and creating.” The work is finite; theory is infinite—the detour to practice by way of theory leaves the work in the lurch, as a fragment: “He was no longer able to limit his demands, to see the work of art in isolation and to tear it from the wide context to which he knew it belonged.” The relation of serviceability between the knowledge appetite and the production of works had become perverted; and in the process, it had become apparent that theory could not be instrumentalized. Of course for Freud, that is an indication of the establishment of this dominance in infancy, and of “reinforcement” by sexual instinctual forces, so that the knowledge appetite becomes a surrogate: “Thus a person of this sort would, for example, pursue research with the same passionate devotion that another would give to his love, and he would be able to investigate instead of loving.” When the “forerunner” can become the “representative” in this way, in the knowledge appetite, there has to be a ‘story’ connecting the infantile attitude and the later dominance. On the one hand, Freud typifies this story as inhibition by repression or as fixation into compulsive behavior; on the other hand, he typifies it as successful sublimation and substitution, where the libidinal energy evades repression “by being sublimated from the very beginning into curiosity and by becoming attached to the powerful instinct for research as a reinforcement.” Only this latter type spares itself the constraints of inhibition and compulsion, of repression and the eruption of the unconscious, through continuity in the process of sublimation. Leonardo is a representative of this ‘story,’ which Freud reconstructs from the analysis of a childhood memory, the fantasy of the vulture.

We need not deal with that here. But the hypothesis that the relation between the knowledge appetite and rejection of authority originates in the infantile bond to the mother and rivalry with the father is
important. The rehabilitation of curiositas means two things for Leonardo and his time: overcoming the divine reservation and rejecting the authority of antiquity. With his decision in favor of the exploration of nature and against the exhaustive prior accomplishment of knowledge by the ‘ancients,’ “he was merely repeating—in the highest sublimation attainable by man—the one-sided point of view which had forced itself on the little boy as he gazed in wonder on the world,” namely, the illegitimate child’s forgoing of a father and his recourse to the tenderness of his mother (nature). His early sexual curiosity, uninhibited by any paternal bond (authority), stabilizes itself and asserts itself against the religious preserve as well, which after all is only a higher-level father complex, and becomes, as it were, abstract in the adult’s sublimation: “His later scientific research, with all its boldness and independence, presupposed the existence of infantile sexual researches uninhibited by his father, and was a prolongation of them with the sexual element excluded.”

This account of the pathology of Leonardo’s knowledge appetite, however hypothetical its historical content may be and despite the slight attention it pays to the historical conditions affecting the individual biography, nevertheless in an indirect manner makes the problematic of the strained relation between theory and therapy in psychoanalysis itself clearer than is permitted by the first-person declarations—intent on convergence—of its founder, with his devotion to “scientific curiosity.” The curiosity that, in both Leonardo and his analyst, has become an instrument rests on a powerful energetic basis of acquired autarky. The artist, in any case, with his commitment to his work, seems, judging by the analysis of his resignations, to be on a wrong path rather than a detour.

Translator’s Notes

a. By “anthropology,” here as elsewhere in the book, the author means not the social-scientific discipline that studies mainly primitive peoples but more literally the study of man as such. It is thus similar to what is sometimes nowadays called “philosophical anthropology,” but to avoid the overnarrow connotations of that term (which might or might not cover the work of Freud, for instance), it seemed best to use the term “anthropology” simpliciter, as in the original.

b. A phrase from Hegel’s Theologische Jugendschriften that the author quoted in part I, chapter 9.
c. Giambattista Vico's principle that *verum et factum convertuntur*, truth and fact are interchangeable ("fact," here, being what is 'done' or 'made'—*factum* is derived from *facere*).

d. "Poetics" here must be understood broadly, as creativity or constructive activity. *Poieisis*, its Greek root, means "making" or "creating."
IV

Aspects of the
Epochal Threshold:
The Cusan and the Nolan


The Epochs of the Concept of an Epoch

That at some particular time, here and now, a ‘new epoch’ of world history begins, and one could have been present at the event—as Goethe wanted to make the disappointed combatants believe on the evening of the cannonade of Valmy—is never a secure historical fact. Perhaps that was not really such big talk as it sounds to our ears, even as the ironic exaggeration that it may have been intended to be. We acknowledge as an ‘epoch’ only what has been summoned up by the rhetorical hyperbole that speaks of the “epoch maker.”

Philologists’ and historians’ doubts whether the Goethe who in 1820 conjured up The Campaign in France had enough of the historian’s attitude to want to report a statement that was actually made or whether, with poetic freedom, he projected onto the evening of the lost battle what he had learned and thought in the meantime about the Revolution and its consequences—these doubts alone are enough to make evident how, since Goethe’s time, a scarcely paralleled accretion of significance has become attached to the term “epoch.” A “new epoch”—one is almost inclined to ask, how many does that make? How many fewer in the year 1792, or even in 1820, than after the inflation of the concept by historicism, with its need to create historical individualities by means of the great phrase divisions of the course of history? When Goethe had first written to Knebel about Valmy, on September 17, 1792, he still had to add the word “important” to the term “epoch” in order to make something of his having been an eyewitness.
Count Corti, in his history of the House of Rothschild, cites an item from the Vienna State Archive that provides a nice illustration of the carefree manner in which, for a long time, "epoch" could still be used. It is a letter of the senior partner Amsel Meyer to Metternich, who was arriving in Frankfurt on November 3, 1821, for the meeting of the Bundestag, inviting him to take his midday repast at the House of Rothschild: "This happiness would constitute an epoch of my life..." There is not as much fawning exaggeration involved here as we read into the sentence. The term "epoch" had only begun to have an effect.

Between 1792 and 1820 and Goethe's two uses of the term for the battle of Valmy lies his historical experience with the rise and fall of the Napoleonic 'demon,' with an 'epoch' that was supposed to have resulted from the 'epoch' of the Revolution. For a contemporary of these events, there was an incomparable historical observation in the fact that, and the way in which, this revolution—whose approach Goethe had felt, and whose outbreak he had seen, as though it were a phenomenon of nature [rather than history]—could be ended ten years later by an action, by a gesture, when the First Consul proclaimed on December 15, 1799, "Citoyens, la Révolution est fixée aux principes qui l'ont commencée. Elle est fini." [Citizens, the Revolution is fixed to the principles that began it. It is finished.] It seemed that history had reduced its temporal dimensions to those of the 'life-world' and had begun to submit to distinct time limits. Goethe writes to Schiller on July 13, 1796, that on this day he experiences "an epoch of his own too": His married state is eight years, and the French Revolution seven years old. Such parallelisms between his personal condition and the general condition may have been intended as wit more than presumption—the personal epoch is, after all, already a carried-over version of the historical one.²

What is more important is that periods of time have taken the place of points in time. In the letter written to Knebel from the army's encampment, nothing but the event of the campaign itself had been the "important epoch," of which Goethe writes that he is "very glad that I saw all this with my own eyes." When, almost three decades later, he presents his account of the night of September 19, 1792—under the motto "I, too, in Champagne!"—what is now entitled the "new epoch of world history" has become a period of time, which according to the consolation offered to the distressed losers is to "begin"
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precisely here and now. One will have to assume that the connection of ideas in the consolation as it was communicated to Knebel lies closer to the probable truth than what was written down nearly three decades later. For the history of concepts, which seeks to comprehend the change that took place between the Enlightenment and historicism, it is only the difference between the two examples that is important.

As regards its linguistic derivation, "epoch" is better suited to designate a punctiform event whose importance is being stressed than the period of time that is, say, introduced by this event and is to be characterized in terms of it.4 The Greek word "epoché" signifies a pause [Innehalten] in a movement, and then also the point at which a halt is made [angehalten wird] or a reversal of direction takes place. For ancient Skepticism, this root meaning gave rise to the application that commanded restraint [Einhalt: literally, holding in] in the movement of cognition and judgment and at the same time enjoined one to refrain [sich enthalten: literally, hold off], so as to avoid all risk of error once and for all. For the technical language of astronomy, the "epoché" was a special point at which to observe a heavenly body, its transit through the zenith or its greatest proximity to or distance from another star; astrologically, it was a position or constellation traditionally regarded as significant. The distances from definable points could be made useful in the determination of temporal periods; however, it was not these time periods but rather their initial points that were to be entitled "epochs" in the strict sense. Those points retain that status in the application of the concept to historical chronology, which presupposes a schema of discrete event-points and neglects the circumstances that lie between them as 'lowlands' destitute of events.

The individualization of historical periods as complex unities of events and their consequences, and the preference given to states rather than actions, to configurations rather than figures, in modern historiography—these reverse the relation that was originally implied in the concept of an epoch; the event becomes a historical magnitude by virtue of the state of affairs that it gives rise to and defines. When Goethe compares the duration of his sharing of a household with Christiane to that of the French Revolution, then to our surprise "epoch" here means not what began with those datable initial events but rather the length of the distance in time between those events and the present. Here nothing could be more natural than to take the further step of
contrasting the circumstances that commenced then with previous ones and comparing them with one another across this discontinuity.

We find this further step taken only at a late date. In his diary of 1831, Goethe notes “with the greatest wonderment,” after reading in the works of Galileo, the difference that separates his own world from the early times in which knowledge was left simply to common sense and “philosophy [which was] at variance with itself.” Galileo had died in the same year in which Newton was born. One would have expected Goethe, following his earlier usage, to define this year as the sharp demarcation point, as the “epoch.” The fact that this expectation is disappointed makes clear the change that has taken place when the entry goes on: “Here lies the Christmas Day of our modern times. Only now do I begin to be able to conceptualize the contrast between these two epochs. . . .” Only the secularizing metaphor of “Christmas Day” continues to relate the strict datability of the original events of modern science to the prototype of the most decisive partition of historical time as it was preformed by Christian chronology. But when the talk is of the “contrast” of the epochs, what is at issue can no longer be the demarcation that separates but only the character and individuality of the time periods separated by it.

This concept of an epoch leaves historiography’s chronological needs behind it. Epochs are not only, and not primarily, divided from one another; they are seen as comparable. The difference between them can be conceptualized. Bishop Bossuet, whose universal history Voltaire was opposing when he invented the philosophy of history, had still related the concept of an epoch to the privileged standpoint of the contemplator of history for whom the comparison of ages was to be possible. It is not history but this contemplator of history who halts at a resting place so as to survey what happens before and after and thus to avoid anachronisms, the errors that consist in confusing one age with another. This point cannot be subject to arbitrary, subjective choice; otherwise it would not accord with the distinction between the ages. For what it opens up to the observer must contain the objective criteria to be used in avoiding anachronisms. One can gather what kind of harm the bishop of Meaux has in mind; but what matters is not that but the fungibility of the concept of an epoch. The quality of the ‘epoch’ presents itself to begin with, as the summation of those features that protect the historian from leveling off the course of history into the monotony of what is always the same, and thus from
the error of thinking that anything can happen at any time. Independently of the clerical universal historian’s actual intentions, this would perhaps in fact be the most comprehensive definition of the possibilities of error in historical cognition.

Rather than the point in time, the periods of time that are separated by it begin to determine the concept of an epoch. As a result, the question of the dates of the turning points is overlaid by that of the circumstances and features of the formations that are merely contiguous at those points. And this “prevalence of a specific condition of things” has, in the long run, its methodological consequences. They are associated, superficially, with the question of the real or merely nominal validity of the epochal concepts. The decision between these epistemological alternatives has been made to depend almost exclusively on the condition that it should be possible to provide clear datings for the points of demarcation between the epochs. Those who espouse realism with regard to the epochal concepts have always failed as a result of their willingness to accept this demand. For of course it is a rather external view that leads to the emphatic preference for the year in which Galileo died and Newton was born, since after all these events are as far as possible from what one would call “epoch making” in each of their lives.

Nevertheless, the coincidence on which Goethe relies as the epiphany of the modern age continues to have the mythical suggestiveness that seems at least occasionally to satisfy our need to find meaning in history. That all historical research is influenced by the weight we attach to the possibility of not only adopting an attitude toward or determined by history but also (to whatever minimal extent, be it only by one’s birth or death) having some impact on it—this becomes palpable in our need to find distinctness in the factors that bring history about. The tangible markings in time that continue to be associated with the concept of an epoch, even if they are no longer its sole constituents, give one confidence that effective actions, clear decisions, vigorous summonings up of energy and insight have led, and therefore still can lead, to those changes in the “condition of things.” One imagines one perceives that history happens neither automatically nor by chance when Luther lifts the hammer to nail up his theses.

Admittedly it is never possible to do enough to satisfy the need for ‘significance’ of everyone who would like to be a subject of history; the images produced there have always been all too vigorously en-
graved. A science that easily becomes embarrassed about its 'relevance' quickly turns to obligingness. That should not prevent us from unearthing the roots of the discontent with history that such science would like to help remedy. Boredom with the classical concept of progress also has to do with the homogeneous unbrokenness of the picture of history that it offers, with its process definition, which—to remain in the language of "epochs"—admits no stopping and turning points that are perceptible and attainable within the 'life-world.' This is what Goethe again expressed, with the aid of a very original use of the concept of an epoch, at the beginning of his introduction to the *Materials for the History of the Theory of Color*. This, he says, will be "more irksome than pleasing to aspiring youth because they would like to begin a new epoch, in fact a regular primeval epoch, themselves. . . ." To a large extent, the ill repute of historicism has to do with this. It had forced itself, in spite of all its individualization of the characteristic forms of epochs, to reduce these continually to what preceded them, in that—simply through the accumulated concentration of its material—it continually produced new transitions and levelings off, quite automatically and without any plan. One need only think of what has become of the heroic zero-point figures of the speculative history of philosophy as a result of historians' assiduity—what medieval qualities have been brought to light in Copernicus, Bacon, and Descartes, in spite of their posture of turning away from tradition.

By its very success in setting the process of historical cognition in motion, historicism worked against its own intention of demonstrating the reality of epochs as authentic formations of the historical process. The dismantling of the mythicized roles assigned to historical actions and events threw doubt on the admissibility of the 'epoch' as a means of historical ordering. What matters here is not primarily the self-understanding expressed in the original sources. A consciousness of decisive separation from its past similar to the one developed by the early modern age cannot be required of any other epoch. It is not even characteristic of the formation of the Middle Ages, which sought their legitimacy directly by annexing themselves to the intellectual system of the ancient world and constructing a continuous identity with that world. That the modern age defined and wanted to realize itself as a distinct era in world history should not in itself give it precedence over the Middle Ages, which sought rather to conceal their distinctness by seeing anticipations of Christianity in the ancient
world. Thus even if the “modern age” itself explicitly wanted to be a new age, and to distance itself from the preceding age by identifying it as the “Middle Ages” falling between itself and the “ancient world,” historical cognition does not require that there be a reality corresponding to such a pretension. While the way in which ancient materials were received in the emerging Middle Ages was meant to conceal what underlay this reception, the emerging modern age behaved as if it was determined to make a historical break—behavior that was calculated to mask the process of ‘reoccupation,’ with its relation to a constant matrix of needs.

The Enlightenment’s consciousness of itself as representing the new epoch, in accordance with its rational intention and in its pure form, was contradicted by Romanticism, which reached back to what Petrarch had been the first to call the “dark centuries.” And when the category of ‘secularization’ was used to sum up the processes that constituted the modern age, the Enlightenment’s consciousness of itself was contradicted once again. The secularization thesis admitted the existence of a break between the epochs, but it demanded, not without at least a suggestion of restitution and reunion with the underlying identical substance, that the new age admit retrospectively that it had reached back, illegitimately, to what went before it. Romanticism and historicism had begun to bring the centuries from the end of the Roman Empire to the end of the Byzantine Empire back into the unity of the historical conception. In this way, at bottom, they fulfilled Renaissance humanism’s secret longing to narrow more and more the distance between the ancient world and its renewal and to display the medieval interim as an incidental failure of librarianship; but they also fulfilled the equally unavowed need of every rationalism to recover reason, after the Enlightenment’s polemical black-and-white delineation, as an agency that is present throughout the greater part of human history. The transformation of the Middle Ages into a ‘renaissance’ that continually expands further backward in time not only dissolved the reality of the epochal differentiation but also helped the always plausible postulate of human ‘constants’ in history to attain a success that extends all the way to “‘topos’ research.” The whole of European history began to look the way that at first only the modern age had wanted itself to look. If a unified history of European literature existed, then why should not Europe also possess the totality of its unbroken world history?
Would not the situation of the ‘epochs’ then be the one described in a saying of Heine’s, that every age is a sphinx, “which plunges into the abyss the moment one has solved its riddle”? Or did this formula, from the year 1835, four years after Hegel’s death, refer precisely to the epochal concept of the ‘fullness of time,’ insofar as that concept had not withstood the disappointments of idealism’s confidence in history? For unless all the appearances are misleading, the phenomenon of the historical ‘epoch’ should rather be described by the reverse of Heine’s dictum: Eras exhaust themselves more in the transformation of their certainties and unquestionable axioms into riddles and inconsistencies than in their solution. Plunges into the abyss are indeed part of the image of the sphinx, which sees its riddle solved and thus its reason for existence destroyed; but historical life, even when it passes through breakdowns and new formations, can only be understood in terms of the principle of self-preservation, as long as one does not want to ascribe to it mysterious death wishes and longings for downfall. Even the change of epochs, as the sharpest caesura of all, has a function of identity maintenance, in that the alteration that it must allow is only the correlate of the constancy of the requirements that it has to satisfy. Thus after the great conception of each epochal project, the historical process produces its ‘reoccupations’ as restorations of its continuity.

This is, to begin with, only a heuristic principle. It provides a criterion for what can still be understood at all in history, when that history contains deep radical changes, revaluations, turnings, which affect the entire structure of life. The application of this conception will be successful, more than anywhere else, where the admittedly outmoded ideal of a ‘history of ideas’ [Geistesgeschichte] can be realized. That is undoubtedly the case when the topic of the theory of history is, precisely, the history of theory—in other words, what can nowadays, without contumaciousness, be called “history of science.”

Here I am not making a belated plunge into the dispute about Thomas Kuhn’s The Structure of Scientific Revolutions. Nor is that necessary, when what is at stake is only the type of theory of the history of science that it represents, insofar as it presents a process form of singular significance. Not only does it make the logical development and the concentration of the historical movement into factors contributing to the inevitability of the radical changes in that movement, but at the same time it also exhibits these changes as serving the self-
preservation and self-confirmation of theoretical pretensions and attitudes that remain below the level of the process being discussed. The historiography of science, which is useful at first in hunting out and ordering facts, simply cannot carry out its anticipatory integration of these results in any other way, whatever case studies of actual influencing factors may produce, whether they be of illumination through dreams or of the influence of social circumstances. 'Scientific revolutions,' if one were to choose to take their radicalness literally, simply cannot be the ultimate concept of a rational conception of history; otherwise that conception would have denied to its object the very same rationality it wanted to assert for itself.

In the progress of a science, the same thing takes place—in exemplary fashion, almost as though in a test tube, with greater clarity—that in more diffuse manifestations keeps the general historical process in motion: An established system produces for itself the instruments with which to secure itself thoroughly and to extend the sphere of objects that it comprehends, and in the process continually refines the forms in which it is justified and applied, with the result that in this way the system itself brings to light and accentuates the data that go beyond what it is able to master and to enclose within the prescribed frame of the accepted assumptions. This is the description of a logical situation that Aristotle had already put under the heading of aperia [difficulty of passage, lack of resources] and that Kant had discussed as the fundamental "transcendental dialectic." In both cases the process of cognition itself forces the abandonment of its presuppositions and the introduction of new elementary assumptions, which, while they do remove the situation from which there was no way out, do not require the shattering of the identity of the overall movement that gave rise to that situation.

The theory of 'scientific revolutions' describes, for the most part correctly, the breakdown of dominant systems as a result of their immanent rigorism, the 'pedantic' disposition of every schoollike mode of thought, which leads with fateful inevitability to the self-uncovering of the marginal inconsistencies from which doubt and opposition break into the consolidated field. This conception of what historians have been pleased to call "downfalls" may be capable of generalization to a high level in relation to historical phenomena. But in relation to the new foundations called for afterward, to the preference given to the new "paradigm," this schema has no explanation whatever to offer.
‘Decisionisms’ may describe practical conclusions drawn from the embarrassments of theories, but on the plane of the history of theories they do not give access to any analogous insights into the process by which one system is replaced by another. I think that there is a connection here with Kant’s first ‘analogy of experience,’ against which no experience, the experience of history included, can be adduced as an argument.

For the problem of epochs must be approached from the perspective of the question of the possibility of experiencing them. All change, all succession from the old to the new, is accessible to us only in that it can be related—instead of to the ‘substance’ of which Kant speaks—to a constant frame of reference, by whose means the requirements can be defined that have to be satisfied in an identical ‘position.’ That what is new in history cannot be arbitrary in each case, but rather is subject to a rigor of expectations and needs, is the condition of our being able to have such a thing as ‘cognition’ [Erkenntnis] of history at all. The concept of ‘reoccupation’ designates, by implication, the minimum of identity that it must be possible to discover, or at least to presuppose and to search for, in even the most agitated movement of history. In the case of systems of ‘notions of man and the world’ [Welt- und Menschenansicht: Goethe], ‘reoccupation’ means that different statements can be understood as answers to identical questions.

Here we are not dealing with the classical constants of philosophical anthropology, still less with the ‘eternal truths’ of metaphysics. The term ‘substance’ was to be avoided in this context because every type of historical substantialism—such as is involved in, for instance, the theorem of secularization—relates, precisely, to the contents, which are shown in the process of ‘reoccupation’ to be incapable of this very permanence. It is enough that the reference-frame conditions have greater inertia for consciousness than do the contents associated with them, that is, that the questions are relatively constant in comparison to the answers. The suspicion that what is being practiced here is the implicative metaphysics of a metasystem is easy to dispel; it is sufficient for that which assigns the functional framework to the reoccupations to have a durability that is very great in relation to both our capacity to perceive historical events and the rate of change involved in them.

During the phases in which the function of this frame of reference is latent—in the periods, that is, that we assign to the epochs as their ‘classic’ formations—we must expect, above all, gains by extension.
and losses by shrinkage; in the new reorganization, certain questions are no longer posed, and the answers that were once provided for them have the appearance of pure dogma, of fanciful redundancy. A striking example is the fact that people have not always inquired about immortality and apparently will not always be inquiring about it in the future; from its entry into the biblical text after the Babylonian exile all the way to Kant’s postulate of immortality, it was a position that, while it could be changed in many ways, every new system had to occupy. It is only the actual lengthening of lifetimes and the less unpleasant ways in which this additional time is spent that have caused the interest in immortality to flag and its systematic position to disappear. It appears that even contemporary Christianity, around the world, scarcely mentions immortality in its rhetoric any longer, and thus unintentionally has abandoned a principal element of its historical identity.

Even if the concept of an epoch, as used by the historian, were only a nominal means of defense against the lack of order in his material, and if, for instance, the unity of the Baroque had not existed, or had existed only in special departments of culture, then such nominalism would nevertheless only be a way of avoiding the burden of proof. That burden will, of course, always lie on one’s opponent. In the case of the beginning of the modern age, the conditions could be unique. And they are unique. This is not only a result of the fact that the conceptual presuppositions to which the historian is subject when he operates with the concept of an epoch are already, to a large extent, implicit in the self-understanding of this epoch. More than that, the program of the modern age cannot be assumed as a contingent ‘spontaneous generation’; the unfolding of its conceptual presuppositions already reflects the singular structure of the needs that had emerged, compellingly, in the self-dissolution of the Middle Ages.⁹

That the conditions of a realistic [i.e., nonnominalistic] use of the concept of an epoch cannot be satisfied in the same manner in every case can be gathered from the lack of comparability between the change of epoch that led from the ancient world to the Christian Middle Ages and the change that led from the Middle Ages to the modern age. The delay in the development of the medieval system in relation to its central ‘factor,’ the original type of Christianity, exhibits this system as not the authentic and adequate interpretation of a historical turning point but rather—at most—its belated elaboration.
Christianity laid claim only very late to having initiated a new phase of history. Initially this was totally out of the question for it because of its eschatological opposition to history and the unhistorical quality that was (at least) implied by it. Late antiquity, although it was suffering from the contradictions of its great schools of metaphysics, had also felt no challenge to a new inclusive conception but rather had developed a sort of worldly resignation that could just as well take the form of openness to transcendent offers of salvation as its opposite, skepticism, or of a private heroism of invulnerability. To that extent, the dissolution of the contradictions of late antiquity was the opposite of the overcoming of the difficulties on which the medieval/Scholastic system was to run aground a millennium later. In the latter case, a program of self-assertion against transcendent uncertainties, rejecting every kind of resignation, had become necessary. The modern age, then, in contrast to the Middle Ages, is not present in advance of its self-interpretation, and while its self-interpretation is not what propelled the emergence of the modern age, it is something that the age has continually needed in order to give itself form. Its self-understanding is one of the constitutive phenomena of this historical phase in its initial stages. This makes the concept of an epoch itself a significant element of the epoch.

What does one expect to see when the question of a change of epoch is posed? Since all history is composed of changes, the ‘epoch-making’ movements must be assumed to be both copious and rapid but also to move in a single, unambiguous direction and to be structurally interconnected, mutually dependent. He who speaks of the reality of a change of epoch takes on the burden of demonstrating that something is definitively decided. It must be possible to show that something is present that cannot be disposed of again, that an irreversible change has been produced.

Jacob Burckhardt asked himself the question in connection with the Middle Ages when and in what way it was determined that the new factor had gained the upper hand, that the decision had been made. Here it becomes apparent that it is easier to answer this question negatively than positively in relation to particular points and states of affairs. To illustrate this by an example: Around the middle of the fourth century A.D., between the reign of Constantine and the conquest of Rome by the Western Goths, the Emperor Julian, the so-called Apostate, could still have turned everything back with his pagan inspiration, or at least made Christianity and the old cults coexist side
by side, if one "imagines him without the Persian war and with, perhaps, a ten-year reign." Then probably paganism would have "at least established itself firmly enough to resist any further dismantling and would then have held out, as a religion inaccessible to any raisonnement [argument], alongside Christianity for who knows how long." But also if Arianism had been victorious, there would have been "no Middle Ages at all, or [they would have been] totally different." It is not an accident that Burckhardt sees the issue of the Middle Ages as decided along with that of the unequivocal Incarnation of the Son of God—and consequently it can be no more accidental that the issue of the modern age was to find one of its indexes in the most decisive contradiction of the Incarnation: the beginning of pantheistic inspiration in Giordano Bruno.

There are no witnesses to changes of epoch. The epochal turning is an imperceptible frontier, bound to no crucial date or event. But viewed differentially, a threshold marks itself off, which can be ascertained as something either not yet arrived at or already crossed. Hence it is necessary, as will be done here for the epochal threshold leading to the modern age, to examine at least two witnesses: the Cusan [Nicholas of Cusa], who still stands before this threshold, and the Nolan [Giordano Bruno of Nola], who has already left it behind; the Cardinal, who relates to the threshold through his concern for the endangered continuance of his system, and the heretic, who is certain, in his triumphant backward glance, of having crossed it. However, these examinations could not become 'experience' of history if they did not satisfy the transcendental principle according to which the alteration of appearances refers us to something persistent [das Beharrliche: Kant's requirement], which, to be sure, in the case of historical consideration only needs to be something relatively longer lasting, as described earlier. This is why one of the preconditions for attaining clarity in relating doctrines to one another, and thus in differentiating them, is the possibility of demonstrating, through dissection, an identical fundamental system of elementary assertion needs, notions of the world and the self, on both sides of the threshold.

The Cusan, the highly speculative metaphysician of the fifteenth century, who tries to grasp reality one more time in a consistently medieval fashion, and the Nolan, the escaped monk, wandering scholar, and failed Master of Arts of the latter part of the sixteenth century, who postulates and celebrates the new reality more than he grasps
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it—they can only be brought into confrontation to the extent that they allow us to recognize congruent position frames for their reality, to the extent that they pose homologous questions to which their answers, in spite of their mutual opposition, still relate. Only this differential analysis makes visible what it is that separates the positions on either side of the epochal threshold; it discloses what must have happened in order to force their incompatibility.

Of course the admission of this assumption that the epochal threshold could live below the surface of chronology and the events datable by reference to it is irreconcilable with everything that could be useful to the self-consciousness of the modern age. For to grant the existence of this cryptic border between the ages would nevertheless mean that the Middle Ages and the modern age existed for a good bit of history intermeshed or side by side, or at any rate without phenotypical distinction. The demand for an identifiable point where the sheep are separated from the goats and the age of sheep from the age of goats is one that an epoch that wants to have willed itself as an epoch can only see fulfilled by an embodiment of this will, by a widely visible and effective boundary figure. Columbus and Luther, Copernicus and Descartes appeared to offer such a tangible quality, without finally meeting the need. For what the consciousness of the time had seen as fulfilling this inaugurative function was to be rejected by historiographical reason. Historiographical cognition—how could it be otherwise?—is ill-disposed toward the notion of absolute beginnings: To understand history as a result of history means that every phenomenon has to be traced back to what ‘was there all along.’ The founder figures succumbed to the erosion inflicted on them by historiographical diligence. What may have seemed like the self-production of the modern age finally proved to be the mere point of convergence of lines of influence coming from the distant past.

What finally is still there becomes the norm of what was there all along. Precursors of the present are found even in the presentiments of the Presocratics. European history turns into a lengthy preparation for the modern age, exhibited, perhaps, in Pierre Duhem’s monumental work *La système du monde* [The World System] or in Edmund Husserl’s final outline, *The Crisis of the European Sciences*, where he has the early Greeks already unknowingly take the turning and set out in the direction that was merely to receive its final definition from Descartes. Such a view of history, despite its consistency in the construction of its object,
deprives itself of the possibility of allowing validity to, and exhibiting, the modern age as a ‘final’ and unique epoch. From the point of view of his need for a defiant and monumental gesture directed against the Middle Ages, Nietzsche was right to blame the Germans for having it “on their conscience that they deprived the last great age of history, the Renaissance, of its meaning.”

For under the pressure of historiographical objectification, the Renaissance had in fact been pushed back deeper and deeper into the Middle Ages, had amalgamated itself more and more with the Middle Ages, while a growing number of ‘precursors’ of the supposedly specific accomplishments of the modern age were found in the thirteenth and fourteenth centuries, indeed even in Alexandrian late antiquity. Thus the dark lacuna of the Middle Ages was narrowed from both sides. The originally two-winged symmetry of the schema of the ‘story of salvation’ [Heilsgeschichte; “two winged” as before and after Christ] seemed to set itself up once again, on worldly premises this time.

If, for purposes of object definition in historiography, the name of the modern age [die Neuzeit: the new age] contained what now was only a great prejudgment, then there was an irreversible contradiction between the self-consciousness of the epoch, especially in its explicit form as philosophy, and its leveling off by theory. That the figure of Nicholas of Cusa has attracted to itself such a degree of analytical and descriptive attention in the half century since the editors of Friedrich Ueberweg’s Grundriss der Geschichte der Philosophie [Outline of the History of Philosophy] called the Cusan the “most important middle term between Eckhart and Leibniz” has to do with this insolvency.

It is not only that here was a new founder figure, one who might seem to correspond better to the tendency to shift the beginning of the age to earlier periods; it is also that here was a different type of initiating gesture, one stamped by not so much the pathos of beginning anew and opposition to what is past as concern for what already exists, humility before what has already been said, and perhaps also the cunning of intervention through transformation, which would then have taken, unnoticed, its own unauthorized direction. This prototype had to be able to satisfy the diverging requirements of the continuity projected by historiography, on the one hand, and the marking off of epochs, on the other hand, so far as this could be done at all. The Cusan combines traits of medieval piety with criticism of Scholasticism and a new power of disposition over the tradition of antiquity. He is
unquestionably marked by the emerging interest in nature, and at the same time by anticipation of new methods by which to satisfy this interest. Such onsets of the new have been dissected out eagerly and not without overestimation of their originality and their historical influence.

The attempt to localize in history the moment of the original beginning, the larval stage of what is to come, is ambivalent. It does always contain an element of justification of the final transformation, the upshot of things that terminates with ourselves; but at the same time it also contains an element of mistrust of the reliability of a rationality that could ever have engaged in such detours and dead ends, and that consequently does not escape the suspicion that its latest certainty of itself will have to submit to the 'epoché' and the future retrospective vision of a reason that has come to itself anew.

In relation to the reason that believes that it can make history, the proceedings under the heading of "epoch" become acquiescence in contingency. Reason's critique of itself, to the extent that it is the reason of past epochs, includes the expectation of repetition. While it is fascinating to see man liberated from the domination of inherited and unexamined accepted truths, at the same time it equally endangers the fragile consciousness of a rationality that now can no longer admit that what is elementarily rational could also be the old accepted truth. If the modern age was supposed to have been ushered in by a radical break with its past, then this always implies the admission that it was only from this new beginning onward that one could think and recognize what should have been the real issue all along. It appears, unavoidably, that reason owes man no guarantee of its always being present, and this fact puts every present moment in a difficult situation in relation to what it takes to be certain.

But a difference becomes evident in the strengths of the epochal systems. The strength of the medieval system lay in its not being oriented toward confirmations; no 'life-worldly' success that depended on medieval presuppositions could ever have reinforced what made the medieval system strong. At the same time, however, its sensitivity lay in the self-contained character of its logic, which had to make every difficulty appear immediately as a contradiction as soon as the formulation of the difficulty as a question had been sufficiently sharpened in the continual refinement of the systematic structure through the untiring arbitration of the differences between schools and the
obligatory work of interpreting the canonic authors. To put it differently: The possibility of refutation was inhibited, was long deferred—but, for instance, the great effort of the Paris decree of 1277; but in return for that it was tied to acute liability to crisis by its daring auxiliary constructions. The strength of the system of the modern age, on the other hand, lay in its being oriented toward continued, almost daily confirmations and 'life-worldly' successes of its 'method.' In that way, it also had an amazing capacity for correction; its weakness was its uncertainty what 'totality' this untiring success could ever bring forth, and its doubt whether a disposition over its process, the possibility of 'making history,' still existed for its legitimate subject or had already disappeared.

This description of the indicators of epochal thresholds is the appropriate context for a phenomenon that I would like to describe as that of the "seriousness that is always 'new.'" Here again Goethe is helpful, with his entirely uncomprehending amazement at the use of the term "seriousness" in the speech of the youthful contemporaries of the old man, who could find in them "no cheerfulness," and who blamed the "new age" for this: "What is more, artists and friends of the arts have become accustomed to the word 'seriousness'; they say these artists are serious, but here that means nothing more than a dogged persistence on the wrong path." The other side of the coin is that he who was displeased by this in turn was no longer taken seriously: this "Goethe with his lullaby." The consciousness of a new seriousness puts the totality of the preceding attitudes, sympathies, and actions under the suspicion of frivolity; one had not yet found it necessary to take things so to heart, to be so particular, to want real knowledge.

Where did this relativization of the seriousness of what has gone before one begin? Perhaps as early as Thales of Miletus's statement that everything is full of gods. That may have been a description precisely of the end state of the epoch of myth, in which the conversion of numinous indefiniteness into nominal definiteness seemed complete, everything that was unknown had been named, everything that was uncanny had become addressable and now had its position in the genealogical ordering of the things that bear names; no doubt at the same time it was an abbreviated way of expressing satiation with an all too cursory way of apprehending the world, with the fruitful ease with which things were assumed to be explained because they had
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names. Taken altogether, the dictum was a summing up that had to serve as a challenge to approach reality finally with more serious means, that is, with that 'theory' that caused its nocturnal executor to fall into the well. That it was possible to give Thales credit for the first prediction of an eclipse of the sun at least makes evident what was thought to have been important for the 'new seriousness' following on a world of names and stories—namely, to deal with the prior indications of what was to be feared or hoped for in such a way that they in turn became something indicated in advance. One consequence is that—according to the anecdote related by Plato—from the other side, from the still mythical sphere of the Thracian maid, the astronomer's 'new seriousness,' which he pays for with the fall into the well, calls forth only resounding laughter. The beginning of the postmythical attitude to the world has the form of a seriousness that is full of effort, and that throws into relief the loss of sleep and the danger to life and limb that it involves. The laughter of the Thracian maid must, for its part, have seemed comical to the philosopher, even after his fall, as an attitude that was all too superficial and carefree in comparison with the seriousness that reality seemed to him to call for.

Comparable evidence for the change of epoch from antiquity to the Middle Ages would be easy to produce. Here, unexpectedly, a lack of concern about one's own happiness [or salvation: *Heil*] appears as characteristic of ancient life: a frivolous credulity toward the world, insofar as, through a failure to recognize its stigmata of unhappiness [Unheil], it has been trusted as the 'cosmos.' The early Christian literature is saturated with scorn for the false serenity of this trust in the world and of its forgetfulness with regard to transcendence.

And this same basic pattern of contrasting one's 'new seriousness' with the past is repeated when the modern age, at its commencement, reproaches prior ages with the credulity of prejudice, with being oblivious to the world and neglectful of the experiences nearest at hand. To have relied on the world management of a hidden God looks like a sheer lack of prudence and care in an existence that is brief but correspondingly all the more in need of being secured. The nature that had been left uninvestigated emerges as not only a previously exposed flank of the art of living but also an inexhaustible source of material, subject to man's demiurgic power, to which no attention had been paid. The *laboriosa vigilia* [laborious wakefulness] that Descartes recommends in the last paragraph of the first of his *Meditations* is,
once again, the tension of an extreme seriousness, which resolutely leaves behind it the past sleepiness and negligence in perceiving possibilities and in overcoming precipitateness of both judgment and action. To Bacon, the bygone interest in extraordinary phenomena in nature seems misguided to the extent that extraordinariness is supposed to be indicative of a transcendent violation of nature's regularity—misguided, then, as a form of the inquisitive industriousness (*curiosa industria*) that had amused itself with nature's unseriousness, with its supposed playfulness (*lusus naturae*), instead of showing itself to be capable of dealing with nature's serious usefulness (*seria utilitas*) by relying on the thoroughgoing lawfulness of its phenomena. The imputation of a voluntaristic background to nature becomes the equivalent of the conjecture, characteristic of all magic, that it is possible to intervene cunningly in the way that things happen. Now, just as it came to be intolerable to think that man could be a plaything, it became equally intolerable that he should be able to play. Part of Bacon's program is to reduce the *miracula naturae* [*marvels of nature*] to the strictness of *forma* and *lex* [*pattern and law*], in that, in their oddness, they merely represent the uncommon coincidence (*concursus rarus*) of regularities. These extreme cases were there only for the sharpening and invigoration of the mind, not for its gratification.¹⁶

A stigma like that of the epoch-making 'new seriousness' is not only available for rhetorical employment; it is also capable of simulation. The attitude with which 'history' seems to turn away from what is definitively a thing of the past, as its former frivolity, can be 'fabricated.' It can provide itself with anachronistic opposition figures to be abandoned to ridicule solely for the purpose of self-validation, of rendering new pretensions serious. People had to make the 'bourgeois' ridiculous, as philistine, 'irrelevant,' and narrow-minded, in order to obtain assurance, in support of aesthetic or political projects, of the end of his epoch—at the same time that, as the 'late bourgeois,' he was busy assimilating everything that till then had been unbourgeois and accomplishing, under the cover of his 'downfalls,' a stupendous feat of integration. The imperturbability that had been drawn as one feature of his image was not only a weakness; the cry that now everything is at stake, the final decision is at hand, quickly makes deaf the people whom it is meant to rouse.

The perspective of the epoch-making setting off of the 'new seriousness' against its contrasting background perhaps most nearly enables
us to understand what it is in the figure of the Cusan that has irritated his interpreters. He actualizes for the last time the basic feature of the medieval system: the freely self-supporting speculative construction derived from the attributes of the divinity—no longer, however, with the full confidence of Scholasticism but rather with concern about its decline. This is why this thought structure is impervious to the contradictions that it elevates into its own distinguishing feature, that, in a mystical gesture, it anticipates.

Hans-Georg Gadamer has opposed my characterization of the Cusan as a figure of “concern about the Middle Ages”; he says that I “fail, to some extent, to appreciate the magnificent ease [or carefree manner: Leichtigkeit] with which the Cusan newly appropriates and transforms the entire heritage of Scholastic and ancient thought.” I take this reproach very seriously because it touches the fundamental subject of the change of epoch, since there is no way to eliminate an ultimate doubt whether this “ease” is the final and classical intensification of the principle on which the medieval system was constructed or whether it is only in a final and almost desperate effort that it demonstrates this ability, thus exposing itself without any defense against the coming ‘new seriousness.’

It is not only that the Cusan is attractive to a consciousness disturbed by the questionable aspects of its own epoch that allows us to gather what changes have occurred in the need for an epochal boundary figure. His new inclinations too, which all too often are already taken as belonging to the modern age, and which at least prepare its way, after all do belong to a man who, in not only his external position as a prince of the Church but also the unbrokenness of his piety, is entirely rooted in the Middle Ages and seems bound by their safeguards. As soon as it was possible for the question to arise whether precisely what was new in the modern age should not be held responsible for the epoch’s later experiences of internal and external human destruction, something like a soothing proof of genealogical extraction could present itself: If a medieval mind already showed itself capable of such conceptions, perhaps no great revision would be necessary in order to bring the epoch back to its legitimate dimensions.

It is not a ‘result’ of the research that has centered on the Cusan for more than half a century that it was possible for him to ‘turn out’ to be a protagonist of the modern age. The interest in him is itself guided by the need to relate this phase of history more readily to
what preceded it and to make it less accessible to the reproach, which draws strength from the supposed consequences of the age, that it abandoned a proven model of the European style of existence wantonly and for the sake of problematic gains. A motive of unsecured legitimation is involved in this interest. It propels the search for a sphere of origin that lies far from the historical break and from the posture accompanying that break. The question of the Cusan’s ‘modernity’ promises to open up access to the problem of the legitimacy of the modern age as well. The solution that suggests itself is, with the help of this early ancestor, to find in the wrong the consciousness of the modern age, which arose from the will to break with tradition and formed itself in opposition to the Middle Ages, but at the same time to find a new sort of legitimacy in the continuity and substantial constancy that the modern age concealed from itself and is now uncovered. It would be the kind of legitimacy that is always longed for, the legitimacy of ingenuousness, of the matter of course that has no need of justification. It is not the historical ‘substance,’ then, but only the special epochal consciousness that was imposed upon it that would have to be revised—and that would indeed already be revised by the historical demonstration.

These implications of the choice of the Cusan as the precursor of the modern age will have to be opposed here. What I object to is not the failure to choose the ‘correct’ founder figure. Rather it is the assumption (which has brought about the need or expectation) that there can or must be such an ‘epoch-making’ thinker or actor. It is true that we must proceed from the assumption that man makes history—who else should make it for him?—but what we can discover in history is not identical with what has been ‘made’ to occur at any given time. For in relation to actions that could have ‘made history’—whether of the discredited ‘great men’ or, more recently, of the masses that are defined by their economic conditions—the element of interference always supervenes. In the realm of ideas, this has brought historians to the resigned confirmation of the ‘misunderstandings’ that dominate histories of the reception of ideas and that occasionally can be described as “fruitful.” The principle that man makes history certainly does not mean that what is made depends solely on the intentions and the precepts as a result of and according to which it was produced.

As long as history was only what can be found in annals and chronicles, in treaties and proclamations, there was no need to deny that
legal instruments and public papers document how history was 'made.' It is not the change in the agents to whom the responsibility for history could and should be assigned that altered our assumptions here. What cut deeper was a change in the concept of history that no longer allowed an unambiguous coordination of intentions with effects, of motives with transformations. As long as such a coordination seemed possible, it could be said that with the Revolutiones Copernicus brought about the changed view of the world that was important to him; that Descartes produced from the motive of absolute doubt the effect of absolute certainty; and that the Cusan, too, by drawing up the program of 'imprecision,' became the overcomer of the Middle Ages that he should have understood himself to be. Our picture of history is being emptied of 'events' that can be dated and attributed to agents in this way, like the event of November 5, 1937, recorded in the fateful "Hossbach minutes"—and even here the precisely dated, tangible event turns out to be an opportunity to observe rhetorical preparations for a surprise attack with respect to which everything decisive stretched out ahead of it in a ramified system of conditioning and conditioned factors. The artificial datability of the fateful 'action of a century' is an exotic case in which reality is hermetically sealed off.

The distinction between the subject of history, who is supposed to be able to 'make' it, and his object, which is supposed to be 'made' by him, can now be brought to a point in the following way as well: Man does indeed make history, but he does not make epochs. This is a deduction not from the admirable principle that the whole is greater than the sum of its parts but more nearly from the reverse, that it is less than them; that is to say, it is not the equivalent of action. Action takes place within the horizon of the historically possible; but its effect is not the arbitrarily, accidentally 'totally other,' either. The effect also occurs in a context of the reciprocal interaction of synchronicity and nonsynchronicity, of integrative and destructive interdependence. An epoch is the sum total of all the interferences between actions and what they 'make.' In this sense—that actions and outcomes are not capable of unambiguous coordination—we have to recognize that history 'makes itself.' What we grasp in the patterns of history is more the outcomes than the agents.

So also in this case of the Cusan and the Nolan. Neither 'made an epoch'; neither is a founder figure. However, both are distinguished by their relation to the epochal threshold. That threshold is compre-
hended not with them or in them but by interpolation between them. That is the difference between the guiding method here and the trusty procedure of weighing and playing off philosophical systems against one another. The familiar comparison of systems is symmetrical across its axis: the location of the systems in time remains contingent. If one mentally places the Cusan and the Nolan side by side, it immediately becomes evident that they cannot have stood side by side in reality. The impossibility of substituting one system for the other is due to their respective relations to the epochal threshold. The comparison between the systems of the Cusan and the Nolan that was presented, in one of the earliest documents of research on the Cusan, by F. J. Clemens, a lecturer at Bonn, could not grasp this fact. In spite of this work's keen ear for the 'linguistic kinship' between the two thinkers, we can no longer follow the path of that treatise because it sought to make the Nolan into the somewhat dusky foil for the luminous form of the Cusan. To that extent, this treatise from the middle of the nineteenth century is a piece of late Romanticism.

The most instructive point of difference between the Cusan's relation to the epochal threshold and the Nolan's can be gathered from the attitudes of the two speculative metaphysicians to the questions associated with the Copernican reform. The pre-Copernican character of Nicholas of Cusa is just as specific to his thought system, insofar as it is 'not yet' modern, as is the post-Copernican character of Giordano Bruno, insofar as it is not a mere assent to an astronomical theory but rather an elevation of it into the guiding principle of cosmological and anthropological metaphysics. The Copernican reform represents a systematic point of reference for both thought systems that at the same time makes obvious the impossibility of exchanging their historical positions.

The Cusan neither anticipated the Copernican turning as an event in the realm of theory nor even had a presentiment of it. But he had a sensitivity for those presuppositions that, while they did not make a change like the Copernican one a historical necessity, could indeed define the meaning, for man's understanding of himself and the world, of its entry into history. One probably does not miss Nicholas of Cusa's intention if one describes him as wanting to equip the spiritual substance by and for which he lived with flexibility so as to enable it to deal with what had not been foreseen and could not be foreseen in such an alteration of the view of the world. For the Nolan, the Copernican
reform has indeed been accomplished and counts for him as an unquestionable truth, but it has not yet been made to speak for man; it is still confined in the technical language—what was to him the monstrous technical language—of mathematical astronomy, which could only veil the necessity for radically rethinking the premises of man's existence and for destroying the system in which he believed himself to be secure.

Both of them, the Cusan as much as the Nolan, have their unexpressed 'reserved thoughts.' They differ in the degree not to which these thoughts were unspoken but to which they could not be spoken, or, still more clearly, in their relations to the possible ways of 'putting something into words.' If it was said of the Cusan that he kept, "so to speak, an index of forbidden innermost thoughts,"" then the strictness with which these ideas were excluded is certainly disproportionately greater for him than for Giordano Bruno, whose way of life, as a vagabond "outcast" from Church and society, not only offers the appearance of intimacy with forbidden things but also delights in propagating what is intellectually shocking. It is not enough to make this a matter of national temperament, to see the one as made to seek "not radical impact, but harmonizing synthesis," 20 and the other as abandoned to the dismemberment of life and thought. That something was still possible for the one that was to become unaccomplishable for the other—namely the compatibility of contradictions as a world principle, represented in the saving datum of the Incarnation—was not a matter of differing degrees of readiness for faith or of differing talents for fate but of what was still or was no longer historically possible.

My attempt to comprehend anew the basis and the background of Giordano Bruno's annihilating fate and of his influence 21 may at the same time bring out more clearly what Nicholas of Cusa may have been minded to overcome, or at least to allay.

Translator's Notes

a. The Cusan is Nicholas of Cusa; the Nolan is Giordano Bruno (of Nola). It should also be noted that "aspect" includes, among its various senses, the astronomical (and astrological) idea of the configuration of various heavenly bodies at a particular time.

b. On "topos' research," see translator's note b to part I, chapter 8.

c. On "decisionism," see translator's note f to part I, chapter 8.
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e. The "Hossbach minutes" record a meeting in which Hitler and his ministers of war and foreign affairs and heads of the armed forces discussed plans for forcibly annexing Austria and Czechoslovakia by (at the latest) 1943/45.
All too often we miss in the figures of history the consciousness and explicitness of the crises in which we see them and in whose terms we have to understand their behavior. It is also in vain that we search the Cusan’s work for explicit evidence of his knowledge of the critical situation of the epoch to which he still wholly belongs. Yet the motives behind the effort of this work can be understood only if one perceives in it a concern for the continuance of the medieval world. Concretely this means that one has to comprehend each element of this work as an attempt to answer those unformulated questions, whose totality would have defined the critical tensions in the structure of the epoch. The fact that it would not have been possible to formulate these questions, that—not accidentally—they are absent from the texts, constitutes our hermeneutic task. That task, here as elsewhere, consists in relating assertions, doctrines and dogmas, speculations and postulates, as answers to questions whose projection into the background of what is documented is what constitutes our understanding.

The Cusan did not formulate his concern for the continuance of the age. But the unity of his thought can be understood precisely and only on the basis of such a concern. The most definite indication of this fact lies in the ‘systematic’ effort of his work, which no longer has the almost naive serial unity of the Scholastic texts of the Middle Ages, the commentaries on the sentences, collections of questions, and summas. The endeavor to hold together a threatened structure leads directly to this ‘systematic’ consistency, unknown to the ancient world.
and the Middle Ages. The three exponents of medieval reality—God, the universe, and man—are not set above one another in a three-storied structure but rather fastened together in such an inner and mutual dependence that we might best use the model of a 'feedback system' to clarify the reaction of any change in one element on the others. Here the treatment is not motivated only by a desire to lay claim to completeness; rather the substantial reference to one another of the aspects of theology, anthropology, and cosmology under discussion determines the thought process. In this system of correlatedness, the classical hierarchical ordering of objects no longer exists. Instead, any one of the three aspects can be taken as the point of departure for the understanding of the whole.

The crisis-laden self-dissolution of the Middle Ages can be linked to the systematic relations in the metaphysical triangle: man, God, world. This presupposes an ambivalence in Christian theology. On the one hand, theology's theme is anthropocentric: The biblical God's concern, within history and beyond its eschatological invalidation, for man's salvation is transformed with the help of the received Stoic idea of pronoia [providence] into an idea of world government and the coordination of nature, history, and man, which is fully unfolded in the Scholastic system of pure rationality. On the other hand, there is the theocentric motive: the dissolution of Scholastic rationality through the exaggeration of the transcendence, sovereignty, hiddenness, fearsomeness of its God. The first motive holds the metaphysical triangle of theology, anthropology, and cosmology together; the second tears it apart. The ability of the second motive to prevail shows at the same time that the systematic consistency of the structure constituted by the first motive is insufficient, that it is superficially harmonized heterogeneity.

It is here that the Cusan appears to lay hold; he attempts to yoke the basic theological motives, both of them recognized as legitimate, into a structure that is tenable on its own account. It is just this that one can only characterize as the attempt, arising from or at least corresponding to the situation, to save the Middle Ages out of the substance and with the spiritual means of the epoch itself.

The Cusan's intellectual accomplishment can be developed entirely from the urgency of this starting point: the maintenance, indeed intensification, of the element of divine transcendence, but at the same time the advancement both of man and the cosmos toward the qualities
of this transcendence. From this follows his holding fast to the over­
koming of the Aristotelian epistemology with its idea of a conceptuality
‘taken from’ the objects themselves—that is, his holding fast to the
critical achievements of nominalism, as he had no doubt become
acquainted with them in the school of the Brethren of the Common
Life at Deventer—but at the same time his removal of the new theory
of concepts from the mere functionality of an economic expedient in
favor of acknowledging the authentic and specific dignity of the human
systematic comprehension of reality. And also from this follows his
holding fast to the destruction of the Scholastic cosmos of levels—
indeed his resolutely pushing forward beyond that to the suspension
of that Platonic remainder in the Aristotelian cosmology, which had
consisted in the separation between the supralunar and the sublunar
worlds. At the same time, however, in and in spite of this leveling
off, there follows his enrichment of the object called “the world” with
new significance, with interrogatability, with a metaphysical dignity
that in many ways anticipates the tone of Giordano Bruno.

If one wanted to formulate as a tendency the Cusan’s concern—
which appears in the form described and sustains the whole work,
though it is never expressed therein—one would have to say in a
modernized vocabulary that this tendency is conservative without hav­
ing any inclination toward restoration. The Cusan does not want to
go back to the level of organization, which today is again occasionally
attractive, of the High Scholasticism of the thirteenth century; he must
have seen and acknowledged the inevitableness of the subsequent
critique of that formation. But he had evidently taken exception to
the merely reductive character of this process; he did not believe that
his age could exist on the mere ‘remnants’ of the ‘high’ phase that
preceded it. The constructive effort, even violence, is palpable in the
very language; but the importation of new vividness, after the Scholastic
centuries of continuously increasing abstraction, was not successful.
On the contrary, the wealth of neologisms conceals for the most part
only the iteration and involution of the degree of abstraction already
arrived at. But that in itself is an index of the insolubility of the
imagined problem, that of saving the Middle Ages. From the point
of view of our formulations, everything depends on seeing that this
failure was not accidental.

To define more closely the spiritual situation—and thus the task—
with which the Cusan was confronted, it is necessary to remember
the close proximity of intensification of metaphysical transcendence to skeptical resignation with respect to immanence. In the history of philosophy, this had become unexpectedly evident for the first time—and, even today, it is often still not understood—when within one school generation, dogmatic Skepticism 'broke out' in the Platonic Academy. But the transition from the assertion that the Ideas are unreachably transcendent, that only mystical/esoteric access to them is possible, to the dogmatic assertion that true knowledge or knowledge of the truth is impossible is a tiny and, moreover, a thoroughly logical step. The distance involved is overestimated only by those in whom, in contrast to a highly intensified metaphysics of Ideas, any sort of skepticism only strikes terror—then, of course, one cannot see how close together the two things are logically.

Apart from the Bible, the root of the medieval concept of transcendence is above all Neoplatonic. The conception of transcendence deriving from Platonism can be traced back to a spatial schema in which the primary assertion about the Ideas is that they are nothing in or of this world but rather are located outside and apart from it; on the other hand, the biblical 'transcendence' of God is more a temporal state of affairs, insofar as God's crucial presence for the world and for man either is an exemplary and comforting past—from the Creation up to the interventions in the history of the Chosen People—or else is still impending as His eschatological becoming present to men, which will put everything in order. The biblical God Himself withholds Himself in His transcendence, so as to make possible faith as the attitude of submission and thus at the same time as the condition of the retraction of His withholding of Himself. This sort of transcendence is thus an intrahistorical reservation; it can be canceled in eschatology and thus is not 'substantial.' It can be related only to a process, not to a static system. With the reception of ancient metaphysics, this idea must be reharnessed, as it were, from the temporal horizontal into the spatial vertical and must be interpreted as the difference between what is of the cosmos and what is not. This relating of theological transcendence to the schema of the finite ancient cosmos signifies, among other things, the vulnerability of this conception in relation to any possibility of a nonfinite cosmology.²

To transcendence as a process there corresponds transcending as the pursuit of what withdraws itself, the pursuit pictured by the Cusan as venatio sapientiae, as the hunt not only for wisdom but also of wisdom
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for its object. The procedure of such transcending was described once and for all by the Neoplatonist Plotinus in the third century A.D. as the procedure of iterating a rational accomplishment: "As he who wants to see intelligible nature sees without any sense representation that which goes beyond the sensible, so also he who wants to see what goes beyond the intelligible will see it only after the surrender of everything intelligible, since while he does first learn through the latter that the former exists, he forgoes learning what it is."\(^3\) It is always a matter of going beyond an already attained step by the formal means appropriate to that step. The Cusan does not so much oppose his 'transmysticism' of the Non-alius [the Not-Other] to any Platonizing mysticism that defines God as the entirely other as he sets the one upon the other.

He opposes to and superimposes upon the plunge into the all-extinguishing obscurity of the mystical experience of God the 'method' of docta ignorantia [learned ignorance]. "The better one knows that one cannot know this, the more knowing one will be."\(^4\) The condition is understood as instruction in an accomplishment. Ignorance can in fact be known better or worse or not at all—merely accepted as the misfortune of the pretension to truth—whereas here transcendence is understood as a challenge; not yet, indeed, as the challenge to turn away from something futile and apply oneself to the knowable in its defined possibility and in the method by which it is accessible but rather as the instruction to construct limit concepts of knowledge that, so to speak, hedge about and protect the immanence of what is knowable, and, moreover, limit concepts from the point of view of which a very definite confidence is reflected into the realm of immanence.

"Knowing ignorance" justifies not only itself but also the knowledge of that about which not only ignorance can become knowing. The natural predisposition of man to want to know, which was laid down in the first sentence of Aristotle's Metaphysics, cannot be a delusion. On the contrary, it is the key to the turning of docta ignorantia toward man's understanding of himself. "Mira res: Intellectus scire desiderat" [A remarkable thing: The intellect desires knowledge]. If this fact is so surprising, how then does the contradiction get resolved between the fact that reason longs for knowledge and the futility of its effort to arrive at knowledge of the essence of its God, in which it is forced to give itself up and which it nevertheless cannot give up? The Cusan's answer: This reason would not be satisfied with itself if it were the
image of such a slight and imperfect Creator that He could have been greater and more perfect. Here the fact begins to emerge that the idea of being 'in the image of...,' which is necessarily the basic idea of any theological anthropology, enables one, indeed requires one, continually to couple the intensification of transcendence with the intensification of immanence—which means the intensification of anthropology and cosmology.

This clasping together by means of the image idea reveals the crucial device with which the Cusan holds together the structure of his system. The same thing that is achieved for anthropology by the image relation is accomplished for cosmology by the schema of complicatio and explicatio [complication and explication; literally: folding together and unfolding]. As an example of how the limit ideas of transcendence reflect on immanence, let me cite a passage in which the Cusan takes as his point of departure the definition of God as the Not-Other, the Non-alid. All beings derive this very characteristic, that they are nothing other than what they are, from the fact that God defines them as such; but beyond this they also derive from Him, as the Not-Other, the fact that they do not beget something different in kind from themselves but rather something similar. The principle, already established by Aristotle, of eidetic constancy, the sole 'conservation principle' of Aristotelianism, is detached here from hylemorphic metaphysics and elevated to the status of an absolute principle of the self-conservation of what is worldly. Thus when the Cusan transformed the transcendence of the 'Entirely Other' into that of the 'Not-Other,' he employed a linguistic step with the appearance of a mystical end in itself as a means of extracting from the world's having been rendered insecure vis-à-vis its absolute principle an element of stabilization of the world in its continuance and comprehensibility for man. But such an element would have had to be important to him if he had the central concern that we impute to him.

The systematic conflict between transcendence and rationality traverses the history of medieval Scholasticism, which, on the one hand, was committed to carrying out the program of the proofs of God's existence and natural knowledge of God and, on the other hand, was obligated to promote the intensification of the transcendence of its God. Anselm of Canterbury's (1033—1109) 'ontological proof' of God's existence from His concept already makes the antinomy manifest, since the concept of a highest being must be definable from positive
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predicates only, but the idea of transcendence precisely denies and excludes such predicates. Anselm conceals this dilemma in his *Proslogion*, in whose first chapter he offers his much disputed proof, while in the fifteenth chapter he speaks of two concepts of God, a rational one defined by the intensification of what is thinkable to the point of insurpassability and a transcendent one requiring one to go beyond the limits of what is thinkable. Transcendence withdraws the concept from definability: "Ergo Domine, non solum es quo maius cogitari nequit sed es quiddam maius quam cogitari possit" [Therefore, Lord, You are not only that than which it is impossible to conceive anything greater, You are something greater than can be conceived]. But that means that the God Who could be proved to exist is not yet the God that the religious sense calls for. Only an ‘ex post facto’ reinterpretation of the concept, a projection of rationality into transcendence, makes this distinction disappear. Similar processes are found again and again in Scholasticism. The cosmological proof, which it favored, leads to a world cause, which as the final instance of the causal chain remains within the connectedness of the world. Here more than a projection is necessary in order, first of all, to identify the world cause with the limit concept of thought and then, once again, to undertake Anselm’s substitution of the highest thinkable thing for something beyond thought. This is what happens in the identification of Aristotle’s unmoved mover—which after all can only provide for the processes of a world given from eternity—with the Creator of this world, the identification that Thomas Aquinas (1226–1274) undertakes. Thus the ‘Creator’ becomes a limiting case of the ‘mover’ function. What can be proved in this manner to exist belongs to the connectedness of the world, to which, however, it should not belong if the proof is to fulfill its systematic function.

It is against this theoretical praxis that the reaction of mysticism, nominalism, and the *Devotio moderna* is directed: the voluntarization and the exaggeration of negative language. For the Cusan’s very conscious, even mannered, linguistic constructions, what is important is not only the reflection on language and its insufficiency developed by mysticism but also his discernible effort not to take part in the mere negativity of the language of mysticism. Characteristic of this—to remain yet a moment in the connection with Anselm—is the peculiar transformation the Cusan gave to the ontological argument in one of his sermons: He identifies the concept of a first principle of which it
cannot be thought that it does not exist with the truth as the primary object of thought that must exist even if it is only to be claimed of some proposition—even if it were the proposition that God does not exist—that it is true, which, however, is certainly a claim that belongs to the essence of such propositions. Since God, he says, is this truth, the primary and necessary object of thought, what is asserted in any proposition at all, and particularly in propositions about Him, is a matter of complete indifference. For the condition of the possibility of any proposition as something laying claim to truth is presupposed as real in this proposition itself. "Beyond all opposition and contradiction, therefore, God exists, Who by either of two contradictory judgments is seen necessarily to exist.”

This is an exemplary instance of the Cusan's device of the coincidentia oppositorum [coincidence of opposites]. This device makes logical antitheses into marks of world-bound language, which lead outward beyond world-boundness precisely by negating their perceptual contents. In this process, language is a medium that can only be brought into relation to the truth by taking itself as provisional and tending continually toward the point of its self-suspension. Imagination and language reflect one another from the point of view of the limiting case of their self-suspension; but this is no longer an act of medieval humility, no longer the sacrificium intellectus [sacrifice of the intellect] in view of the mysteries of faith, but rather a quasi-experimental procedure of continually renewed testing of the boundary of transcendence. Every negative theology that revels in the realms of what cannot be said immediately draws upon itself the objection that really there is nothing that one needs to say or can say once one has described God as what is absolutely inaccessible. But the Cusan's procedure sees an essential difference between muteness and falling silent. The language and system of metaphor that he developed for docta ignorantia do not represent a state of knowledge but a praxis, a method, a path to a certain sort of attitude. They draw intuition into a process, in which at first it is able to follow linguistic instructions, for example, to imagine doubling the radius of an arbitrarily chosen circle and then to imagine it as expanding continuously in this way. But at a certain point, the instruction passes over into what can no longer be executed, for example, to think of the radius of the circle as the greatest one possible or as infinite, in which case the curvature of the circle (which decreases as the radius increases) approaches identity with the curvature
of a straight line, so that the circle’s radius and its circumference coincide. The point is to make transcendence something that one can ‘experience’ as the limit of theoretical accomplishment and for that very reason as a challenge to heterogeneous modes of accomplishment.

The explosive material of such use of ‘metaphors of explosion’ is the concept of infinity. Its most influential model was the formula from the ostensibly Hermetic Book of the Twenty-Four Masters, according to which God is the infinite sphere whose center is everywhere and whose circumference is nowhere: “Deus est sphaera infinita, cuius centrum ubique circumferentia nonquam est.” It is characteristic of the Cusan’s endeavor to let the world participate in the ‘advances’ of the comprehension and representation of transcendence that he applies this formula from what was originally a purely theological speculation to the world as well. The advantage of the mathematical construction for this exercise in transcendence lies in the freedom of variation of the given. The figure of the circle can be brought to its ‘explosion’ by having its radius conceived of as infinitely great, and its circumference thus identified with a straight line, but also by the instruction to let its radius become infinitely small, so that the circumference and the radius become identical in a point. The perceptible figure stands between the two infinities; it has, as it were, both an outward and an inward transcendence.

The anthropological and cosmological correlates of this theological speculation—once such a correlation is assumed as a systematic principle in the metaphysical triangle—are obvious. This sort of representation of transcendence is called by the Cusan “symbolic investigation” (symbolice investigare), which he describes as follows: “All mathematical objects are finite; nor can they be imagined otherwise. If we want to use something finite like that as an example by which to ascend to what is absolutely greatest, we must regard the finite mathematical figures with their characteristics and relations and then transfer these very relations correspondingly to infinite figures of the same sort. Finally, on a yet higher level, we must transfer the relation of the infinite figures to the infinitely Simple, which is free of any figure. Then only will our ignorance be incomprehensibly instructed as to how we have to think more correctly and truly about the Highest, even if we do labor in an enigma.” The helpfulness of mathematics in grasping the difference in kind of the Divine is due to the fact that the construction of the coincidentia oppositorum is formally ‘imitated’
by means of this method of double transfer. At the same time, the procedure provides a metaphysical ground plan that can also be traversed in the opposite direction, in that it specifies the inner structure of the origin of the world as the explicatio [explication, unfolding] of the basic complicatio [complication, folding together]. Thus the reflexivity of transcendent—in other words: the continual retranslatability of theology into anthropology and cosmology—continues to be secured. That a speculative theologian who was rooted entirely in the Middle Ages could convey impulses to the conception of ‘world’ and ‘man’ that press toward the end of the Middle Ages is grounded in this retranslatability of transcendent as he conceived it.

The end of the Middle Ages—that also means overcoming the naive attitude to language that induces one to let an equivalent reality be associated with every linguistic element and that sees in this association a closed circle of accomplishment. Here nominalism had first cleared the way critically, but only in the direction of an economically regulated restriction of the association function. The Cusan begins to see the function of language as ‘instruction,’ and specifically in such a way that language always ‘fulfills’ its function when it refers one outward from the realm of what can be discussed. To cite the modern linguistic critic: “My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them—as steps—to climb up beyond them....”11 Only with Wittgenstein’s metaphor of throwing away the ladder is the Scholastic remainder that the Cusan did not yet see, the coordination of transcendent of language and transcendent of the world, definitively eliminated; transcendence of language for the first time really leads one into the world. But such an end point of the break with the association function of language can hardly be understood without a glance back at that first escape from Scholasticism.

The formula of docta ignorantia, of learned ignorance, whose origin the Cusan describes as his philosophical ‘Damascus experience’ during his sea voyage from Byzantium to Italy in 1437, unites an element of skeptical resignation vis-à-vis the metaphysical pretensions of the age with an element of indefinite expectation of a knowledge that could no longer have the form it had hitherto. Man’s situation in relation to transcendent, where there is no hope for theory, is newly illuminated as the prospect of understanding oneself more clearly precisely
in and from this perplexity. To that extent the formula, which seemed in its rudiments to be more that a millennium old, was nevertheless new. Augustine's *pia confessio ignorantiae*, the humble confession of ignorance, which he had opposed to the thoughtless pretense of knowledge, was precisely not the knowledge resulting from and sought in the fathoming of ignorance but rather the mere point of the surrender of the pretension to knowledge in going over to faith. Precisely in the retention of the linguistic elements of the formula from the beginning to the end of the epoch, the lack of constancy and the radical change in its meaning emerge here. The Cusan's *docta ignorantia* differs from both Socrates's statement that he knows that he knows nothing and the *scientia nihil scire* [science of not knowing], which was Seneca's term for the various tendencies of Skepticism. The 'known negativity' is different from the knowledge *resulting from* negativity, which Philo of Alexandria (ca. 25 B.C.—ca. 50 A.D.) was probably the first to formulate: "When the God-loving soul investigates what that which exists is in its essence, it falls with its investigation into the formless and the invisible, from which a highest blessing accrues to it: comprehending that God, Who is in Himself, is incomprehensible to every one, and of seeing precisely this, that he is invisible." In Philo there is already found the definition of this positivized negativity as "seeking in itself, which is very much worth striving for, even without finding." Petrarch (1304—1374) was the first to use this formulation in what was no longer a mystical context, and made it into the basic formula for criticism of the Scholastic pretension to knowledge. He alone could become knowing who recognized himself as ignorant and therein abhorred himself, since the painful insight into one's own backwardness is the point of departure for its overcoming.

One recognizes the ambivalence of this basic idea; on the one hand, it leads to the humble resignation vis-à-vis immanence that leaves everything to the Divinity, the leap of faith of the self-sacrificing intellect, while on the other hand, it leads to becoming conscious of a factual—and thus always objectionable and worth changing—state of knowledge. This was what was entirely lacking in Scholasticism, which seemed, in each of its representatives, to stand at the end of the summation process of what is humanly knowable. With the Cusan there begins a recollection of the unknown, no longer only in order to reject the presumptuousness of the pretension to knowledge but also at the same time to refer to the still unknown scope for the expansion of knowledge.
The reproach that the Middle Ages had ascribed the character of definitiveness and completeness to their state of knowledge and thereby crippled in themselves the will to theoretical progress and the acknowledgment of new experiences is part of the arsenal of the early modern age's critical distancing from its past; to have expressed it was more characteristic and more effective for thinkers of Francis Bacon's type than even the advances that they could claim to have made in science. Rousseau was to generalize this reproach as cultural criticism and to speak of the good fortune of ignorance (l'heureuse ignorance), which protects us from the disappointments that come with the corrections to our supposed knowledge. In his letter to Voltaire dated September 10, 1755, he writes that what we do not know harms us less than what we think we know. "If we had not pretended to know that the earth does not turn, then no one would have punished Galileo for having said that it turns."

Of course the critical potential of docta ignorantia was not exhausted by the Cusan; it was only set out as the capacity to reflect on the surpassability of the state of knowledge at any time. But that this humility does not turn into the resignation of definitive finitude, that it allows one to see systematic stabilization as a possible exhaustion of the will to know, is the unrest that it restores to the age.

Instructive evidence regarding the direct challenge of docta ignorantia to Scholasticism is the opposition that it provoked from the Heidelberg professor Johann Wenck von Herrenberg in his polemic De ignota litteratura [On Ignorant Erudition]. Wenck resists the introduction of a novel cognitive procedure, that of the comprehension—uncomprehending, and resulting from this incomprehension—of the incomprehensible: "Quomodo ergo in hac vita incomprehensibilia incomprehensibiliter apprehenderemus?" [Now how in this life were we to understand incomprehensible things incomprehensibly?] In this life there are for man only two sorts of comprehension, namely, in concepts and in images. For knowledge of God, man was assigned, in the thirteenth chapter of the first Letter to the Corinthians, knowledge through reflection and riddle [through a glass, darkly]. What is feared here, as so often in relation to a mystical theology, is the effacement of horizontal/temporal transcendence by the supposed possibility of being able to displace in the vertical the boundary of the Divinity's concealment. The eschatological condition of blessed contemplation, the visio beatifica, which is held in reserve for man and so must at
present, *in statu viae* [en route], be withheld from him, could be anticipated or usurped if the possibilities of knowledge were demarcated less strictly.\textsuperscript{18}

The assumption that knowledge proceeding by way of concept and symbol to contemplation is limited by the eschatological reservation was the common property of Scholasticism. It is also the basis of the peculiarly static character of Scholasticism’s conception of the human possession of knowledge as a stock that was completed in the tradition and only needs to be arranged and defended ever anew. This context makes clear how it is that the Cusan’s conception, in spite of its indubitably conservative intention, was de facto directed against medieval spirituality’s basic attitude. This becomes particularly conspicuous where the Cusan seems to comply with the restriction to concepts and images as the only possible alternatives by himself speaking in images. These carried-over descriptions are not the sort that refer to a static state of affairs, as had been presupposed by the Middle Ages’ classical doctrine of the figurative sense of a text.\textsuperscript{19} The Cusan’s ‘symbols’ are precisely not of the kind that signify or even reveal a particular hidden state of affairs; rather—as I already tried to express by characterizing them as “exploding metaphors”—they are figurations of a method, models from which a rule can be derived that can be applied and repeated in continually new operations.

At bottom, in spite of Grabmann’s two-volume and incomplete work,\textsuperscript{b} there never was such a thing as a Scholastic method. The transposition of the modern concept of method to the Middle Ages belongs among the supposedly justifying deobscurifications of the Middle Ages that were long held to be necessary. What was called the Scholastic method consists simply of formal prescriptions for disputation and the composition of treatises. It is not an epistemological method. The imputation of a method presupposes that the stock of knowledge can be amplified by the application of definite rules; the concept of method is related to the concept of progress—not necessarily to the concept of an infinite progress, but potentially so.

Here lies the heart of the difference between Wenck and the Cusan. The assertion of the possibility—even if only a presumptive one—that one could open up new regions to knowledge, could displace the fixed boundaries of the hitherto existing stock of knowledge into the region of the unknown, always implies an attack on the eschatological reservation. The idea of infinite progress is not the ‘secularization’ of
Christian eschatology; vice versa, when this conception became possible, when its preconditions came into view, temporal transcendence—the eschatological future—ceased to be The Promise. It lost its compellingness as a possibility of heterogeneous fulfillment of the human desire for happiness and truth. Here Wenck went entirely astray in his arguments when he held it against the Cusan that *docta ignorantia* deprived the natural cognitive striving of the consciousness that it could be satisfied, by reducing the *terminus ad quem* [end point] of the realization of knowledge to infinite shades and approximations. With his appeal to the first sentence of Aristotle’s *Metaphysics*, according to which all men by nature desire knowledge, Wenck thinks he intervenes directly against the Cusan and in favor of confirmable progress in the acquisition of knowledge; but he fails to see that Scholasticism under the authority of this sentence could perfectly well rest content with the static inherited stock of knowledge.

It was yet to become evident, in connection with Descartes’s mistake regarding the finite perfectability of knowledge of nature, that the impulse of the theoretical will can be put in question by neither the suspicion nor the certainty of the infinitude of theoretical progress. On the contrary, the impossibility of specifying or adhering to an idea of completion only makes this process yet more forceful.

Very closely associated with this is Wenck’s opposition above all to the Cusan’s doctrine of the essential “imprecision” of all finite knowledge. He argues that intellectual movement ceases to be movement when it has no point at which it can complete itself and against which it can measure its progress, so that consequently it becomes meaningless and futile. Wenck argues in behalf of a progress that after all had not occurred under the presuppositions he defends. He reproaches the Cusan with destroying, by his presuppositions, the scientific process (*destruente omnem processum scientificum*)—a process that the Cusan certainly did not intend to induce as such, but the possibility of whose conception he unintentionally created through the antithesis of his presuppositions to the Scholastic ones. Precisely in the mirror provided by his inferior opponent, the Cusan’s historical position emerges more clearly than in his own statements. The polemic against the logical consequence of the infinitude of the path of knowledge, against the insurpassably approximate value of each of its stages, for the first time makes disconcertingly clear how, from the still entirely medieval anxiety about the intensification of the transcendence of the absolute,
a new inference easily presents itself, one which, however, can appear as a daring anticipation of one of the basic ideas of the modern age only to someone who already knows what is to come.

The difference between Wenck and the Cusan can perhaps be most penetratingly comprehended in terms of their use of metaphors that derive from what one could characterize as the leading medieval system of metaphor: that of the ‘vestige’ or ‘trace’ (vestigium). With the idea of the vestige, the basic Platonic idea of the universal character of the world of appearance as the image of an original is restricted and reduced, specifically in the sense of a restriction of this characteristic to anthropology; only man is meant to remain in the strict sense an imago [image]. Nature receives the basic character of a vestige, in the sense of not an image of an original but rather an impression of a feature that refers one to its Author. The vestige contains something of the figure of analogy, of partial identity; it becomes accessible through a causal inference from the impression to the Author. Although it is not a representation of the essential and the substantial, still it is an eidetic element, an authentic mark, a hermeneutically translatable value. Thus between the absolute and the world there must indeed be, for Wenck, an unequivocal and overwhelming difference, but at the same time there must be a definite proportion, just as there must in principle be a proportion between the precise definition of a truth and an arbitrarily imprecise statement of the same truth. The basic intellectual pattern employed by the opponent of docula ignorantia is analogy, static proportion.

The Cusan, on the other hand, developed the metaphor in the direction of one of its entirely authentic possibilities of association by understanding the vestige as not the static signature of the Creator in His work but rather the reference, marking a path, of a fugitive goal to be pursued: “First there is the truth, then its vestige; one cannot seek after the truth without following its trace.” For Wenck, ‘vestige’ and ‘image’ lie close together; the image is, as it were, the fully unfolded intention of the vestige, the full presentation of what is only hinted there. To that extent man would be a peculiarity of the Creation only in degree, not in kind. So far the knowledge that is possible from the vestige, knowledge arrived at through a process of inference, is still completely acceptable under the norms of the Aristotelian idea of science. For the Cusan, the ‘trace’ is a direction for movement, for pursuit. His image, introduced explicitly against Wenck, is the
hunting dog on the trail, the *venaticus canis in vestigii*. There is no 'proportion' between the 'trace' and the game that is pursued. The trace has the character purely of a signal; it has no imitative quality. The trace appeals to man's desire for truth, but it furnishes him with no fulfillment, not even a measure of it. Here a form of truth possession makes its appearance, in which each acquisition of knowledge only has the function of making possible and provoking the next step to a new application of the cognitive method.

The metaphor of the hunt, already abundantly employed by Plato, is for the first time developed fully, and beyond its medieval presuppositions, in the Cusan's last work, *The Hunt for Wisdom* [*De venatione sapientiae*]. But precisely here it turns out that the fully drawn consequence of a basic medieval idea, once it is set free, brings to light something entirely new: the hunt as the 'pursuit' that is necessarily always involved in the authority, for modern thought, of the concept of method.

The Cusan answered Wenck temperately but firmly, with the *Defense of Learned Ignorance* [*Apologia doctae ignorantiae*]. In his own modification of the old simile of the sun, he likened *docta ignorantia* to the knowledge of the sun that is possessed by one who sees, in contrast to a blind man's knowledge of it: The blind man believes, after he has heard much about the sun and the unbearable looking at it directly, that now, through what he has heard, he knows something about its brightness, about which he in fact remains entirely ignorant; the sighted man, on the other hand—precisely because he had to answer the question how great the brightness of the sun is with the admission that he did not know—has the knowledge of this ignorance, since from the experience of his own attempt to persist in looking at the sun directly, he is certain that its brightness exceeds the capacity of sight.

Visual clarity causes a peculiarly dangerous lulling of the mind. The Cusan's own illustrative images always aim, of course, at making use of the attractiveness of the visual; but at the same time they aim, by breaking through what they accomplish, to lead one to the limit of this visual clarity. The recoining of the metaphor of the 'vestige' must be kept in mind here when he resists the division of all knowledge into knowledge in concepts and knowledge in images, the division that had been held up to him. The truth is by no means present in the image unless the image is always immediately suspended as such.
For while each image does represent the truth, at the same time, as an image, it has already fallen away and is hopelessly distant from it. This general formula is meant to be applied to both the language of revelation and mysticism and the character of the world itself as an image. This "functions" only when it is understood as a vestige in the sense of the signal that sets thought in motion.

_Docta ignorantia_ is 'method' in the preliminary and undogmatic sense that it does create a consciousness of a 'path' that can be followed. To the Scholastic form of thought, which all in all is characterized by belief in 'definition' in the widest sense, it opposes the indefinite as the unsurpassable restriction of man's situation. The sharp distinction between concept and image disappears once both have been seen as means for the preliminary direction of thought toward an objectivity that is never entirely to be reached, received, or accomplished. Such disjunctions, such alternatives disappear for _docta ignorantia_ because they appear as aspects of a movement: "Docta vero ignorantia omnes modos, quibus accedi ad veritatem potest, unit" [Truly learned ignorance unites all the methods by which it is possible to approach the truth].

But _docta ignorantia_ is not only the maxim of an intellectual process; it is also the means of orientation in this process. In the Defense of Learned Ignorance, by comparing it to the knowledge of the hunt of one who, stationed on a high tower, can survey the hunter's search activities, the Cusan represents _docta ignorantia_ as a knowledge that is withheld from one who remains entirely bound up with his methodical 'trace.' The need for such an orientation, for the determination of one's own station on a path, had never occurred to Scholasticism.

The modern idea of science will be a sum total of such orientations. In it too, knowledge of one's ignorance is an essential element, though admittedly less to know _that_ one knows nothing than to know _what_ one does not know, perhaps even what one _cannot_ know, and, very important, what one does not _need_ to know—the negative wisdom that belongs among the kinds of orientations that become ever more important in a world of surplus knowledge. All of this is quite certainly not yet present in the Cusan when he defends his idea of knowing ignorance by his opponent's arguments _ex ratione adversarii contra ipsum_. He did not yet know that the progress of knowledge, the extension of the mastery of reality, could be achieved by restricting one's pretension.
It is a constitutive element of the modern age that it expands through restriction, achieves progressions through critical reduction: Renunciation of the principle of teleology discloses for the first time the full efficacy of the application of the causal category to nature; the elimination of the question of substance, and its replacement by the universal application of quantity, makes mathematical natural science possible; and renunciation of the phantom of the requirement of absolute accuracy makes possible an exactitude that can set itself tolerances for its inaccuracy. The knowledge of the modern age was decisively rendered possible by a knowledge of what we cannot know, and by the resolute concentration that made possible upon a realm that had become accessible to judgment. That essentially distinguishes modern knowledge from medieval Scholasticism's forms of knowledge and consciousness of knowledge. In this respect the schema of docta ignorantia already belongs to that which, with the means and in the questions of the Middle Ages, is no longer medieval: "Quia non est scientia, qua quis credit se scire, quod scire nequit, ibi scire est scire se non posse scire" [Because there is no knowledge where someone believes he knows something that cannot be known, in such a case to know is to know that one cannot know].

The polemic between Wenck and the Cusan shows that "learned ignorance" had, to begin with, broken through the traditional schema of concept and metaphor, of literal and figurative speech. The treatise De coniecturis [On Conjecture], immediately following the Docta ignorantia in the year 1440, already reveals that the Cusan felt the need to give the concept of learned ignorance a positive correlate in the form of "conjecture." This was so even though at least the second book of the Docta ignorantia had already shown that hidden in the basic conception of the knowledge of transcendent objects—in this case, of the totality of the universe—there was a potential for positive speculation and the variation of traditional doctrines.

Between that which one was supposed to be able to know with certainty according to the criteria of the Aristotelian/Scholastic doctrine of science and that which, as unattainable mystery, was supposed to originate exclusively from the source of revelation and faith, a scale of possibilities opened up that rested directly on the fact that in the systematic structure of the metaphysical triangle, what one might call "projection rules" hold. If the concept of infinity proves to be the means of representation of the docta ignorantia for transcendence, then...
for neither cosmology nor anthropology can this remain without consequences. The world is not only the appearance of the invisible God, but God is the invisibility of the visible itself. Such symmetry, derived once again from the Neoplatonic model, means not only that the assertions of metaphysical and mystical theology offer points of departure for speculation about the world and man but also that the propositions of the teaching of faith can provide premises for considerations that reach downward from the realm of theology.

Here it turns out that faith and conjecture, fides and conjectura, are functionally equivalent; they provide reason with the presuppositions that it lacks, proceeding from which it can arrive at items of knowledge within the total system. The Cusan saw that the threat to the scholastic architecture posed by the cynicism of the ‘double-truth’ theory could not be removed from the world by obstinately repeating the apodictic assertion of the necessary agreement between reason and revelation but more likely by making visible a continuum of shadings, applications, projections. What did it really mean for man’s image of the universe that he had learned of its creation from nothingness by an omnipotent and infinite Author? Could inferences be drawn from that fact, since after all the cosmology of the Middle Ages was still the same one that had been developed, even independently of the biblical theology, in the ancient world? And had consequences followed for man’s knowledge of himself from the fact that he had heard that he was meant to be the image and likeness of his Creator? Was it not valid here frankly to digress into conjectures?

But Scholasticism had done none of that seriously, nor had it even experimented with it. Now one sees, as soon as one investigates the Cusan’s descriptions of the act of faith, that Wenck’s opposition to the effacement of the distinction between the status of knowledge in this world and in the next was not groundless. The antithesis of earthly faith to the visio [vision] in the world to come disappears when faith itself is defined as coincidentia visibilis et invisibilis [coincidence of the visible and the invisible] and the intellect takes the content of revelation in certitudine, ac si vidisset [for certainty, as though it had seen it]. This mediation between faith and knowledge seems at first to tend, entirely in the framework of the medieval, toward positing faith as absolute; but faith can now equally well stand in the service of knowledge, in that it postulates freedom for playing through new possibilities of knowledge. Here the original ambivalence of docta ignorantia between
skeptical resignation and encouragement of theory manifests itself: Knowledge of one's own ignorance is always in danger, as a result of consciousness of absolute transcendence, of turning into dogmatic skepticism, to the extent that no encouraging prospects of accessible possibilities offer themselves.\(^{28}\)

The Cusan presses the functionalization of faith a step further in the treatise *De genesi* [On Genesis]. He recommends that one should accept the declarations of theological authority as though they were made known by divine revelation, and only then should one attempt to grasp intellectually what one has at first assumed. He explicitly grounds this recommendation on his own experience.\(^{29}\) Here faith has drawn quite near to conjecture. They have in common the hypothetical function that has to prove itself by experience.

Nicholas appeals to Augustine's formula of faith as the point of departure of knowledge (*fides initium intellectus*). But this formula has gone through a noticeable change of meaning. The presupposition on the basis of which one is supposed to understand why God revealed and offered Himself to faith in a particular way is the human spirit's cognitive pretension, to which God, as the essential fulfillment of the spiritual nature that He created and endowed for the infinite, cannot refuse Himself. But this nature's equipment is not sufficient to satisfy the requirements that emanate from its relation to infinity. The redemptive meaning of revelation, of passion and salvation, recedes, and there is already an intimation of what will be completed in the Cusan's doctrine of the Incarnation—his Christology as the last degree of intensification of his anthropology. The problematic of certainty that characterizes the end of the Middle Ages and that was to make necessary the modern age's attempts (typified by Descartes) at establishing foundations, had become centrally operative here. Everything seems to be designed to prevent the crisis created by the fundamental situation of learned ignorance from leading to resignation. Hence faith is offered to reason as not the unreasonable demand that it sacrifice itself but rather the disclosure of the possibility of its self-fulfillment. That is clearly an attempt to restore the Middle Ages by means of their own substance.

It is in this context of a projective speculation that breaks through the constraint of Scholasticism and its binding force that the Cusan's cosmology,\(^*\) the most influential part of his intellectual accomplishment, must be set. Placing it in this context is already sufficient to show that
the Cusan cannot be regarded, as has been suggested again and again since Giordano Bruno and Kepler, as a forerunner of Copernicus, even if Copernicus did read him. Today, since the medievalness of Copernicus himself has become ever clearer, the tendency is to go further and to state that the Cusan was less a preparer of the Copernican turning than a diviner of consequences of it which were still entirely hidden from its author: “Nicholas of Cusa really failed to discover the Copernican doctrine in the fifteenth century only because he already occupied the standpoint of the relativity of motion, which Copernicus did not reach”;\textsuperscript{30} and “A correct cosmological conjecture must avoid the new deception of a heliocentric doctrine just as much as the old mirage of the geocentric world view.”\textsuperscript{31} Independently of the question whether there is really any difference between the Cusan’s theory of motion and Copernicus’s other than that Copernicus still preserved the finite reference space of the traditional cosmos, absolutely bounded by the outermost sphere, there are no grounds at all for the view that the Cusan would have changed, would have wanted to change, or could have changed anything in the preexisting world model constructively and in regard to any astronomical problems and data whatever.

F. J. Clemens, the early pioneer of research on the Cusan, was quick to publish a note from the Cusan’s own hand that he found on the last page of an astronomical work, preserved in the library of the hospice of Cusa, that the Cusan had obtained in Nuremberg in the year 1444.\textsuperscript{52} This cosmological meditation, as I would like to entitle the page, does not in the least enter into the scandal of the difficulties and confusions of the accepted Ptolemaic system; nor does it even implicitly take these into consideration. Consequently to bring it into direct relation with the problematic of an astronomical reform seems to me to be a misinterpretation. The point of departure here, as in other questions bordering on the empirical, is the principle of “imprecision” as an application of the general rule of prudence that had followed from the initial step of \textit{docta ignorantia}. It disputes the three essential claims to precision that had been made by the ancient and Scholastic cosmology: the precision of the circular orbits and of the regularity of the movements of the bodies along these orbits, and the precise centering of the earth at the midpoint of the world. The premise reads as follows: “I have arrived at the view that no movement can hold precisely to the circular form and that consequently no star
describes a precisely circular orbit from one rising to the next." The inference that the Cusan draws from his premise reveals that, at least in this note, he holds to the conception of the fixed stars as distributed on a sphere. He argues that the metaphysical prohibition of the precision of any process in the world, applied to the orbits of the heavenly bodies, necessitates the movability of the pole of the eighth sphere, so that the distances of the individual fixed stars from the pole will also be changeable. To believe that the Cusan intended here, with divinatory foresight, to supplement changes in the station of the earth with the westward drift of the equinoxes (precession) or even the oscillations of the pole of the heaven of the fixed stars (mutation) seems to me to be an entirely inappropriate extravagance of the historical amusement that consists in making everything have already been present, if not forever then at least since the earliest possible period. The unsteadiness that Nicholas ascribes to the position of the earth in space has nothing to do with the phenomena with which astronomy had been familiar since the time of Hipparchus; otherwise he could not have speculated about a complete inversion of the poles of the heavens—an idea that was still to influence Giordano Bruno. But what deprived this speculation of any value for astronomy was its lack of any tendency to compensate for empirical "imprecision" in the prediction of its periodic regularity by postulating sufficiently long observation time spans. For a theoretical attitude, imprecision could never be an ultimate characteristic of its objects, but only an intervening phase between the supposed precision of an imagined stellar "simplicity" and a future, more complex precision of superimposed periodicities.

Thus precisely as a speculative metaphysician, the Cusan could not even be the initiator of the reform of astronomy. This statement does not prevent him from having provided an opportunity for the renewal of the foundations of our view of the world, from having encouraged the forcing of a breach in the wall of the system. That is where the long-term relevance of the thesis that denies praecisto [precision] to the world lies: Imprecision is not the speculatively anticipated and necessary state of affairs but rather first of all a scandalous contingent fact, which through the discovery of a regularity that lies within the tolerances of measurement can finally be theoretically resolved by a causal explanation—in the case mentioned, by reference to the forces of attraction of the other bodies of the solar system, with their influence
on the movement of the earth's axis. The divergence, as such, disturbs and irritates the empirical attitude, drives it to increase the precision of its measurements, and the periodicity of the divergences that then emerges assures it of at least the possible application of a causal hypothesis.

With the Cusan, imprecision is a metaphysical postulate, which must be seen in its ambivalence. It can be a formula of resignation, as when Ptolemy, in the second chapter of the thirteenth book of the *Almagest*, had already deduced from the incomparability of terrestrial and stellar conditions a formula of epistemological resignation for astronomy. But it can also be a formula that stimulates attentiveness and energy directed at experience, for which attention to the world and investment in the technology with which to carry out measurements are motivated precisely by the fact that the constitution of the physical world cannot be arrived at by deduction. This kind of motivation was to become characteristic of early modern astronomy, with its consciousness of the necessity of increasing the accuracy of observation and the intervals of comparison. It prompted an empirical persistence that made its first great step forward with not Copernicus but Tycho Brahe. With the inferences that Kepler drew from Brahe's precise observations it won its first triumph over the things that traditional astronomy had taken for granted, over its metaphysical predecidedness, when Kepler departed, in the case of the orbit of Mars, from the classical requirement of circularity. Of this, I repeat, nothing was yet present in the Cusan's cosmological note in codex 211 at the hospice of Cusa, nor is there even a presentiment of it. But—and this is already a great deal to set against a dogmatic form of thought—the note does allow for this as a contingent possibility and puts it in a position where it could, potentially, be noticed by an observer (an observer who, however, was not the Cusan).

The case is similar with the second part of the cosmological fragment as well, in which Nicholas arrives at the conclusion that the earth cannot stand still but rather must move like the other stars, and in fact in such a way that it revolves once a day around the polar axis of the universe. This idea could only be regarded as an approach to the Copernican revolution if it had been conceived as an explanation of the daily rotation of the heaven of the fixed stars, and thus intended to perform an astronomical function. But that is quite manifestly not the case. For the assertion immediately following, that the eighth
sphere, the heaven of the fixed stars, makes a double revolution in the same time—so that the simple apparent daily motion comes about through the subtraction of the earth's own movement from the movement of the heaven of the fixed stars, which is twice as rapid—keeps the explanatory force of the Aristotelian/Ptolemaic system in effect. In this context, the assertion of a special movement of the earth has nothing at all to explain but must be an inference from metaphysical premises of the Cusan's cosmology. We know, after all, from Plato's *Timaeus* that such a special movement of the earth, which is neutralized again by the movement of the sphere of the fixed stars, fits into the context of a philosophically based world system better than the assumption of an absolutely resting world body, whose special properties Aristotle was able to explain in his cosmology only with difficulty and by violating the principle of rational economy. With the Cusan, here as in other passages, the emphasis is on treating the earth as like another star (*ut aliae stellae*).

This deviation from Aristotelianism, with its assertion of the heterogeneity of the terrestrial and stellar realms, was to be the lasting triumph of the Cusan's cosmology; here he really does anticipate developments beyond Copernicus. But this anticipation in itself would not have been able to produce anything of theoretical relevance if the speculative stellarization of the earth had not been given—by Copernicus, of course—a constructive foundation. It was only on this basis that the speculation could become one of the universal hypotheses of physical astronomy.

To return to the fragment, codex 211: The metaphysical principle of imprecision was not sufficient to lead to constructive alterations of the world system. Even if it motivated the Cusan to say that the earth did not stand precisely at the center of the world, still this does not yet mean that it had exchanged places with another world body within the system of planets or that there should no longer be any talk at all of the center of a system because the no longer finite world could not have a center. Rather it stands in the context of all the theses that repeatedly speak of the impossibility of occupying a point precisely or of having precisely a certain shape, for example, the spherical form for the heavenly spheres or the earth. In any case the earth remains nearer to the center of the system than any other world body, and consequently the system as such is not modified.
It is a mistake to claim the Cusan as a forerunner of Copernicus, despite the fact that Calcagnini, Giordano Bruno, Kepler, and Alexander von Humboldt praised him as such. Such a claim always presupposes that what was meant plays a mysterious and historically irrelevant outsider's role in relation to its own time and as what was really intended—and thus justified—bears a hidden relation to the new.

The astronomical essay that lies before us in codex 211 could not represent a contribution to the reform of the traditional world model if only because it does not even reach the empirical level of medieval astronomy and is not at all comparable with the work of either Ptolemy or Copernicus. Nevertheless, it is evidence of the origin of the theoretical unrest of astronomy that characterized the subsequent centuries. Just as the simple layman in the Cusan's Idiota dialogues is able to open a new dimension of possible truth to the Scholastic who is heavily armed with book learning, so also Nicholas himself, while he did not actually initiate the reform of astronomy or prepare its method and its approach, did actualize the presuppositions under which the question of the constituents of reality could be newly and openly posed at all.

The fragment in codex 211 lay dormant until its rediscovery in the library of the hospice of Cusa; that would be the most external reason for the fact that it exercised no influence. But the second book of Of Learned Ignorance had a radiating influence that should not be minimized. The amazing thing about this second book is that now the 'method' of docta ignorantia is applied to the universe. In fact its transferability seems to be unlimited; it leads ad infinita similia, quae pari arte elici poterunt [to an infinite number of things of the same kind, which can be educed in the same way]. And the very first example is astronomy and the application to it of the basic thesis that the lack of precision is an index of nondivine reality. This imprecision is described as one of measurement, which is understood as applying to both time and heavenly place. The astronomical technique of calculation, the calculatoria ars, is said to presuppose (in relation to time) that motions of the planets can be measured by means of the revolutions of the sun. But here precision is just as impossible as it is in regard to the arrangement of the heavens or the determination of the locations of the risings and settings of the constellations or the elevation of the pole of the heavens. In regard to the measurement of the times of revolution of the planets with the help of the sun's movement, one may assume that the discussions of the Nominalistic school regarding
the incommensurability of the motions of the heavens were not unknown to the Cusan. The ambivalence of the formula of imprecision becomes evident once again. This formula may just as well lead to a demand for and a claim to an unrestricted increase in the accuracy of measurement as to resignation to the expectation that astronomy can offer nothing more than a solution to the difficulties with the calendar.

The transfer of the cognitive mode of docta ignorantia to the world goes far beyond the defect of imprecision all the way to the determination of those characteristics of the indeterminable that withdrew the foundation from the traditional assertion, essential for Scholasticism, of the finitude of the world. One must let this assertion of the Cusan’s, which was so influential in the subsequent period, stand in the framework in which it originally belongs, that is, as a piece of docta ignorantia, of the conscious restriction of the will to make assertions regarding the form of the world. Only God Himself is, in the language of this metaphysical theology, a negative infinitum [negatively infinite thing]; the world is indeterminable in regard to its form and limitation, a privative infinitum [a privatively infinite thing]—but that can also be formulated as saying that it is neither finite nor infinite.38

But this statement cannot be understood merely as an epistemological antinomy. It contains a presupposition that I would like to call the postulate of the adequacy of the Creation vis-à-vis its Author. “It is as though God had spoken His ‘Let it be!’ and because no God could come into being, Who is after all eternity itself, something came into being that became as similar to God as it could.” In this passage in particular one can observe how the Cusan advanced his question of the adequacy of the world to a point beyond which he himself could on no account go but at which, with the given ground plan, the resolute reoccupation that Giordano Bruno was to undertake appears as a possibility. But for the Cusan, it is already clear that the Creation is no longer merely the act of Divine Majesty, no longer the sovereign decree of arbitrarily chosen content that the nominalists regarded as the epitome of transcendence, but rather an act in which the essence of its Author must unavoidably be invested, in which there could be no arbitrary reservation. The universe is a likeness of the absolute; it unfolds in time and space the original unity, the complicatio [complication, folding together]. Consequently movement is the fundamental char-
acteristic of nature, for it is the unfolding of original unity, the *explicatio quietis* [explication—unfolding—of rest].

Movement is therefore the fundamental characteristic of the world in a more original sense than is the case in Aristotelianism, where the principle of movement, the unmoved mover, is brought in on the assumption that there is a continual need for an additional supply of movement causality to be provided from outside. For the Cusan, this assumption cannot be held to, if only because of his abandonment of the finitude of the universe. The Cusan’s God is no longer the unmoved mover of Aristotle and High Scholasticism; but consequently He is also no longer the God Who can be verified by way of the classical proof of God’s existence. Wenck saw correctly that the Cusan, with his theory of *complicatio* and *explicatio* as the definition of the relation between Creator and creation, had destroyed the Aristotelian support of the entire Scholastic metaphysics: “Hoc corollarium destruit primum motorem, contra philosophum” [This deduction destroys the prime mover, contrary to the Philosopher (Aristotle)].

In the Aristotelian cosmos, God is the last external factor on the radial scale of the transmission of movement to and in the cosmos; he is absolute rest as that which is utterly opposed to movement, and as such he is, as it were, the ‘energy’ of all processes of movement. For Aristotle, the movement of the first sphere is the epitome of the eternal and eternally futile attempt to approach the prime mover, of the loving imitation of his self-reflexiveness—an imitation that takes the form of eternal circling as the ‘substitute’ for fulfilled rest. On the other hand, for the Cusan, without his admitting it, *complicatio* and *explicatio* stand in a relation of equivalence, in fact an equivalence of interiority, of emanation from a center from which everything real unfolds itself. For that very reason, for the Cusan, the center is metaphysically, and no longer cosmologically, accented. The ‘center of the world’ in this conception is no longer the lowest point of that radial scale, occupied by the inert mass of the earth, but rather the center of emanation—as Kepler will be the first to interpret it physically as well, relating it to the moving power of the sun in relation to the planets. If one considers this reversal of the fundamental metaphysical ‘direction’ in the world, it becomes comprehensible why Wenck so emphatically charges with heresy the Cusan’s thesis that God is the center of the world (*deus est centrum mundi*). He remarks at the same time on the connection of this assertion with the other, that the earth
is a world body of the same rank as the heavenly bodies ("Subdit quod terra est nobilis stella maior luna" [He adds that the earth is a noble star, greater than the moon]).

It is critically important to pursue the connection seen by Wenck, for in it the immediacy of each member of the universe in relation to transcendence is postulated, and thus the Scholastic hierarchical order of things, including the traditional assignment of last place to the earth, is abandoned. The destruction of the traditional cosmology is already implied in this understanding of the idea of transcendence, although no alternative model can be given. Wenck still believed that he could at once expose and dismiss the unheard-of contents of the new conception by a simple appeal to the (for him) entirely indubitable Aristotelian cosmology: "Conclusio contradicit scientiae de caelo, nec adiectum prius unquam est auditum" [This conclusion contradicts (Aristotle's) science of the heavens; nor has such an addition ever been heard of before]. Inferior to the Cusan though his opponent may have been, still he possessed a capacity to scent out and see clearly the inner consistency of the overall picture that the Cusan draws.

The denial of the earth's location at the center of the world thereby acquires a further aspect. Imprecision and infinity are only irritants to the traditional system. The deeper-lying motive is the reoccupation of the center, which now no longer has to be the mere point of reference of a scale of order but is rather the substantial source point of the ontological viability and dignity of the whole. In the eleventh chapter of the second book of the Docta ignorantia, it can clearly be seen that the Cusan's primary concern was to establish the impossibility of identifying the earth with the center of the world, and thus to make possible the no longer physically verifiable assertion of the pseudo-Hermetic proposition according to which the center and circumference of the world coincide in infinity and God is simply this coincidence of center and periphery. It is only from this premise, that the earth cannot stand in the center of the world, that its movement and thence in turn its equal rank with the other world bodies are inferred: "Terra igitur, quae centrum esse nequit, motu carere non potest" [Therefore the earth, which cannot be the center, cannot be without movement]. But then the central component of the Aristotelian cosmology is also eliminated, according to which there is a radical division, not to be overcome by earthly experience, between the astral and the sublunar worlds. In the treatise of his old age on the hunt for the truth [De
venatione sapientiae], the Cusan formulated the consequence of this intracosmic dualism: Aristotle had indeed made reason into the first cause and the principle of movement but had nevertheless ascribed to it a direct administratio [administration] only with respect to the heavenly bodies. Such a control was supposed to operate over earthly things only indirectly, through the mediation of the heavenly bodies, so that it simply did not embrace the whole universe in the same way.\textsuperscript{42}

In this context there is found the remarkable sentence in which Epicurus appears to be praised for having ascribed to God the job of looking after the universe without any mediating instance or instrumentality: "Epicurus vero totam deo soli sine cuiuscumque adminiculo universi tribuit administrationem" [Epicurus attributes in fact the entire control of the universe to God alone, without any aid whatsoever]. This sentence, which could scarcely be surpassed in historical falsehood, becomes more intelligible only when one recognizes that what was most prominently impressive for the Cusan in Epicurus's universe was the equivalence of the worlds. For in his own cosmology, the concern is precisely to set aside the apparent differences of the world bodies, for instance, their division into dark and bright, reflecting and self-illuminating bodies, as illusions conditioned by one's standpoint. To judge from its construction, our world could have been designed to mislead man, who lives in it, as to his position and the nature and form of the whole. This suggestion, with its flavor of nominalism and voluntarism—a suggestion from which a direct line of descent could lead to Descartes's thought experiment with the genius malignus [malign spirit]—was certainly not what the Cusan intended. But his thesis of the interchangeability of the fundamental orienting concepts—center of the world, pole of the heavens, axis of the earth, zenith, sphere—does nevertheless take into account the great skeptical apprehensions of the fourteenth and fifteenth centuries: That in his endeavor to gain insight into the plan of creation, man could be a victim of futility. The Cusan's cosmology seems directly aimed at constructing a system of possible limitations of standpoint and observer's illusions, thus forestalling, in imagination, the eventualities to which nominalism saw itself delivered over. This is at any rate the way the last sentences of the eleventh chapter of the second book of the Docta ignorantia read, according to which one should test, with the help of imagination, the interchangeability of central and polar observers.\textsuperscript{43}
The upshot of such thought experiments is the statement that one cannot comprehend the world, its movement and its form, because it offers itself as a wheel within a wheel and a sphere within a sphere and nowhere possesses a center or a circumference. At first glance, “learned ignorance” plays the same role as is played in nominalism by the consciousness of being excluded from access to the truth of the Creation; it is a prescription for playing through possibilities all the way to paradox, just like nominalism’s theory of hypothetical inferences—only the Cusan’s anthropology is permeated by the idea of the richness and authentic imaginative power of the human spirit, which therefore, in contrast to the barren nominalistic idea of the merely ‘emergency’ function of reason, realizes its status as a counterpart to the creative world origin. It is thus able to achieve indirectly, by detour through that quality of being an image of God, what cannot be reached directly, in the pure subject-object relation. The imagination, which gets ‘on the track’ of the mechanism of the world, thereby at the same time invalidates the burdensome metaphysical apprehension that in his whole theoretical relation to the world man could be led around by the nose. The ‘unsuspected’ no longer exists. And deeming this accomplished has always been one of the elementary historical achievements.

A good example of this sort of imaginative world orientation is provided by the theory, already mentioned, of the apparent difference between dark and bright, reflecting and self-illuminating world bodies, which at the same time helps to underpin the basic thesis that the earth is a heavenly body.

The black color of the earth is no proof of its having little value, for if someone were on the sun, even its brightness would not appear to him as it does to us. For if one regards the body of the sun, one sees that toward the middle it contains something like earth and that the fiery brightness lies around the outside, and between both a sort of water vapor and transparent air—so that the elements are arranged in layers as in the earth. If one were outside the fire region of the earth, then the earth would appear to him in the whole extent of the fire region as a brilliant star, just as to us, who are outside the fire region of the sun, it appears to us so exceedingly brilliant. On the other hand, the moon appears to us to be not so bright because we no doubt find ourselves within its outermost elemental zone and more toward the inner regions, perhaps in the region corresponding to the
element of water. Consequently its light is not visible to us, although it possesses a light of its own, which, however, becomes visible only outside its outermost periphery, while we perceive only reflected sunlight in it. . . . The earth consequently appears to stand between the (outermost) elemental region of the sun and the (innermost) elemental region of the moon and takes part through their mediation in the influence of the other heavenly bodies, in which cases we behold only their bright regions because we are entirely outside their peripheries. So the earth also is a noble star (stella nobilis), which possesses its light and its warmth and its influence. . . .

In this passage the cosmological accomplishments of the Cusan’s speculation can be viewed in their totality: stellarization of the earth and thus homogenization of the physical structure of the whole universe; establishment of the equivalence of all observer’s standpoints, or actualization of a methodical reflection on the conditionalities of the observer’s standpoint; suspension of the Aristotelian unilateral direction of the causality of movement; and establishment of the principle of reciprocal action in the universe, of the reciprocity of all sorts of influentia [influence].

The ancient/medieval world picture was geocentric in not only its static but also its dynamic structure. The earth not only ‘stood’ in the center, but it was also the ultimate pole of reference of all cosmic influences, which always passed from ‘above’ to ‘below.’ The God of High Scholasticism still made use, for the exercise of His world regime, of mediating agencies, secondary causalities, and thus adhered to the very schema on which the continuing acceptance of astrological ideas also depended. The Cusan breaks with this schema; the heavenly powers no longer flow only in one direction, from above to below, from the sublime spheres to the purely receptive and thus all too ‘earthly’ earth. That old idea now proves to be dependent on the cosmological illusion of the central position of the earth, toward which the directions of influence of the universe appear to converge—a dubious interpretation even of an anthropocentric teleology, if it has to assign to man the location of greatest passivity. The ancient and medieval hierarchical cosmos has lost its reality, and indeed precisely because its mediating function between God and man has been eliminated. The operation of the Divinity streams unhindered and unmediated into the world, and in spite of intensified transcendence is more intensively omnipresent than could be conceived in the shell cosmos of Scholasticism.
The Cusan’s transcendence is not only a transcendence of externality and distance but also at the same time of interiority and proximity. That is why the transfer of the mystical formula—so awkward when regarded by itself—of the intelligible sphere, whose center is everywhere and circumference nowhere, from the Divinity (for whose mystical representation it had originally been invented) to the universe is such a significant accomplishment. Transcendence is no longer related to an objective topography, a cosmic ground plan. It appears precisely when man, in the manner of Scholasticism—as though upon the ladder of the hierarchical cosmos—wants to pursue his argumentation to a successful conclusion and in the process has an opportunity to experience the incomprehensibility of the world’s form, the infinity of the finite; transcendence is a mode of negation of definitiveness of theory. This instability of predicates makes Wenck break out into the most extreme and daring and most desperate of all possible reproaches: The author of the Docta ignorantia deifies everything, annihilates everything, and presents the annihilation as deification (“Omnia deificat, omnia annihilat, et annihilationem ponit deificationem”). That is the tenor of Wenck’s entire opposition. Transcendence and immanence, divinity and nothingness have become interchangeable in such a way that they no longer represent real predicates and localizable agencies in a well-ordered cosmic configuration.

Traditional antinomies of metaphysics show themselves for the first time in the Cusan’s speculation as magnitudes bound to the position and pretension of the observer. In the dialogue On the Globe Game, at one point the duke of Bavaria says to his interlocutor, the cardinal: “If it were possible for someone to have a standpoint outside the world, then for him the world would be invisible, like an unextended point.” The cardinal praises this conclusion because it comprehends the world as a magnitude that can neither be surpassed nor undercut: “Et sic concipis mundum, quo nulla quantitas maior, in puncto, quo nihil minus, contineri, et centrum atque circumferentiam eius non posse videri” [And so you understand that the world, than which no magnitude can be greater, is contained in a point, than which nothing can be smaller, and that its center and circumference cannot be seen]. For the world to become nothing to someone, he would have to regard it from outside; for one who considers this a chimerical requirement, an Archimedean point—for one who perceives the internal standpoint as unrenounceable—the world remains or becomes an all-including,
all-providing, insurmountable magnitude. The metaphysical speculation that thinks it can choose a standpoint outside the world, that operates with the infinite, is not accessible by any process of transition. But is it also the normative standpoint, to which man has to transfer himself if he wishes to gain a concept of the world as a whole? This is the point where the insistence begins that separates the Cusan from the mysticism of the late Middle Ages and from its Neoplatonic tradition. The mystic strives 'to adopt God’s standpoint,' by seeking identification with the absolute; this point of view, before which everything real collapses into nothing, is for him the only valid one. For the Cusan, the standpoint from which the variety of the visible world shrinks to the status of an invisible point is only the external aspect of the finite, and to imagine oneself occupying it represents a possibility that cannot be equated with the mystic's ardent desire to exist on that basis, that is, as it were, to become external to both himself and the world.

The choice between observing the world 'from outside' and 'from within'—between the standpoints of God and man—was contested by the Cusan’s followers (chiefly his followers in language) to the point of an explicit refusal to allow the nothingness of the world. Thomas Campanella, the tragic contemporary and equal of Giordano Bruno, obstinately insists that if the earth is a point in the universe, in any case it is the object of our science, and thus for us it is not a point. The objectivity of theory permits subjectivity's self-assertion: What may be a metaphysical point for him who need not live with or on it is for man his all in all. The hierarchical order of objects that Scholasticism had either set up or retained no longer means much in comparison to the certainty that can be gained from what lies 'near at hand' [was 'nahe liegt': what is nearby, or what is obvious]. The quality of being known is decisive, as against the worthiness of being known—the security of the subject as against the absolute magnitude or value [Größe] of its objects. The Cusan made this decision visible, but he did not make it, nor was he able to make it. It was beyond him on account of his readiness to regard, and to force together, as mere aspects of one system, things that on the contrary pressed toward the 'unilateral' character of the human standpoint, toward bracketing out the medieval option.

The Cusan’s cosmology has immediate consequences for his anthropology. It is not only that the center of the universe could no longer
be a distinctive and descriptive position for man. More important was the fact that the equivalence of the heavenly bodies as ‘worlds’ (partes particulares mundiales unius universi [particular worldly parts of a single universe]) implies not only their inhabitability but also the playing through of the idea that the universe has other aspects besides the one it presents to man and that this latter aspect no longer has any precedence. The world is no longer something that was created on behalf of man and around him as its central point. Plato and Aristotle are blamed—incorrectly, to sure—for having ascribed to the heavens the purpose of being serviceable to man. God created the world for His own praise, but He could do this only by expending His potential without reservation; this premise involves man’s dignity and rank to a higher degree than does the idea of a teleology directed at man and perceivable by him in the world. It forces one to put in place of the passive anthropocentrism that had made man the viewer and beneficiary of the universe an active existential determination of man, realized in terms not of his circumstances in the world but of self-realization.

In general the Cusan has an aversion to teleological interpretations in his cosmology; teleology appears to him as compensation for a deficiency in creatures such that the latter are supposed to find in the preparation of their world circumstances what is denied to their self-realization. Creation without reservations excludes economic teleologies; the stars shine in order not to give light to man or to other beings but rather to fulfill their own nature. Light shines by virtue of its nature— that its light also allows one to see is not its primary definition but rather a secondary process of putting it to work—a process that is based on the activity of the seer, that is, on what he makes of the world. It is evident that the Cusan wanted at the same time to save and to take the edge off of the oppressive idea of Aristotelian Scholasticism that God created the world only for Himself and for His own glory and created man as a mere functionary to admire this work. Precisely because and if it was the case that God indulged in this self-referential behavior, His work had in the highest degree to give to each being what belonged to it. But this train of thought has its limit—the very limit that Giordano Bruno will transgress: the irreducible difference between the Creator and His work as infinity and finitude, whose mediation makes the Incarnation the pivot of the system: “God created all things for His own sake and in such a way that the universe
would have its full greatness and perfection only in relation to Him; but even this could not become one with Him, since for the finite there is no proportion to the infinite.”\(^5\) God’s lack of reservation in the Creation, as a principle of the enhancement of the universe, has not yet been thought through to the end.

Thus the fact no longer speaks for man that he alone inhabits the physical world and may refer it to himself. But neither does he need to refer the inferiority of his standpoint in the universe to himself, to interpret it as an orientation regarding his own rank in reality: “For even if beings of different rank came forth from God, as the center and circumference of all the regions of the heavenly bodies, into the respective regions, so that so many places in the heavens and on the stars would not be deserted and not only this earth—which after all may be one of the smaller heavenly bodies—would be inhabited, still there is no more noble and perfect being of this kind than the nature endowed with reason, which is at home here on this earth and in its own region, even if inhabitants of another species may be at home on other heavenly bodies.” This comforting assumption, which of course is not retained much longer in the later tradition of speculations about inhabitants of the heavenly bodies, is substantiated by the Cusan immediately after the cited passage with the root proposition of his anthropology that “man has no desire for a nature other than the one he has, but only wants to bring to perfection that which he is.”\(^5\)

This self-affirmation of man, presupposed as a fact of consciousness, determines his view of the world from within. This axiom for the first time completes the revaluation of the universe, which, although it appears from the point of view of the infinite as the mere nothing of a point, still cannot be this nothing if within it man possesses such a consciousness of the sufficiency of his nature for itself and the attainability of the perfection of this nature.

The Cusan is a mystic without the mystic’s ‘absolute interest in the absolute.’ That interest is directed at consuming what is finite and destroying any possible standpoint in it. What is described as mystical experience destroys itself as experience insofar as its object forces the subject to abandon itself. If one considers that this idea was already familiar to Neoplatonism, one sees that the Cusan opposes not only Scholasticism and its theoretical self-contentedness but also the tradition in which he is rooted. One can describe the unifying basic feature of the traditions to which he adheres as one of ‘demanding too much.’ He does not give up the demand that is posed there, but he strengthens
and enhances the addressee who is supposed to satisfy it. Just as he seeks to keep cosmology in systematic communication with theology, he also supplies compensatory substance to anthropology.

It is true that for Nicholas of Cusa the new cosmology was nothing but the consequence, thought through to the end, of the old idea of creation. But what happened to man while the cosmos grew into the infinite with its Author? The step in metaphysical speculation by which finitude was suspended had as its consequence not only that from then on the world was, as it were, 'on the point of itself becoming divine, but also that it became—instead of a realm of experience capable of completion and thought to have been largely completed—a field of data that are in principle always surpassable, an inexhaustible store of objects of knowledge. For man, according to the Cusan’s picture, there emerge as a result two dimensions in which the truth can be pursued into the infinite: on the one hand, the imprecision in principle of any given whatsoever, and with it the inexhaustible potential of the theoretical comprehension of each object; and on the other hand, infinity as the never-to-be-overcome indefiniteness of the universe of empirical knowledge, the imprecision, as it were, of the universe itself.

It was no accident that precisely the Cusan’s speculative approach led in a direction in which infinity and imprecision could be positivized. It will emerge in full clarity for the first time with Leibniz that there is an indissoluble connection between the concept of infinity and that of individuality because only the infinity of the universe of monads excludes any repetition in the always finite actualizations of its representation in the monads. The uniqueness of the subject is secured by the (now permitted) infinity of its constitutive elements. Since the subject is understood as the power of representing the universe, the latter’s intensification into immeasurability is indirectly to the former’s advantage. For the Aristotelian tradition of High Scholasticism, on the other hand, individuality had been seen only in the horizon of a finite multiplicity of essential forms, whose concrete individual presence could not be taken into account in a cognition whose sole appropriate object had to be the universal. But individuality was the refraction of the universal form in the medium of the material. It is easy to see how little this harmonizes with a conception for which the world is the manifestation of an infinite will. For how can the matrixlike duplication of identical essential forms be adequate to this will, since
after all such duplication seems practically to demonstrate the exhausability of the stock of forms? Or should one impute to the infinite power and infinite will a sort of self-restriction to that which the human understanding, with the finite capacity of its conceptual faculty, could represent? But how, on the other hand, could the concern of the divine will with the fate (the salvation or damnation) of the individual man be appropriately interpreted if the individual has only the arbitrary character of an ‘instance’ of its general species form, which possesses intelligible dignity only in its universality? Although one would think that this motif should have become pressing for the Middle Ages, nevertheless the ancient, predominantly Aristotelian idea of individuation was overcome only laboriously and late.

But this very circumstance could become the precondition for the fact that the modern age could be the first to see in the discovery of the individual one of its most intimate and authentic accomplishments. This is one of the most important phase displacements, nonsynchronicities, that we know of in our intellectual prehistory. Something that, judging by the urgency of its motives, should really have been due in the Middle Ages experienced its realization only this side of the medieval system. The turning away from the Aristotelian doctrine of individuation that set in as early as the Franciscan line of High Scholasticism did not prove very fruitful for anthropology because in this school it was immediately—that is, at the latest with William of Ockham and the Ockhamists—interpreted purely epistemologically and pushed on to the extreme of nominalism. It is true that the universal lost its constitutive meaning, but the realm of the concrete was by no means assigned a higher value thereby; rather it became an amorphous sea of particulars, on which the concept-creating understanding had to set up orientation marks. The Cusan tried to maneuver through between the Scylla of Scholastic rationalism and the Charybdis of nominalism. It is palpable that he accomplished this in neither epistemology nor anthropology; it only shows that he became conscious of this problem as one of the fundamental matters in question in the situation in which he stood.

It is no negative assertion if one must state that the Cusan’s attempts at mediation between the Scholastic structure and its destructive ferment, between rationalism and nominalism, remained more or less stuck in the purely linguistic realm, in an ingenious artificial intermeshing of rationalisms and voluntarisms—with the high point perhaps
in the formula of the work of his old age: “deum ab aeterno concepisse velle creare” [God has, from eternity, conceived the will to create]. In this passage, a Platonizing exemplarism conflicts with the absolutism of will that is supposedly owed to the sovereignty of the Divinity: “Quid igitur aliud sunt exemplaria illa . . . quam termini determinantes omnia?” [What then are those ‘examplars’ . . . but termini determining everything?] Certainly it will be possible to view the juxtaposed appearance of rationalistic and voluntaristic terms for the intradivine preconditions attributed to the world’s prehistory as a piece of the Cusan’s coincidentia oppositorum. But then one discovers how little this piece of doctrine really performs in relation to the historical task with which the Cusan is confronted as soon as it is meant no longer only to bring about mystical obscurification but to accomplish the harmonization of destructively incompatible positions. If it is said of the determination of the intradivine exemplars that it is “rational,” then this would be meaningful only if such rationality permitted additional reasonable assertions. But this is not possible because the Cusan explicitly rejects the path, later taken by Leibniz, of the ratio sufficiens [sufficient reason].

The Cusan’s path from the Docta ignorantia to the Venatio sapientiae, over almost a quarter of a century, is not consistent. It begins with a God Who, as the [absolute] maximum [der Grösste], could produce likewise only a work of His order of magnitude, the [restricted] maximum [das Grösste]. This God is replaced by a God of complicated formulas, for Whom the world that He was actually to create had no precedence over any other entirely heterogeneous—to us, admittedly, inconceivable—possible world contents. It is just as understandable as it is instructive that the reception of the Cusan’s ideas related almost exclusively to the early works. Only in connection with them can Leibniz, with his attempt to dissolve the intolerable contingency of the world for man, be related to the tradition of the Cusan. The later Nicholas of Cusa returns to the intradivine volitional decision, which is indeed asserted to be rational but is not accessible as such, and which ordains this world like a decree. That this was not supposed to be voluntarism becomes evident from the effort to separate the positing of reality from the positing of possibility. But this is no more than an indication that the Cusan was conscious of what he was doing, and that he escaped from this consciousness into hairsplitting.
In the treatise *De possest*, composed in 1460, he attempts to bring the concept of possibility (*possibilitas*), which was so irritating for Scholastic thought, into dependence on the creative Origin itself, and thus to divest it of its critical function vis-à-vis what actually exists. The universe of unrealized possibilities cannot be played off against the actual universe. For the Cusan, the logical concept of possibility is only a reflex of the metaphysical reality of the creative ground of being. Thus every ‘it could be’ is legitimized by an absolute ‘it is.’ Nothing has happened except that the universe of ‘unexplained facts’ [*der Faktizitäten*] has been reduced to an Original Unexplained Fact. This does not diminish reason’s characteristic offense at everything [merely] factual. But one can certainly see an effort to undertake a reduction of the questions that come up and are often posed in this context, and in this way to settle the surplus of problems inherited from a theological age, an age that had entangled itself in insurmountable contradictions precisely in connection with the concept of possibility and its liberation by the theological principle of omnipotence.

In the interval between the treatises *De possest* (1460) and *De venatione sapientiae* (1463), there appears in the Cusan a certain resignation regarding his own attempt at disposing of this problem, which is evident particularly in the increase in the variety of formulas that are tried out. Their mutual inconsistency is made obvious by a thorough reading of chapter XXVI of *The Hunt for Wisdom*. Here the important thing is to see the virulence of the problematic of possibility precisely in the fact that in it man is implicitly concerned with himself because at bottom he is asking whether he could have a ‘right to exist’ if and although what is at stake in the Creation is after all only the *gloria dei* [glory of God]. For this roundabout glorification would mean nothing but a reflexive procedure, mediated by the world, of the Divinity with Himself—the self-glorification of the absolute, detouring by way of man and inconceivable to him in its necessity. Can man, who is inserted into this circle, lay claim to insight into the possibility and security of his existence as something other than an accident?

The man of the modern age declares himself by the fact that he no longer endures the consciousness of perhaps being a venture hazarded by a God. The concept of ‘providence,’ which had already been comforting for the ancient anxiety about the world, lost all its dependability and protective function for man in the working through of Scholastic speculation, especially in its combination with Aristote-
lianism and the latter's image of the god who is turned toward himself alone. This is already evident early in the Cusan's work, when he tries to draw the concept of providence into his system in the *Docta ignorantia*. It is true that the essential constitution of the world is not yet grasped here as a variable assumption, but the administration of the world certainly is, insofar as it is composed of individual destinies. The principle of the origin is not the principle of history.

What the Cusan tries to do here for providence already carries in itself the germ of the return of voluntarism to the concept of creation that characterizes his late phase. He deduces the universality of providence from the unity of opposites in God. If God is the folding together of everything—that is, even of opposites—nothing remains that could escape His providence. This universality can neither be increased nor decreased, even if it had provided for something other than what it has in fact provided for or will provide for, and although it has provided for much that it did not need to provide for. A concept, then, which in its native philosophical environment was supposed to guarantee the possibility in principle of interrogating the world regime and the world's course is here transformed into an instrument of the assertion of its radical contingency.

The example that the Cusan adduces to illustrate his thesis is significant: If a man were born whose birth had never been anticipated, then nothing would be added to the extent of human nature, as also nothing would be taken from it if the man were not born, no more than when those who have once been born die, since the *humana natura* [human nature] comprises both those who in fact exist and those who do not exist and will not exist, although they could exist. Thus in the Cusan's early-work, providence is already referred to the concept of possibility, so that it would remain unaltered even if something were to happen that in fact will not happen. But that means that the individual cannot find a justification of his existence in the concept of providence.

If one considers the Cusan's anthropology from this angle—the establishment of creative exemplariness [*Urbildlichkeit*] and its restriction to the universal *eidos* [form, Ideal]—then one does not see how this entanglement in the difficulties of the problem of universals could have led out of the late-medieval crisis. But the systematic difficulty reaches yet further. It is magnified precisely by the way the Cusan, as it were, repeats the diagram of theology on the levels of cosmology.
and anthropology. For this means that not only is the universe the unfolding of what lies folded together in the Divinity but the ‘natures’ of which the world is composed are in turn foldings together of the infinity of characteristics that are realized in the individuals of a kind. Thus the Cusan can compare these ‘natures’ with divine providence itself, with the result that human nature also “contains infinite things folded into it because it comprises not only the men who have been, who are, and who will be, but also those who could be, although they never will be—in fact it comprises changeable things in an unchangeable way.” If one pursues this analogy further, it has the consequence that while unfolding into an infinity of individual destinies is indeed founded in human nature, as individuality it remains below the threshold of what is necessary and relevant for divine providence. His Platonism, his fundamentally Scholastic realism regarding universals, prevents the Cusan from really closing the systematic gap between God and the individual, between humanity and man. Everything that he contributed to the positivizing of individuality and freedom must be seen under this proviso.

What can it still mean, in this constricted situation, to say that the individual is no longer the instance of an essential form multiplied like cookies from a cookie cutter as Aristotle and the Scholasticism that was obedient to him had seen it, but rather arises as the explicatio [unfolding] of the complicatio [folding together] of the one nature? “Everything that exists in the universe enjoys a uniqueness that it shares with no other thing.” This conception still gives no inner value to individuality. It only establishes that the great number of mutually differing individuals is necessary in order, as it were, to demonstrate the complicatio of the kind. Multiplicity, as such, is justified, not the uniqueness of the individual. The latter remains contingent because the possible variations are not after all exhausted but only played through ‘in examples.’ Again it was Leibniz who saw and tried to eliminate this inconsistency also, by making the universe of monads and consequently the predicates of each individual monad infinite. For the Cusan, the concept of freedom stands in this gap, freedom that over and above the differentiation of individuality is a special form of self-realization for man, one that breaks through the schema of “explication.”

All of this finally makes it understandable that nothing irrevocable had yet been said about man’s position in the universe either—
especially if one thinks of the geocentric passage in *De venatione sapientiae* XXVIII 83, which seems like a demonstration of timidity on the part of the aging man, like a senile recession. What is more important is that the indicative function of a cosmic position comes to nothing in the moment in which man has become a being who regulates and centers himself in the world, or has begun to see himself as such. The question of *where* man may find himself in a pregiven world of natural things has lost its relevance for his self-consciousness. In this context the concept of freedom as man’s special independence from the determination of nature gains a new aspect. Not only is man’s moral quality seen as the epitome of his capacity for self-determination, but also his self-consciousness is freed from its orientation to nature and nature’s ‘framework of positions.’ The interpretation of the Copernican reform as a catastrophe for human self-consciousness signifies a regressive fixation on something incommensurable with this freedom. If the Cusan can be regarded as a forerunner of Copernicus in any respect at all, then it is surely in the fact that, for him, man’s cosmological placement gives no information as to what he can credit himself with and regard as his worth. This suspension of the indicatoriness of cosmology for man’s self-consciousness found its finest formulation after the Cusan’s death in another unique work of his century, the *Oration on the Dignity of Man* of Giovanni Pico della Mirandola (1463–1494).61

This oration was conceived for the opening of a mammoth disputation on 900 theses, for which Pico had invited people to come to Rome in 1486, but that was prevented by the condemnation of 13 of these theses and the subsequent proceedings of the Inquisition. Pico places before us the creation of man and imagines God addressing man. When God (*summus Pater architectus Deus* [supreme Father, God the master builder]) had finished creating the world, there arose in Him the wish (*desiderabat*) for a being that could estimate the dimension of this work, could love and admire it (“... esse aliquem qui tanti operis rationem perpenderet, pulchritudinem amaret, magnitudinem admiraretur”). The result is not only that man’s place is the last in the work of creation, but also that he does not belong, he is heterogeneous to the primary order of beings: “Idcirco iam rebus omnibus... absolutis, de producendo homine postremo cogitavit” [Accordingly, now that all things had been completed, He lastly considered creating man]. The decisive fact here is that no pattern for
this creature had been provided in the original 'world program':
"Verum nec erat in archetypis unde novam sobolem effingeret...

[But there was nothing in the archetypes from which He could mold a new offspring...]. Here the biblical idea naturally suggested itself that precisely for lack of an ideal paradigm, God could only create man in His own image; but Pico does not avail himself of this opportunity, no doubt because it would have stood in the way of his later statement that man was meant to be "sculptor of himself." The idea of 'creation in the image of... ' has already become too static, as is made very manifest by a comparison with another passage in Pico, wherein man is compared with the statue that a ruler causes to be erected in a city that he has founded.62 In the Oratto there is no place for man in the world, which is already complete ['voll' endet]—he is a 'superfluous' creature for nature, necessary only for his God: "... nec in subselliiis totius orbis, ubi universi contemplator iste sederet. Iam plena omnia; omnia summis, mediis, infimisque ordinibus fuerant distributa." [... nor in the galleries of the whole world was there a place where that contemplator of the universe could sit. Everything was filled up; all things had been assigned to the highest, the middle, and the lowest orders. Accordingly God's speech of investiture says, "Nec certam sedem, nec propriam faciem, nec munus ullum peculiare tibi dedimus, o Adam, ut quam sedem, quam faciem, quae munera tute optaveris, ea, pro voto, pro tua sententia, habeas et possideas" [We have given to thee, Adam, no fixed seat, no form of thy very own, no gift peculiarly thine, that thou mayest feel as thine own, have as thine own, possess as thine own the seat, the form, the gifts which thou thyself shalt desire]. Man is not so much placed in the center of the world as exposed there. The privileged position of the world viewer in Stoicism has become the point of departure of the world masterer and self-shaper, who is able to engage in contemplating and admiring only after he has realized and regulated himself.63

For his part, the Cusan—with his characteristic tendency to appeal to names defamed in the tradition—cites Protagoras's thesis, in disrepute since Plato, that man is the measure of all things, so as to indicate sharply the untenability of the cosmic/physical orientation of human self-consciousness. According to the account that Plato gives us of this dictum of the sophist, it runs, "Man is the measure of all things; of that which is, [he judges] that it is; of that which is not, that it is not."64 When Nicholas refers to this sentence four times in his treatise On the Beryl, it is with an attitude directed against the conception,
predominant in the tradition, of the human cognitive faculty as a receptive imaging process, which makes the presence of things and their mediation by the senses into the measure of man. What Protagoras might already have seen is the heterogeneity of knowledge and reality, at least in one entirely elementary case, the distinction between existent and nonexistent objects, as a possibility that exists only in judgment but reflects nothing in what is present. The nonexistent is precisely that which does not exist and consequently cannot be represented receptively as an image of an original, even in a true judgment whose content is just that this thing does not exist. The possibility of negative propositions is based on the fact that man sets up the standard of his concepts and measures what is given him against it; the given itself does not contain the standard against which it is measured.

I will not make what I believe would have to be a futile attempt at a unitary interpretation of the Cusan's theory of knowledge. Here in particular the inner consistency of his philosophical accomplishment is doubtful. The reason for this can be specified: It lies, again, in the inability to deal with or successfully to evade the consequences of nominalism.

The standard-setting character of human logic with respect to the world, which Protagoras had discovered in the quality of judgment, is extended for the Cusan by the paradigm of mathematics. Mathematics shows that the fundamental relation between the spirit and objectivity is not receptive but projective, and that means that in what can become objective for him, man ultimately only meets with himself again: "Whenever the soul by means of itself and from itself stretches out to everything else, it finds in the manifold of the sensibly perceptible just what it also finds in itself; thus everything is similar to it. And the more it stretches out to other things so as to know them, the deeper it penetrates into itself so as to know itself." Self-referentiality as the basic form of all cognitive acts, even of those directed outward, carries a theological category over into anthropology. That fact is expressed in the third chapter of the first book of *On conjectures*: Conjectures are supposed to issue from our mind as the real world issued from God's infinite reason. For by virtue of its exalted similarity to God, man's mind participates—so far as possible—in the fertility of creative nature and produces from itself, after the image of the omnipotent formative power, intellectually existing things in approximation to concretely existing things.
Thus the human mind becomes the formative power of a world of conjecture, as the Divine Mind is that of a world of things: "... but since God does everything for His own sake, in order that He may be both the intellectual origin and the goal of everything, so also the unfolding of the world of intellectual entities comes to pass from our mind, which contains it folded together, in that our mind creates it for its own sake. But the more profoundly it recognizes itself in the world unfolded from itself, the richer the fertilization it experiences in itself..." This analogy between the cognitive procedure and the creative process means not only and not primarily an anticipation of the emphasis on spontaneity, on the projective character of knowledge, but rather, above all, a supersession of the theory of truth finding that saw the problem of knowledge as exhausted in a relation of individual objects to individual assertions. Since man is now supposed to be conceived as quasi alius deus, as "like another God," his knowledge also will necessarily have to be assimilated to the conception that had been developed of the origin of the totality of the objects of knowledge.

If the world is a structure of meaning emerging from the radical unity of the complicatio and preserving this unity in spite of all of its unfolded multiplicity, knowledge cannot consist in assigning individual assertions to individual objects. The totality of possible assertions about the world is to be grasped as a unity that is systematically interdependent in itself. The Cusan recognizes that comprehension of human knowledge as the explicatio of an underlying complicatio can be gained only if attention is paid not primarily to the connection arising between object and judgment but rather to the immanent unfolding of a system of assertions, "conjectures," which can be related to and tested against the encountered reality only once it has gained a certain complexity and consistency. This intraintellectual explicatio sets up the human mensura [standard of measure] against whose prestabilized metrics things can then be examined as to whether they accommodate themselves to it. Thus the Cusan’s medievally pious effort to take seriously and to think out the biblical description of man as the "image and likeness" of God leads to a revision of the traditional formulations regarding knowledge.

When he tries to describe man as a creature of divine self-prodigality, he acts as though he is conscious of the fact that if this effort were to fail, man’s enhancement would be effected not with theology but against it. Of course the Cusan may not have suspected in connection
with this concept that the formula of *quasi alius deus* [like another God] could also be isolated and taken into service as a metaphor of human existential autarky and that this long-term effect was to be preceded first of all by a rapid metastasizing of the formula to all possible realms of human realization and activity.

The isolation of man's quasi-divinity was a detachment of the self-comparison to God from its foundation in the relation of image to original, a reverse translation from the quality of a distinct substance into marks of accomplishment. The adoption of ancient formulas could not be the motive operating in this process because divinity for the ancient world meant primarily not at all omnipotence and omniscience but rather immortality and self-sufficiency, in other words, a syndrome of characteristics that does not manifest itself in actions. When the Cusan posits the discovery of logic and of mathematics, of systems of rules of games and the forms of artificial objects, as comparable to the divine capacity for creation, the metaphorical quality of the comparison (its not being meant 'strictly' or literally) is protected precisely by the fact that God's analogous 'accomplishments' are specifically heterogeneous in kind; the creation of the world remains something incomparably sublime in comparison to the invention of logic and arithmetic. As long as this is the way one 'likens' man to God, the *quasi alius deus* formula retains its good medieval appearance, at least remaining on an equal footing with the biblical creation of man "in the image of" God. This still holds even for the standard analogy between the poet and artist and the Creator of the world. But it no longer holds when the unsurpassability of an accomplishment can be grasped in its own evidence, and thus [human/divine] equivalence makes any relation of foundation a matter of indifference, and it no longer holds when the supposedly given condition of being an image [of God] becomes something that one wants to be, as the full enjoyment of a newly discovered potentiality. The latter, as the radical *velle se esse deum* [wanting to be God oneself] of human sinfulness—precisely in wanting to be good—was what Luther suspected; the former was discovered by Galileo when he thought that he had disclosed, in mathematized natural science, a level of truth unsurpassable even for God. Husserl still formulates the eidetic evidence of the phenomenological act in such a way that even God cannot have given Himself anything more or anything else of the essence of, for instance, red than one who knows in that manner, just as Goethe had already said to the
chancellor, Müller, regarding the "Urphänomen," that "God Himself knows it no better than I do."

The Cusan's development of the idea of man's likeness to God also relates to the theological predicate—speculatively just as fruitful as it is destructive—of infinity. Only by that means can docia ignorantia also become the anthropological 'method,' as it was the theological and the cosmological method. The nature endowed with intellect is in potentia infinita [potentially infinite], is "infinite in its power of comprehension," but it is this essentially in time as a process of semper plus et plus intelligere [always comprehending more and more]. If the infinite potentiality of the human spirit as progress in time realizes itself in an always open dimension, then this idea at least does not exclude a conception of the realization of knowledge that would have to functionalize the individual man and his finitude for itself. If, in the modern age, such a foundation of the idea of infinite progress in a genuinely theological image of man has no longer been attempted, then that proves neither the radical heterogeneity of the idea of progress nor that it originated, as is asserted, in a 'secularization' of theological eschatology. Instead the theological speculation itself had both given rise to the necessity and also provided the systematic connection to set the categories that had been gained from speculation about God in communication with the idea of man.

However, this communication system did not yet allow the fact to emerge that the triad infinite God/infinite world/infinite human spirit opened up alternatives, that it held in readiness the possibility of each of its components becoming autonomous. For the Cusan, it was still entirely beyond question that in spite of its infinitude, the world could not offer man an essentially adequate, fully satisfying object. The fact was still concealed from him that this privative, indefinite infinity could fail in its 'Platonic' effect of referring to the ideal infinity of God and, precisely in its lack of definiteness, could become the compelling motive of cognitive movement for man. An interpretation of the Cusan that sees the aspect of his work that points toward new formations and begins to move toward them as resulting from a basically conservative motivation will of course have to respond to the question to what extent pretensions are granted to man in the Cusan's anthropology that were to be raised by and for man in the coming epoch. Here the bracket connecting these pretensions to the conservative motive
always remains the presupposition that can be reduced to the formula, Man is great because his God is great.

This appears most clearly in the ascription to man of an originating, creative potency. The entire intellectual structure of man is understood in terms of this potency, and yet within the unity of this structure there is an entirely definite and very problematic differentiation. The cognitive capacity of the human spirit, its accomplishment all the way from the construction of concepts \( \textit{notiones} \) to the projection of conjectures \( \textit{coniecturae} \), is understood, as we saw, according to the theological model of the unfolding of an original simplicity: “Anima rationalis est vis complicativa omnium notionalium complicatiorum” [The rational soul is the power of folding together (complicating) all conceptual unities (complications)].\(^{66}\) This conception of knowledge remains peculiarly unproblematical only because in the case of man the Cusan leaves out the difficulties of his theological model. It appears self-evident to him that the performance of the divine likeness, for its part, is also a likeness; it imitates not the world, but the origin of the world. So the \textit{explicatio} that is carried out in the human spirit becomes a ‘representation’ of the divine \textit{explicatio} of the world.

The possibility of things, insofar as it is projected by the human spirit, cannot be traced back behind the act of will in which God posited the possibility of the world before He created it. What a world is or can be is preconceived and predecided in this aggregate of exemplary possibilities as something that, being beyond question, is reassuring for one’s attitude to the given and rejects or restricts the problem of theodicy. Consequently, a world of concepts and conjectures, insofar as it is merely a ‘world,’ simply cannot fail to hit the mark that is the world of things. In this context, the proposition that “the similarity of the human intellect to the divine lies in its creative activity”\(^{67}\) is a logically necessary result of the human intellect’s capacity for truth, insofar as what can result from a process that can be called “creation” seems to be firmly established. But now the Cusan’s theological deliberations, which we have already described, show what difficulty arose for him from the fact that the power of God the Creator had been conceived as an omnipotence independent of the exemplary pregiveness of a uniquely possible world and realizing the world, as a contingent fact, only by a volitional decree. From this position, the Cusan can polemicize against Aristotle’s metaphysics of substance and deny reason the right to demand a reason for the specific constitution
of the world. He compares this denial to the fact that no reason, but only stipulation, can justify the establishment by decree of particular units of measure within a state: “Why the heavens are the heavens and the earth, the earth and man, man—for this there is no reason other than that He willed it so, Who created them. To question beyond that is just as foolish as to demand yet more proof in the case of Aristotle’s first principles.”68 The human spirit imitates the God Who created it, not the God Who willed its possibility.

Thus the Cusan deprives his anthropology of his own formulas, in which he distinguishes between reason and will in the prehistory of the Creation. The will is the world aspect of the infinite, and the world therefore has an elemental communicative character; it is “like the Word become an object of the senses.”69 The Cusan always simplifies this basic problem when he is concerned to stabilize the relation of complicatio and explicatio as the firm and dependable dimension of his speculation. Then he asserts that the theologians have simply identified the exemplars of the Platonic tradition, the Ideas, with the biblical concept of the divine will.70 Where, on the other hand, the Cusan speaks outside the consistency constraints of his system, for instance, as a preacher, he gives way to the voluntaristic sovereignty proviso of the late-medieval concept of God, with its exposure of the world as a contingent fact. In the sermon Ubi est qui natus est rex Judaeorum [Where is he who was born King of the Jews?],11 he takes up the obtrusive questions regarding the problem of the Creation and rejects them with a citation from the prophet Jonah (1:14): “Sicut voluisti, fecisti” [Just as He wanted it, He made it]. One would have to answer those questions by saying that if God had willed it, He would have been capable of it (“Sic igitur respondes: si voluisset, potuisset”). Under the pressure of the question of the reason for existence, the authorities of reason and freedom diverge, and the place of the required reason is filled by the appeal to the decree of freedom: “Unde non est alia responsio nisi: voluntas dei est libera, et pro ratione respondet libertas” [Whence there is no other answer except that God’s will is free, and freedom answers instead of reason]. That which in the preacher’s edifying discourse puts impious further inquiry in its place cannot be similarly blunted in the thinker’s system. Does man’s creative potency also possess in this respect something of its divine original, so that it must be granted the capacity to posit contingent facts, to advance into the realm of unrealized possibilities? Could the Cusan
break through the principle of imitation, the obligation determining all human productivity since the ancient world? 

So long as nature in its constitution was not a contingent fact, so long as it realized exhaustively the full scope of the possible, because the eternal exemplars were already imitated in it, nothing was left to man either except to imitate this pregiven stock in his turn. This world might be worse than its original, and then man could undertake to represent it not as it was but as it should be. Man's latitude lay in the distance between original and image, between concept and reality. That was also the theory, dogmatized by Aristotle, of art as the perfection of what nature had been able to bring to a certain point. But the late Middle Ages' consciousness of contingency cut the ground from under this conception. The perplexity aroused by the question why the Creator had singled out this and no other tiny particle from the sea of infinite possibility, the idea of a choice without human intelligibility, made reality indifferent with respect to what surrounded it as the corona of possibility. Of course the question was not meant that way; it was meant to enforce not utopian speculation but rather submission and acceptance of the mortgage attached to the revealed promise of salvation.

It is true that the means by which this coercion could be evaded was also resignation regarding the question of the justification of the world, but given this resignation, it was also the new urgency of the question of what then was left for man. It was left to man resolutely to turn his gaze to the scope of what was not pregiven in the factual world but could perhaps be realized by his own power. In the difference between reality and possibility, between infinite omnipotence and the factual world—taking offense at the scandal of the unfathomability of the world—man discovered that he could be something other than an imitator of nature.

Could man be a creator? This question was prepared in the history of one of the Scholastic questions that were entirely devoted to working through the concept of God and the predicates reserved to it. In the *Sentences* of Peter Lombard, to comment on which was obligatory journeyman's work for every teacher of theology, there also arose the problem whether anything besides God could bear the attribute *creator*. Into the fourteenth century it seemed perfectly obvious that this question could only be decided in the way the Lombard had decided it, that is, negatively. The unequivocalness of the answer then became
dubious, from two directions: first of all from the side of its provability, which William of Ockham, against Duns Scotus, was the first to hold not to be given; and second, from the side of the speculation about omnipotence, which finally had to pose for itself the question whether a restriction of God's omnipotence was not implied when one denied the possibility of His creating a being with the power of creation. Here, as so often, it turns out that Scholasticism first raises, in the composed presumption of unequivocal answerability, those questions on which its positions were finally to shatter.

For the Cusan, the question is not already decided by the fact that in his theory of knowledge he interprets man as creative. For this daring is blunted by the requirement that what man projects must be appropriate to the divine Creation. The question is now posed more radically, and specifically because it seeks in man's status as "created in the image of God" the element of infinitude as well. In the treatise On Conjectures, man is designated as humanus deus [a human God]: "Human being (humanitas) is a unity, and that means that at the same time it is infinity realized in a human manner (infinitas humaniter contracta). Now, however, it is the nature of such a unity to unfold beings from itself (ex se explicare entia), for it contains in its simplicity a multiplicity of beings. So also man has the capacity (virtus) to unfold everything from himself into the circle of the region he inhabits (omnia ex se explicare intra regionis suae circulum), to make everything arise from his power as the center (of that circle) (omnia de potentia centri exercere)." Here the diagram of circle and center represents the inclusiveness of the relation between creative origin and projected world, the way in which the reality that arises from man refers back to him. "Human being itself alone is the goal of the creative process (activae creationis) founded in it. Man does not go beyond himself (non pergit extra se) when he is creative (dum creat): rather, in the unfolding of his power, he comes to himself."

Inevitably this is followed, once more, by the restriction that still is and must be self-evident to the Cusan in this phase of his thought, namely, that man, who is creative in the unfolding of his essential unity, produces only the universe of possibilities that is already laid out in him and therefore creates nothing new in the process (neque quiquam novi efficit). Creative production and true knowledge are still identical here: "There is no difference between advancing in apprehension to everything and containing everything in oneself." Thus
even as the origin of a creation, as principium contractum creationis [the restricted principle of a creation], man continues to be harnessed into the correspondence structure of theological, cosmological, and anthropological infinity.

About a decade later, in his *Idiota* dialogues of 1450, the Cusan makes the Layman, the simple craftsman, say something different to the philosopher about his own handicraft, woodcarving. This man displays a spoon he has carved and says, “The spoon has no original other than the idea in our mind (coclear extra mentis nostrae ideam non habet exemplar). If the sculptor and the painter take their models from the things that they strive to imitate, that is not true of me; I who make spoons out of wood and dishes and pots out of clay. In this activity I do not imitate the form of any naturally given object, since the forms of spoons, dishes and pots arise by virtue of human skill alone. Consequently my art is more perfect than one that imitates the forms of objects, and thus is more similar to infinite art.” The Layman represents a new type of human self-consciousness, opposed to Scholasticism and rhetorical humanism. When once the philosopher says to him that he appears to be a follower of Pythagoras, he answers him, “I don’t know if I am a follower of Pythagoras or of someone else. But I do know this, that I don’t allow myself to be fixed by the authority of any man, even if it seeks to influence me.” To this consciousness of original self-realization belongs the triumphant indication of the realm of the technical forms, which are no longer something he owes—as having been read from nature—to a piously accepted pregiveness but rather are supposed to have come into existence sola humana arte [by human art alone]. It is important that the Cusan presupposes no specifically ‘elevated position’ of reflection for this self-consciousness. It is not the traditional special circumstances of artistic production on which such a self-consciousness is based; on the contrary, the spoon carver directly contrasts his accomplishment with that of painters and sculptors, who depend on the imitation of nature—non tamen ego [but not I] is his formula.

It is significant that this pathos of ‘creative’ man commences here with the technical, not the artistic, type. If one keeps in mind how in the following period the testimony of creativity concentrates almost exclusively on the fine arts and poetry, so that it will belong to the manifestation of art in the modern age that the author begins to speak of himself and his productive moments, whereas technical invention
and production still had to contend for a long time for self-appreciation and recognition on the same level, and then finally nevertheless could only reach back to the language of the self-interpretation of the fine arts in order to formulate themselves—only, then, if one keeps this in mind, does the figure of the idiot [layman] obtain its significance. But it is nevertheless not a figure of human self-empowerment. In the final analysis, the Cusan breaches the principle of imitation in describing man's productive relation to the world only in order to use the concept of imitatio all the more emphatically and exclusively for the other side of his metaphysical triangle: When man does not imitate, but rather originally produces, he imitates immediately the absolute origin of everything imitable. He was created for this one imitation. In the dialogue On the Mind, he makes the Layman say that the Mind was created by the art of the Creator as though this art had wanted to create itself. But, precisely, only "quasi"; if this "as though" were missing, Giordano Bruno would be closer at hand.

Can this anthropology that reaches ahead of itself in daring formulas arrive at a concretization, a confirmation in man's complex performance structure? The Cusan gave perhaps the finest, most deliberate exemplification of the originality that is characteristic of his image of man, and one that still points least of all toward modern technicity, in his treatise On the Globe Game. Here the guide for the investigation of human spontaneity is not the tools of self-assertion but rather the invention of a game as a reality closed in itself, a 'world' that unfolds itself with its own elements according to set rules. The ideal of knowledge of a coherent reality is thus derived from the way in which man knows, precisely, his world of play as the reality that is continually derivable from and perspicuous through his positing. In On the Globe Game, the invention of the new becomes the possibility of the self-discovery that the soul practices with itself so as to assure itself of its power, self-movement. The difference between man and beast is sharpened to this very specificity, that man hits upon the idea of inventing new games for himself. Further: Man alone is able, in the absence of light, to help himself and to make vision possible by the light of a lamp; he alone can aid deficient vision with eyeglasses and correct the errors of sight by means of the art of perspective.

Regarded in this way, phenomena move together, become visible in their genetic convergence, which previously had scarcely been seen in such proximity. Language, writing, number, and syllogism each
become particular world-explications, like the invented game; in the
second book of On the Globe Game, the disciplines of the quadrivium—
arithmetic and geometry, music and astronomy—represent original
inventive accomplishments of man, which, we are explicitly assured,
have the condition of their possibility exclusively in the human soul.
Man’s ‘equipment’ is regarded less from the point of view of its function
as means to ends than from that of its explicative worldliness; the
astrolabe of Ptolemy and the lyre of Orpheus are exemplary novelties
of invention, which are structurally closed in themselves and yet at
the same time are mediating orientations, reified conjectures, as it
were, for knowledge. The world map that the cosmographer produces
is an especially characteristic simile for the Cusan; it does indeed bear
a similarity to the represented world, but it is anything but a com-
bination of images of what it represents. It is a reconstruction, and
resembles conjecture in that it is indeed ‘participation,’ insofar as it
represents, but participation in otherness. The cosmographer furnishes
a representation of the whole world apprehendable by the senses
because, while it is true that he works up, orders, and brings to a
common scale the data and information brought to him from outside,
nevertheless in fact he remains at home, shuts the door, and turns
his gaze inwards to the world ground that lies in himself, which alone
provides him with the principle of the unity of all the facts brought
to him from outside. Nicholas made use of an experience of his own
in this picture of the cartographer; he had had a map of Central
Europe drawn on the basis of critical accounts of journeys, which,
however, was only engraved in Eichstätt in 1491, long after his death.

Finally, in the work of his old age, De venatione sapientiae, the Cusan
uses the example (exemplum remotum) of the creation of the art of the
syllogism, not indeed for the creation of the visible world, but rather
for that of the ground of its possibility, its posse fieri itself. Here the
voluntaristic element that presses forward so strongly in this late work
is already allowed for in the initial formula: “Intellectus magistri vult
create artem syllogisticam” [The mind of the master wants to create
the art of the syllogism]. The teacher of logic posits and secures the
possibility of this art’s coming to be (“Ponit igitur et firmat posse fieri
huius artis”). However, the forms of the procedure of inference are
grounded in reason (in ratione fundatae) in such a way that every syl-
logism that is concretized in language must imitate them—at this point,
then, the imitative moment joins the creative one. This is why it is
possible for the inventor of this art (inventor magister) to hand it down to the teachable student. And just this is the simile for the origin of the world artifice: “Sic forte se aliqualiter habet mundi artificium” [Perhaps it is the same with the world artifice]. God also creates first of all the world’s posse fieri [possibility of coming to be] and hands it over to obedient nature as though for ‘application.’

When the Cusan brings up geometry as a further example, it is significant that this exemplification does not lie on the same plane. It is said of the geometer, as distinguished from the logician, who imitates God immediately in the creation of the ground of the possibility of his art, that he imitates nature. The geometer directs his gaze at the pregiven concept of the circle, its praedeterminata ratio, and seeks to carry through in construction the instruction given there. He imitates nature inasmuch as he arranges the transition from concept to perception. This concept is not that of an absolutely precise ideal figure, from which all concretely drawn figures deviate by their imprecisions. Rather it is an instruction concerning the distance of specifiable points on the circumference from the center of the circle, an instruction that says nothing about the magnitude of the radius, and thus also permits the symbolic paradox of allowing it to increase infinitely. Only such instructions are inventable; their constructive execution, the concrete rendering visible of their implications in a figure, is nothing but explicative carrying out, imitation. For the Cusan, the geometer stands on a different level from the logician.

This special position of geometry as compared to arithmetic and syllogistics is not yet seen in the Cusan’s early writings. Between De docta ignorantia and De coniecturis, which favor (respectively) geometrical and arithmetical metaphors, there is no distinction in the evaluation of the guiding realms. In the first of the two early works, the topic of methodical utility is explicitly raised: Mathematics helps us the most toward comprehension of the differentness of the divine (“Quod mathematica nos iuvet plurimum in diversorum divinorum apprehensione”). The advantage of the mathematica [mathematical things], as against the naturalia [things in nature], in illustrating the knowledge of God lies in the fact that as products of human construction, they are ‘deformable’ by following specific rules, like that of making the radius of a circle infinite—that is, it lies in the fact that man is not bound to a pregiven essential form that he has to respect. Hence the possibility of employing ‘explosive metaphor’ in this field as a means
of symbolic investigation (ad divina per symbola accedendi nobis via [a path by which we approach the divine by means of symbols].

His Platonist start has led the Cusan so far beyond Plato that in the treatise On the Beryl he can charge him with the error of not having distinguished between the ideas that are given to us and those that we ourselves produce and of having missed the differentiation of truth that goes with this. “For he said that one could regard the circle in its name or its definition, in a drawing or a mental concept; and with all of that one would not have the nature of the circle. Its essence, which subsists free from all contradiction, simple and immortal, can, on the contrary, only be seen by reason. In fact Plato asserts this equally of all things. If he had reflected on this, he would have found that our mind, which creates the world of the mathematical, has that which it can create more truly and more actually in itself than it is outside of it. Thus man has shaping art, and the configurations of this art, more truly in his mental capacity of conception than they can take shape outside it... And so it is with all that sort of thing: with the circle, with the line, with the triangle, so also with our concept of number—in short, with everything that originates from the human mind and not from nature.

At this point, if not earlier, the question arises whether and how the freedom that the Cusan grants man as the independence of his theoretical and technical accomplishment from pregiven reality includes the final and central element of every anthropology, the moral autonomy of an active being. For the Cusan’s system of synchronized intensifications in the metaphysical triangle of God, cosmos, and man, this question must acquire a critical importance. Can the theological speculation about transcendence be ‘translated’ into the idea of human autonomy? In connection with this question, research on the Cusan has depended on the testimony of the treatise On God’s Vision. This treatise, produced in 1453, explains man’s self-conception by the simile likening it to the portrait that seems to look all of its viewers in the face at once. Thus each individual in his place stands immediately before the absolute. No position is distinguished above the others; transcendence levels off hierarchies and stratifications in what it surpasses. Everyone who raises his gaze to the picture is regarded; but he is regarded only when and because he, for his part, looks toward the picture. The plurality and individuality of the viewers are not
opposed to the identity of the picture; rather they are the partnership appropriate to it that for the first time unfolds its mysterious potentiality.

Not all of the Cusan’s metaphors are equally successful and clarifying. One need only think of the simile of casting peas, in the second book of On the Globe Game, with which, perplexingly, something entirely opposite seems to be meant, namely, that the variety of objects in the world, as a deviation from absolute unity, is simply not founded in the will of the Creator: In the casting of a handful of peas to the ground, the falling motion of the individual peas results in accidental variation, although the caster has after all performed only one cast. It is true that the simile is meant to retain the uniqueness of the individual, but at the same time it leads to the indifference of accident and thus to a devaluing origin; between the will of the Creator and the individual a mechanical factor intrudes. Aristotle and Epicurus appear to be harmonized in this image, and the fact betrays itself that toward the late works, the power of more than superficial harmonization diminishes in the Cusan, and the thinker’s achievements, which seem to be bullied out of the Scholastic tradition, nevertheless still occupy insecure ground. Of course in the case of the simile of the all-seeing picture, which originated ten years before the pea-casting simile of On the Globe Game, one could also adduce the misgiving aroused by the element of illusion. But that belongs to the emphasis on perspective in the Cusan’s thought and includes the attempt to establish a systematic consistency between cosmology and anthropology, between the loosing of human self-understanding from the orientation of cosmic localization and the definition of its freedom vis-à-vis the absolute origin.

When each individual before the all-seeing portrait in the simile conceives of himself as the one who is expressly and uniquely regarded, an optical illusion arises analogous to the one that is described, for each location in the cosmos, as the illusion of centrality. “It seems to everyone, whether he finds himself on the earth, the sun or another star, as though he himself were at, as it were, an unmoving center, and as though everything else were moving.”³⁹ But just as that cosmic illusion of centrality was not only an illusion but also a metaphor of a metaphysical state of affairs, so also the illusion before the all-regarding picture is not only an illusion. “Thus the world frame will, as it were, have its center everywhere and its circumference nowhere, because circumference and center are God, Who is everywhere and nowhere.”⁴⁰ The fact that the world has no actually designatable center
and nevertheless everywhere furnishes the viewer with the appearance of being in the center is thus the cosmic metaphor of the metaphysical state of affairs familiar in the Cusan’s thought as the pseudo-Hermetic doctrine of the infinite sphere. This might have served to prevent any disappointment resulting from the Copernican exposure of the geocentric illusion and to ascribe a new symbolic role to the world, symbolic in relation to absolute transcendence.

The gaze of the all-regarding picture, which every viewer can refer to himself, ‘exists’ just as little as does the center of the world; but the very illusion that cannot be objectified discloses to man his position, which can no longer be read off from worldly realities. In the reciprocity of the transcendent relation, in free and response-awakening turning toward [God], he finds himself made capable of a self-consciousness that even, indeed particularly, over against the absolute is not pure lostness and utter dependence. Thus the Cusan has man experience his emancipation in the simile of the all-regarding picture: “When I thus rest in the silence of contemplation, you, Lord, answer me in my own breast, saying: Be your own, and I will be yours. You, Lord, have left me free to be my own, if I will. If I have not become my own, then You also are not mine. You make my freedom necessary insofar as You cannot be mine if I am not my own. Because you have left me free for this, You do not constrain me, but You expect that I will decide to be my own.”

One will not diminish the importance of the passage by asking what type of concept of freedom is intended here. For precisely in the implications of this concept of freedom, the Cusan’s acute concern regarding the disintegration of the Middle Ages becomes tangible. This disintegration had led at first to the position of nominalism, which had deprived human freedom of any significance over against God’s absolute demand for justification and had put man in the position of having the condition of his salvation offered to him in naked contingency, as something to which to submit. And then even this submission was supposed to have resulted from an act of election on the part of the Divinity. Nominalism had seen God’s demand as humanly unfulfillable and had thus posited the path of grace as absolute. Moral quality and fulfillment of the theonomic condition of salvation had parted company. After that, any attempt to satisfy God’s demand became entangled in human self-validation and necessarily failed to meet the intentio praecipiens [teacher’s intention]. Luther will formulate
this paradox of theonomy in the treatise De servo arbitrio as follows: "Man is not capable of humbling himself fully until he knows that his salvation depends, entirely outside his powers, decisions, efforts, outside his will and his works, on the free judgment, the decision, will, and work of another, namely of God alone.” On the question of human freedom and its significance for salvation, the Middle Ages disintegrates—its dissociation is effected—into radical self-disempowering, on the one hand, and equally resolute self-empowerment, epitomized in the zone of what will be called the “Renaissance,” on the other hand.

It is only as a countermove against the unreasonable demands of theology’s contesting of freedom that it becomes possible to understand the attractiveness gained by the ideal of the Stoic wise man, who satisfies himself in the rigorism of the inner consistency of his virtuous will and withdraws from the accident and uncertainty of worldly fate into the undisputedness of his disposition over himself. But even this ideal undergoes an essential change in its presuppositions. The ancient wise man secures for himself the space of his undisputedness by not meddling with what is not open to his power of disposition. He seeks his happiness as inwardness. The new premise, however, is that man does not meet with the boundary between what is and what is not at his disposal as a fixed determination, but rather that he begins to regard nature also as something potentially masterable.

The program of knowledge of nature is governed by this presupposition, that the theory of physical processes suspends the pure externality of nature and brings under control those of its workings that are relevant for man. The systematically complete connection between a Stoicizing ethics and a new concept of science will become evident in Descartes. For him freedom is bound to the presupposition of mastery over that which without insight remains pure accident and delivers man over helplessly to the conditions of the reality surrounding him. Knowledge makes nature into man’s property. The connection between property and freedom persists also and particularly in this conception.

If one keeps these two directions of the final medieval dissociation process in mind, then the Cusan’s conservative effort becomes evident here too; he attempts at a late hour to make the autonomous power of man, which is in the wings, result yet again from an empowerment, and thus to bind it to an original act of absolution or emancipation [Freisprechung]. But he can do this only by holding to and thinking
Part IV

through further a basic figure of the traditional concept of freedom, namely, freedom as the suspension of a property relation, as a passing over of the property right to one who is 'set free' from the original property relation. God, so says the Cusan, wants man to take over for himself and to exercise the original property right of the Creator in His creature. The theological concept of man’s absolution [Freisprechung] liberates from guilt; the philosophical concept [Freisprechung in the sense of emancipation] liberates from dependence on the ownership that God, as the Author of his existence, has in man.

That freedom has its origin in an act of liberation is founded, as a basic idea, in the ancient tradition and conception of right. The Cusan’s taking over of this idea has the difficulty that the emancipation is not an effective legal act in itself. On the contrary, a duty is ascribed to man, which as such already presupposes freedom, to bring about the conveyance of his property in himself and to assert himself in it. This construction of a ‘theonomic autonomy’ is fragile enough. It is not a purely metaphorical illustration, however, but rather stands in a thoroughly medieval frame of reference, which, at the same time, it points beyond.

For the background of the leading metaphor of property and liberation, it is instructive to go back to some testimony from the beginning of the Middle Ages, which is found in Augustine’s argument with Julian, the Pelagian. In the disputation that Augustine simulates, Julian proposes a definition of freedom of the will: The free will by which man is released from God’s power of disposition consists of the possibility of admitting sin or abstaining from it. Augustine answers with a sentence that does not enter at all into the main part of his opponent’s definition but rather refers to the subordinate clause: Julian speaks of man’s liberation by God—does he not notice, then, that what happens to someone who is set free in that way is that he no longer belongs to the father’s family? Perhaps one may find in this short exchange of words one of the basic decisions that underlie an age, or that one must think of as underlying it if one wants to understand it as a meaningful unity. The Cusan made of the liberation an act of self-emancipation, which, however, at the same time is the epitome of obedience and does not dissolve the ‘family bond’ but rather is grounded only in God’s self-abandonment to the free man.

At this very point, where the discussion of the Cusan’s anthropology culminates and could be concluded, an essential systematic piece of
the Cusan’s speculation must be brought up, whose indispensability already follows from remembering that the Docta ignorantia has a third book, of which we have not yet spoken. This third book contains the essentials of the Cusan’s Christology. One could say that he then crosses the threshold into dogmatic theology. But the Cusan’s anthropology is not complete without his Christology. It is the central element of a system that is meant to carry out the exaggeration of transcendence without paying the price of the annihilation of immanence, that is meant to let the additional gain to the absolute flow back into the substance of the conditioned. But even independently of the desirability of presenting the Cusan’s system in the integration that he himself gave it, the Christology is indispensable in order to make visible the epoch-making difference between the Cusan and Giordano Bruno, the Nolan. The intellectual offense that ultimately led Giordano Bruno to the stake is directed against the dogma of the Incarnation.

For a Christmas sermon, Nicholas wrote regarding the necessity of God’s incarnation, “God created all things for His own sake and in such a way that the universe would have its full greatness and perfection only in relation to Him; but the universe could not unite with Him, since there is no proportion between the finite and the infinite. Consequently everything has its goal in God through Christ. For if God had not taken on human nature, which as something intermediate includes the other natures in itself, then the whole universe would be incomplete; indeed it would not even exist.”

To represent the Incarnation as the inner consequence of the Creation, to lead the eternal predestination of the Son of God to become man, of which Duns Scotus had already spoken, out of the voluntarism of the concept of predestination and to bring it nearer to human comprehension by means of a rational deduction, is the program of the first four chapters of the third book of On Knowing Ignorance.

Whereas the first book had dealt with God as the absolutely greatest (absolute maximum), and the second book had dealt with the universe as the restrictedly greatest (contracte maximum), the third book deals with the simultaneously absolutely and restrictedly greatest (de maximo absuluto pariter et contracto). The concept of contractio [contraction, restrictedness] causes difficulties for the understanding; on the one hand, it is the opposite of abstractio, and then it signifies the concrete object’s being characterized by a drawing together of predicates each of which in itself is abstract—and on the other hand, it is the restriction
of the individual, which as something actual never exhausts the range of the possibilities of its realization. "Restriction" is thus the general and thoroughgoing characteristic of the actual world and of what is actual within it. What is actual is this or that, which is to say that as this and not that, it is actual at the expense of possibilities no longer open. Nothing actual is what it can be. That makes movement the continual conversion of possibility into actuality, a conversion characteristic of all reality in the world. Hence there is a multiplicity of the individuals of a species in the world—an admission, as it were, of the inexhaustibility of what is possible within the species by what is ever actual in it. But the universe also, as a unique whole, the universi prima generalis contractio [the first, general contraction of the universe], which is followed by the further degrees of restriction into genera, species, and individua, does not exhaust the horizon of possibility, which is defined by God's omnipotence.96 "The universe does not reach the limit of the absolutely greatest, just as the genera do not reach the limit of the universe, the species the limit of the genus, the individuals the limit of the species. So everything that is, between the greatest and the smallest, is to become ever more perfect, and only God is to be the origin, center, and goal of the universe and of the individual things. . . ."

Here reflection on omnipotence, the most agitating motive of late-medieval speculation, falls into one of its antinomies: If the universe exhausted the creative potential of its origin, then it would be at the same time the limitation of this potential, insofar as it would manifest the inability to do more; but insofar as the universe is supposed to be the work of the highest wisdom and goodness, which manifest themselves in it, it is inconceivable that that potential could not have spent itself in its prodigality and not have realized the greatest thing possible for it. Thus the Creation must, on the one hand, possess the highest possible perfection and may not, on the other hand, reach the limit of what is possible for its origin. Formulated differently: If God could not make the world into the most perfect possible work because He would have contradicted Himself in the process, then He should not have willed this work. This is the basis of the idea pursued in the passage quoted from the sermon, that the universe would not exist at all if it were not capable of being brought to perfection.
This antinomy is 'resolved' by the Incarnation. There must be among the realities of world, among the aggregate of restrictions, one real thing that exhausts the potentiality of the species in which it exists. If there were an entity that as an individual represented the greatest in the restriction of a species (maximum contractum individuum), then its existence would have to be the fulfillment of that genus and species and it would be the way and the form, the essential reason and truth in the fullness of perfection for everything possible in this species. Such a maximum in restriction would surpass the nature of restriction and would at the same time be its final goal, since it would contain in itself all its perfection. . . . But the world, of itself and in itself, cannot contain such an entity because it would violate the requirement that God's omnipotence not be restricted from outside. Only if this creature could at the same time be the Creator would it lose the character of externality with regard to God and become the perfection of the Creation as the Creator's self-restriction. "Such an entity, insofar as it is something restricted, would not be God, Who is the pure absolute (absolutissimus), but instead, as the maximum in restriction—that is to say, as God and creature—it would necessarily be absolute and restricted at once, and specifically in a mode of restriction that could not subsist at all in itself if it did not subsist in what is absolutely greatest (in absoluta maximitate)."

Thus we are led in a purely hypothetical consideration to the basic idea of the 'hypostatic union' of God and creature. This idea does indeed remove the antinomy of omnipotence, but by means of a solution that in its turn, as the Cusan himself admits, entirely exceeds our understanding: "Haec admiranda unio omnem nostrum intellectum excereret." This mysterious unity of creator and creatura is to be conceived neither as mixture nor as composition (absque confusione et compositione).

What is now still lacking from the introduction of the dogma of the Incarnation is only the demonstration that the species of creature that would be most perfectly disposed for this union is human nature. This occurs in the third chapter through the thesis that that entity is suited for union with the Divinity that includes in its being the most of the universe of reality. This should be neither an extremely lowly nor an extremely sublime substance, then, but rather a natura media [intermediate nature]. Such a nature in fact is human nature, which was already correctly designated by the ancients as a microcosm. "If this nature were elevated to union with the greatest, then this would be
the fulfillment of all the perfections of the universe and of its individual beings, so that in human being everything would reach its highest stage of existence.” Once the path has been traversed this far, what is still needed is only the scarcely more difficult demonstration that only an individual human nature and only a particular person of the trinitarian Divinity could enter into this unification.

But so far the discussion has been entirely in the mode of potentiality. The proof must still complete two steps: first, that this solution not only does not contradict God’s essence but rather is in the highest degree suitable and essentially appropriate to it; and second, that this unification of natures has been manifested as an actual phenomenon in the world.

The first step already resembles the significance of the ens perfectissimum [most perfect being] in Descartes, with which he extracts himself from his experiment with doubt. “If one does not recognize this path,” the Cusan writes, “then everything could still be more perfect than it is; but no one, unless he is a denier of God or His goodness, can rationally dissent from this train of thought. For all jealousy is foreign to One Who is pure goodness, and His actions can have no defects; just as He Himself is unequaled, so it is also with His work, which comes as close as possible to being unequaled. But the unequaled power has its limit only in itself. . . .” This requirement is fulfilled when a man is elevated to unity with the unequaled power itself, so that he is no longer man as a creature subsisting for itself but rather in unity with infinite power, so that this power is limited not in the creature but in itself.98 The Cusan accomplishes the second step by subsuming under the foregoing premises the additional one that the temporal position in history required for the appearance of a human individuality is already given, so that this historical appearance can be designated with a name.99

As with other doctrines, Wenck did not characterize the Cusan’s Christology as incorrectly as might be expected. In the passage in which he reproaches the Cusan with turning annihilation into deification, he also imputes to him an identification of the generation of the Son of God and the creation of creatures.100 This imputation is not so false, since while for the Cusan the generation of the Son of God is not an event bound to the act of Creation, his Incarnation is such an act, one which alone removes the antinomy of the Creation and is thus necessarily implicated in it. Not only does the Incarnation
complete the Creation, it is only the reality of the Incarnation, determined from eternity, that makes the Creation possible at all. This is bound up with a further accusation made by Wenck against the Cusan, namely, that he universalizes human nature in Christ (universalisatione humanitatis Christi) and inevitably does away with the historical concreteness of this figure (tollit singularitatem humanitatis Christi). But then Christ's redemptive service would be ascribed to human nature itself.

Now this last remark in particular fails to hit upon the essence of the Cusan's Christology to the extent that the latter's saving significance (Heilsbedeutung) is hardly in redemption and a merit gained for men but rather in the fulfillment of the essential potential of the world and man. This has made the Incarnation a universal, a cosmic event. Nowhere is there talk of the fact that man's sin has compelled God to sacrifice His son. The Creation, not sin, the deficiency of nature, not that of man, presses toward this consequence.

But is it already the ultimate consequence? Has the theological furor of the late Middle Ages been successfully reconciled with the will of perplexed man to secure his own right over against transcendence and not himself to come to nothing in the face of an inflated God? The death of Giordano Bruno will be a beacon signaling the failure of this reconciliation.

**Translator's Notes**

a. See translator's note b to part III, chapter 7.


c. This paragraph begins an extended discussion of the Cusan's cosmology. The chapter is completed by a discussion of his anthropology (and, finally, his Christology) that begins with the paragraph of text corresponding to note 49.

d. I have inserted the Cusan's distinguishing terms, "absolute" and "restricted," in brackets here in lieu of the difference in gender (der Grösse versus das Grösste) in the original text. On the concept of "restriction" (contractio), see the text corresponding to note 95 of this chapter.

e. A term coined by Goethe to designate a primary, irreducible phenomenon or experience that illuminates day-to-day experiences.

For the Cusan, the moment of the Incarnation of the son of God, which he believed to be accomplished in historical individuality, was at the same time the culminating point of metaphysical speculation, with its all-dominating effort to 'overtake' the transcendence of the Divinity by means of the communicating transcendence of man and to draw the universe, in its representation by man, by an individual man, into the reflection process of the Divinity. Precisely this basic figure of the Christian self-conception—God's entry into the singularity of man in the universe—becomes the fundamental scandal, the offense that could not be suppressed by any threat, to which Giordano Bruno of Nola testified on February 17, 1600 at the stake in the Roman Campo di Fiore by averting his face from the crucifix that was held before him, a kind of testimony that had been regarded, in the early part of the epoch that now and not least with this event came to an end, as the highest martyrdom for the truth.

Bruno did not die as a doubter, as one of the heretics whose dogmatic deviations always strike the historical observer as intra-Christian goings-on. Bruno died for a disagreement that was directed at the center and the substance of the Christian system. In the notice of the burning of the Nolan that the Avviso di Roma carried on February 19, 1600, emphasis is placed on the dogmatic irregularity of the element of caprice, which was also to be taken over more or less explicitly by the literature on Bruno under the rubric of 'hypertrophic imagination': The Nolan had "di suo capriccio formati diversi dogmi contra nostra fede" [capriciously
formed diverse teachings contrary to our faith], and in particular he had directed his opposition at the Holy Virgin and the saints. For this, so the incidental newspaper announcement emphasizes, he wanted to die as a martyr: "... volse obstinatamente morire in quelli lo scelerato; e diceva che moriva martire e volentieri ..." [The villain obstinately wanted to die for them, and said that he was dying freely, as a martyr].

The substantial direction of thrust is clearer in the accusation made against the Nolan in an older document from the time of the negotiations for extradition between the papal nuncio and the Senate of the Republic of Venice, on December 22, 1592, in which the Incarnation and the Trinity are named explicitly as the subjects of the heretical errors of which he was suspected. This state of affairs requires emphasis not only because the documents could tend to give the impression of dogmatic arbitrariness in the deviations but also because the circumstances of Bruno's death by fire as established by historical research are not congruent with the impression that it produced, historically, in which it appeared as the widely visible beacon of the Copernican truth. This assignment of symbolic status to the event in history is not, indeed, a misunderstanding, but still it is not correct in the direct manner in which it was undertaken; it could only be verified by means of a systematic linkage between Copernicanism and the 'Incarnation trauma,' a linkage that is not manifest at first glance.

The ready expectation that the Nolan was a victim of his Copernican enthusiasm is not confirmed by the documents of the proceedings of the Inquisition against him that have become accessible so far. It is characteristic of these proceedings that the sole mention of the Copernican thesis of the movement of the earth comes spontaneously from Bruno's own mouth. In defending his work, *The Ash Wednesday Supper* (*La cena de le ceneri*), Bruno says that he intended it to ridicule the pre-Copernican standpoint of some doctors: "... in questo libro la mia intentione è stata solamente di burlarmi di quei medici e dell' opinion loro intorno queste materie" [In this book my intention was only to ridicule some doctors and their opinion on this subject]. The tribunal does not respond with a single word to this 'offer' of the Copernican theme, which gives the impression of an attempted diversion; instead it moves immediately to the question, aimed in an entirely different direction, whether Bruno had praised heretical princes. Also the doctrine of the infinite plurality of worlds, which has to be regarded as a consequence of Copernicanism, is not something that
the tribunal charges him with but is put into words by Bruno himself, and without any perceptible reaction, in fact, on the part of those who are examining him. Neither in the patriarch's request for extradition nor in the representation of the nuncio to the Senate of Venice in this connection are there indications of blame directed at Bruno's Copernicanism. Still, in interpreting the Venetian records, the possibility would still have to be considered that the tribunal in the republic wanted or had to avoid creating the impression that it had not remained within its purely ecclesiastical and theological competence. The fact that the Roman announcements in connection with Bruno's burning at the stake also betray no Copernican 'impact' speaks against this interpretation.

However, it will become evident that the post-Copernican cosmology, with its superabundant consequence of the *infiniti mondi* [infinite worlds], represents the background against which the denial of the Incarnation, of the saving event that is centered on man and that draws the universe into cosuffering and coredemption with him, attains intuitive evidence. The post-Copernican universe no longer holds ready any designated location or distinct substratum for the divine deed of salvation. In this universe, the Divinity had already fully spent Himself in the Creation. Since He did not and could not hold anything back, vis-à-vis the infinity of worlds, He was left with nothing to make up in relation to any creature in this world. Nothing 'supernatural' is possible. Only the infinite cosmos itself can be the phenomenality, can be such a thing as the 'embodiment' [Verleiblichung] of the Divinity, to think of which as a person—that is, as bound to a definite creature in the world, made actual by a temporal position—is something that the Nolan is no longer able to do. In his thought, the conflicts that were painstakingly concealed or were still 'adjusted' in the Cusan's system are fully carried through; alternatives are posed in the triad of theology, cosmology, and anthropology and are decided.

Nevertheless the Nolan's opposition to the historical Incarnation of the Divinity is not an anticipatory bit of 'Enlightenment.' That could perhaps be most impressively verified if one were to investigate in this context the Nolan's use of metaphors of light, that is, the metaphors that are most closely associated with the self-consciousness of the Enlightenment. Copernicus, then, would have been defined as the dawn light, which preceded the sunrise, which itself was accomplished through him, the Nolan. But this sunrise is no more a first occurrence
than it is final in history; for what is rising is the sun of the old, true philosophy ("l'uscita di questo sole de l'antiqua vera filosofia"), which makes its new, not its first and only, day break. The metaphor of the coming of daylight is associated with the idea of a cyclical periodization of history, in which the absence of light—that is, the night of the Middle Ages—is just as 'natural' an event as its return.

How the image of the cyclical operation of history as a natural process can be combined with the heroizing of Copernicus and of his own accomplishments is only one of the many problems of consistency that arise with this thinker. If truth and error alternate with the same regularity as daylight and nocturnal darkness—and this was how Bruno explicitly formulated it in the Excubitor that he placed before his Paris theses of 1586⁶—then it is difficult to comprehend the reality of the liberation, as a 'deed' on behalf of the human reason so long suppressed, that Bruno ascribes to himself. Such a real liberation would presuppose that reason itself can be led astray, that is, that its light, when it had already once dawned, could be extinguished and robbed of its power. The pagan fundamental idea of the recurrence of the same in history—that is, of a regularity of history dominating the realization of reason rather than arising from it—blocks off the possibility of a relation of adequacy between the Nolan’s self-consciousness and the new constitution of the epochal self-understanding of the modern age. One can see how Bruno takes over from Lucretius the figure of a bringer of salvation, which in Lucretius is the figure of Epicurus. But he does this with a clear aversion to the solitariness and uniqueness of the event that would make of it something like a central point of history, and thus would place in time something that cannot be allowed in space in Bruno's acentric universe. The elimination of the illusion of a central point from time—from history—as well, is a piece of logical consistency with Copernicus, though it goes beyond Copernicus and radicalizes him.

But it is not carried out with complete consistency. Like Epicurus in Lucretius, Bruno also breaks through the walls of the singular cosmos, the limits of a finite world,⁷ and gains a homogeneous immeasurability of the cosmic space that is equivalent in all of its points. But he does not accomplish the same thing for time, which retains a closed structure of repeating cycles and thus preserves a lawfulness that prevents an escape from the dogmatic bonds of the Middle Ages into a period of unrestricted forward progress. The metaphors of the periodic return
of light encroach upon and relativize the idea, which was later consitiutive for the Enlightenment, that reason not only is the dawning light of a new day but also brings itself to this dawn and maintains itself in this day, so that it is the guarantee that after this ‘day’ (in a sense no longer literal because no longer periodic!), it will not become night again. Of course that presupposes that the new epoch for its part is not the repetition of a past epoch, that it is not the ‘renaissance’ of, for instance, the ancient world and its philosophy. The modern age was to repeat, purely formally, in its self-understanding the Christian conception of a unique turning point and epochal new beginning of history. In this process, it was not, of course, to accept or ‘secularize’ the transcendent contingency of the origin of this singular event, since by asserting the definitive progressive form of rational self-realization, it had conceived itself precisely against the theological view of history. Just this is not possible for the Nolan because with his rejection of the singular historical act of the Incarnation, he had deprived himself of even the point of reference for a counterconception.

While the rationality of the modern age does philosophize on the whole in opposition to the theological concept of history, it obtains its counterpoint from the formal remainder of faith in the possibility of an absolute epochal threshold. It considers itself capable of stepping out of the sequence of finite formations of history, typical in themselves, that the ‘ancient world’ and the ‘Middle Ages’—as surpassable realizations delivered over to rational critique—are supposed to have been. For Giordano Bruno, reason is an intraworldly magnitude, having a place among more general process laws of nature, and is therefore something that cannot be stabilized. Bruno remains standing in the entryway to the historical self-consciousness of the modern age—in fact precisely because he is unable, on account of his negation of the Christian understanding of history, to accept the formal structure of the change of epoch itself as it had been developed by the Middle Ages. Thus he is forced back to a concept of history whose implications put in question the pathos of the new beginning and its rationality.

The fact that while Giordano Bruno already stands outside the Middle Ages he has not yet found the fundamental formulas of the modern age is apparent in not only his idea of the structure of the course of history but also his concept of historical time. In discussing the importance of the time factor for astronomical knowledge, Bruno at first follows a remark made by Copernicus in the forward to the
first book of the *Revolutiones*. There Copernicus had seen one of the principal difficulties of his discipline in the fact that the paths of the heavenly bodies, and especially of the planets, could be reliably calculated and completely known only 'with time' and given many previous observations handed down to later generations. The deceptive appearance of completion in Ptolemy's system and its so long uncontested acceptance had arisen precisely because the available astronomical tradition had been too brief and consequently had not yet allowed certain motions in the heavens to become noticeable. The present, in which Copernicus speaks, possesses better preconditions for its theory building because the interval since the founding of astronomical science has grown longer, and thus the distance for the comparison of observations is greater. Here, for the first time, the role of the time factor is seen in the fact that a 'progress' of knowledge is accomplished not so much *in time*—as the continual increase of a mass of knowledge, on the basis of the stock achieved at any given time—as *by means of* time itself, that is, on the condition of purely temporal distances between observations of identical objects.

The required intervals are not to be thought of as quantities of an abstract cosmic time, however, but rather as historical times filled with human life, times in which a will and concern for tradition receive and preserve knowledge once it has been collected. Only thus does elapsed time become the 'base line' that makes possible the accuracy necessary for the determination of very small changes and differences from given predictions. Copernicus mentions, in addition to the problem of the length of the year, the displacement of the points of the equinoxes as a magnitude that had moved into the realm of quantitative determinability since the time of Ptolemy. Historical time, then, is not the dimension of the self-development of rationality and the accumulation of empirical data but rather the condition of the possible objectivity of certain empirical magnitudes themselves, inasmuch as they achieve observability and measurability by means of time. But this is accomplished only if man also, in his theoretical interest, lives beyond himself and the finite duration of his existence and, by creating and securing tradition, makes humanity itself into the bearer of an effort that surpasses the capacity and the actual possessions of the individual, an effort that is internally homogeneous by virtue of 'method.'

Giordano Bruno included this idea, which drives directly toward the modern idea of method, in his organic overall conception in a
very characteristic way. Copernicus was able, he says, to see more than the ancient astronomers because 1,849 years had elapsed between Eudoxus and him. It is true that wisdom, as Prudencio says in the dialogue *The Ash Wednesday Supper*, lies in antiquity, but, so Teofilo replies, intelligence lies in the number of years. And now there follows that reversal of the familiar schema of the age and youth of the epochs, with the help of which the self-understanding of the modern age was to formulate itself: An appropriate way of dealing with talk of 'antiquity' leads to the opposite of what is thought by one who appeals to 'the ancients' as binding authority, namely, to carrying over the sequence of phases of the individual life to the history of humanity, so that the relation between youth and age becomes relative to the amount of time that has been traversed.

But then one would have to say that we, who are contemporaries at a given moment, are older and have more time behind us than our ancestors did.9 "The judgement of Eudoxus, who, although astronomy did not first find its rebirth in him, still did not yet find a lengthy astronomical tradition ready at hand, could not be as mature as that of Callipus, who lived 30 years after the death of Alexander the Great and could already, with the advance of time, compare observation with observation. For just this reason, Hipparchus had to have more knowledge than Callipus because he observed change up to a point 196 years after the death of Alexander. The Roman geometer Menelaus possessed the prerequisite to comprehend more than Hipparchus because he had before him the change of motion (la differenza de moto) up to 462 years after Alexander's death. Mohammed Aracensis [Al-Battâni] had to observe still more, 1,202 years after that. But Copernicus, as good as our contemporary, had seen yet more after 1,849 years. But some of those who came after him have not after all been wiser than those who were before him, and the multitude of our contemporaries have learned nothing more; this is because the former have not lived the years of the others and the latter do not live them, and—the latter as well as the former—even experience the years of their own lives like lifeless ones."10 Thus time cannot merely take its course and pass by as an objective datum; it must be lived as history, as conscious tradition, by the later ones in relation to the earlier, just as both must consciously 'live' their own present if the integration of a humanity-wide continuity of experience is to succeed.11
The organic model of an individual life from birth to death supplies the leading metaphor; but in contrast to older parallels between the individual life and the history of humanity, the genuinely 'organic' aspect, the conception of the form of the overall passage of history, begins to drop out of the metaphor here. The schema is relativized, in that those who are present at a given time can be both the old and the young at once: the former in relation to their predecessors, the latter in relation to their successors. What is more, the organic element of the high point of maturity and the aging and deterioration that then set in is left out—and once again no doubt because the Nolan shrinks from centering, because he avoids the possibility of questions regarding the high point, the axis of historical symmetry, just as painstakingly as he avoids those regarding the center of the world. The localization of the present in history is a question not of relation to a center, to an axial event, but only of whether it is day or night. For it is from this stipulation that the answer to the question of what one may expect of one’s own judgment, or in what suspicion one must hold the dominant opinion or the impression nearest at hand, depends.

The importance of such self-localization results from a course of history that is regulated by a supposedly higher lawfulness; it can also imply unnerving self-association with downfall, with the 'decline of the West,' for example. But related to the situation and the self-consciousness of the Nolan, which knows itself to be at the dawning and sunrise of the epoch, this fatefulness is encouraging, promoting a summoning up of effort and the prospect of still unsuspected possibilities. "Aristotle remarked that the changeability that is the rule with other things determines opinions and their various effects no less. If one were to evaluate philosophies according to their age, then that would be like wanting to decide whether day or night came first. What we must direct our attention to is whether we find ourselves in day or night and whether the light of the truth is above our horizon or whether this light shines in the horizon of our antipodes—whether, that is, we or they are in darkness and consequently whether we, who have begun the renewal of the old philosophy, stand in the morning, so as to make an end of the night, or have arrived therewith at evening, so as to end the day. And that is certainly not difficult to decide...."

It becomes clear what is of importance in this self-localization in history: the encouragement of consciousness to begin absolutely anew. Together with this there is the certainty that one does not stand, in relation to
the transmission of the ancient stock, in the resignation of the evening, but rather that, proceeding from that stock, one can win new achievements, which are not absent from the tradition as a result of mere accident or failure but simply could not be present in it.

Here, however, the apparently rigid principle of repetition, of the cyclical periodicity of world history, changes; because these cycles are bound together by a tradition that reaches across them, as though bridging the nights between the days, novelty, gain in truth, becomes possible. And that does not relate, perhaps, only to supplementary, nonessential material, but rather essentially new possibilities are opened up.

In the fifth book of The Ash Wednesday Supper, the talk is of the fact that the illusion of the eighth sphere of the fixed stars, which encloses the cosmos on the outside, could only be effectively destroyed by very long term comparisons of observations from which movements of the fixed stars with respect to one another could result—but nothing had been done toward handing down the necessary data because no one believed even in the mere possibility of such displacements. The point of departure of inquiry is the knowledge not only that a certain thing exists but also that something is possible and compatible with other known facts, and what can be inferred from that. Man’s impotence consists essentially in his reckoning with, and seeking to behave appropriately toward, only those realities that he knows of or thinks he knows of. An index of the beginning of the modern age is the fact that the suspicion of an obscure field of possibilities, a preponderance of terra incognita round about the known, arises and determines the directions of thrust of curiosity and needs.

It is evident that ‘imaginative’ spirits of the speculative type of the Nolan could play a role in the articulation of the consciousness of the incompleteness of the familiar reality. But it is also evident how the methodical idea of widening what is suddenly perceived as the narrow province of the familiar is formed. What comes into play here is not only the pedantry of the intelligence that sets up rules and maxims, as with Bacon and Descartes, but also an imagination that is always pressing toward total conceptions, exhaustive schemes, like that of Giordano Bruno. He posited as a criterion of the best philosophy, besides its working toward the perfection of the human spirit and besides its truth content, the requirement that it must be “cooperatrice di natura” [a cooperator with nature]. This is still meant in a way
that is distant from any technical utilization of nature. Rather it concerns
man's capacity to 'measure up to' the standard of nature by means
of the technique of his cognitive methods, as when, in the long-term
comparison of astronomical data, he rescues even the motionless pros-
ppect of the heaven of the fixed stars from its apparent unchangeability.

Time enters the theory of nature as the natural baseline. Time is
seen as not only the continuum in which the stock of facts is pro-
gressively enriched but also the distance between theoretical points
of view, the space in which parallactic changes in the field of what
was hitherto supposed to be eternal and unchangeable are to be ex-
pected. This requires the constitution of a subject that is permanent
in time. It presupposes that the concrete subject in history learns
consciously and methodically to transcend itself as an individual and
knows how to dispose over the time that is beyond its existential
capacity, just as, in spite of being fixed to the earth as its standpoint,
it begins to project its extrapolations out into space. That in the process
each step will be the presupposition of the next one, that each basis
arrived at leads to new ventures, that each step in Copernican consis-
tency will consider itself as still insufficiently Copernican, that the
universe of suns and earths will provoke ever newer superposed sys-
tematic constructions like the Copernican solar system—here, before
the threshold of the seventeenth century, all of this cannot yet be antici-
pated. That is why Giordano Bruno, in spite of the consequence
of acentricity that he drew from Copernicanism, still remained so
distant from the rationality of the Enlightenment and from the principle
by which to master the infinity he gave to the universe.

This distance from the Enlightenment also holds for the Nolan's
relation to Christianity and his critique of the dogmatic core of Christian
theology. If it is correct that the model of the universe that Giordano
Bruno imagined was not yet equipped to serve as a guide for a new
rationality, then this statement would have to hold equally for his
critique of theology, insofar as cosmology was also supposed to have
provided the pattern for that critique. An indication of the possibility,
indeed the probability, of such a foundational relation was already
given us in the concept of time and history, specifically, in the rejection
of any centering, any symmetry construction, any assumption of an
absolute point of view. On that account, what F. J. Clemens writes
about Bruno's relation to Christianity and his dependence on the
Cusan can scarcely be correct: "For his opposition to Christianity,
although it... turns out to be unconditional and a matter of principle, simply cannot have been such originally because the Nolan took his departure from Cusa, and the initial agreement in principle is still evident; and consequently the opposition in principles must have been introduced by another, more subjective one; so we are left as the deciding factor for the development only the... opposition that was grounded in Bruno's personality and his natural predispositions, which attacks Christianity first of all in its moral teachings. In its method, this approach relinquishes the possibility of using precisely the reception of the Cusan in Bruno, which is so palpable on the level of means of expression and representation, so as to exhibit in the continuity of the medium the discontinuity of systematic function and logic.

Common to Bruno and Nicholas is the Platonizing attempt—which with Bruno in fact reaches all the way back to Parmenides—not only to take up the problem of unity and plurality, of unity in the manifold, as a metaphysical and cosmological problem but to apply it to overcoming the pluralism of the tradition. For the Cusan, the escape from the forced unitary form of Scholasticism, leveled off on the plane of Aristotelianism, meant that even the disreputable names of a Protagoras and an Epicurus could have their share in the complex substance of the truth. Even the multiplicity of religions could be brought into an almost perspectival schema of concordance. With Giordano Bruno we are nearer to the age of criticism. In place of the great reconciliation that hovered before the Renaissance of the fifteenth century and seemed possible as an overcoming of the Scholasticism that continually pressed toward the magisterial determination of *sic et non* [thus and not (otherwise)], we have the literary form of a mythical self-criticism such as is imagined in the *Expulsion of the Triumphant Beast* as the ancient pantheon sitting in judgment on itself. Bruno's paganism here becomes neither the return nor the renaissance of the ancient myth of the gods but rather the transparent medium through which the moral basis of the formation of shapes of the divine is supposed to be made visible. The great revision of the constellations that is put in the mouth of Jupiter in this mythical dialogue is an allegory for the tracing of what is historical back to its supposed universally valid ground, a tracing that the new age was to set for itself as its task. One theology is not decided against and described as overcome from the point of view of another, nor is an eclectic concordance of theologies held to be still attainable; rather the critique of theology is begun from
the point of view of the principle of its possible binding force. The standpoint to which the aging Jupiter is ‘converted’ is that of a morality as the criterion of every theology.

The satire on the gods, which looks like the clothing of a moral treatise in Renaissance garments, thus becomes the literary form for implicit criticism of the fundamental theological ideas of Christianity as well. It opposes the voluntaristic foundation of ‘justification,’ that is, the doctrine, shared by the late Middle Ages and the Reformation, of the unfathomable dualism of election and damnation. What it is for man to be well-pleasing to the Divinity should be left neither to concealment nor to a rationally inaccessible revelation. The trees that grow in the gardens of the law are intended by the gods to bear fruit, and in fact fruits by which men can nourish and preserve themselves and in which the gods have no other interest and satisfaction than this—a statement that is clearly directed against a paradise in which there grow forbidden fruits or fruits reserved to divinity alone. Love and fear of the gods should secure men’s socialization and hold them back from everything that can harm them.

So far that is quite ‘enlightened’ and has the unspecific generality that was not to avoid the reproach of triviality. But Bruno also aims more accurately; he makes Jupiter not even spare his favorite bastard son, Hercules, in clearing up the starry heavens and then puts in the mouth of Momus the praise of the highest god, that he did not allow his fatherly love to lead him to restrict his principle of justice in the reformation of the catalog of constellations. The apostrophising of Christianity and its central theme of the Son of God as the Son of Man, and the transition from the metaphorical fatherhood of God the Creator to the mystical fatherhood of God the Savior, is palpable. A less disguised statement is the infamous passage toward the end of the Spaccio [Expulsion], where the story is told of the banishment of the centaur Cheiron, whose double nature is mockingly defined in the theological language of the hypostatic union: “in cui una persona è fatta di due nature, e due sustanze concorreno in una ipostatica unione” [in which one person is made of two natures, and two substances concur in one hypostatic union].

For understanding Bruno, everything depends on grasping what is compelling in this rejection of the theological idea of the union of two natures, of the identity of the divine person in its union with humanity, in connection with his new concept of the world; for him, this central
Christian event becomes the symbol of a theological 'model.' The concept of predestination is representative of a system of extraordinary actions and conditions, preferences and acts of grace, which is superimposed on a reality that seems to be established as 'order,' as 'nature,' solely in order to make the extraordinary, the supernatural, definable. Bruno, on the other hand, sees forms and natures as equivalent possibilities, over time, of successive participations in an eternal redistribution of roles, by which the ability of anything to become anything is accomplished. Both theocentrism and anthropocentrism are the abandoned counterpositions of this new metaphysical model, in which the Divinity bears innumerable names for a transcendent substance that stands behind everything, and is no longer the 'person' who could choose one nature from the abundance of the forms of his creation for his Incarnation, but is rather the divinità [divinity] that 'appears' in all forms, without simply becoming one of them and definitively entering into it. That Bruno's God, too, can only be defined by a negation, in this case the negation of personality, is no longer the logical means of mystical transcendence but rather of precisely the opposite, of asserting the impossibility of such transcendence.

The problem with which the Cusan had struggled and with which every attempt to come to terms with the late medieval crisis had to deal—stabilizing the world in the face of its being put in question by theological absolutism—now is no longer dealt with by means of a relation of image to original, but rather by means of a congruence between divinity and worldliness. One runs no risk in designating this as "naturalization," because it reoccupies the position of the sovereignty of the divine will with the necessity of the self-transfer of the divine into the worldly—and thus with the necessity of the identification of possibility and reality, of potentia absoluta and potentia ordinata [absolute power and ordained (regulated) power] (to continue to formulate this in Scholastic language). Because the world as the Creation absolutely 'exhausts' the potential of the ground of being, it becomes a contradiction to think that the Divinity could still have realized a new and supremely special possibility, after the Creation and into it, indeed against it. If the world as such already credibly represents God's self-extravagance, then He cannot have made Himself once again into the historical fact of an Incarnation in it.

Bruno directs everything against the one premise that fascinated Scholasticism and continually drove it to new deductions, that Bon-
aventure paraphrased with the metaphor that while God had given away much of His treasure when He created the world, He had not given away everything: *Multa de suis thesauris profert, non omnia.*\(^{20}\) and to which William of Ockham gave the sharper inverted formulation that He is able to create much that He does not want to create: *Multa potest facere quae non vult facere.*\(^{21}\) In another passage, while discussing the question whether God could create something that He neither has created nor will create, Ockham gave his affirmative answer the justification, which is significant in our context, that the exhaustion of the totality of what is possible would qualify the Creator as a mere natural cause.\(^{22}\) The Nolan does just this, and he does it in opposition to the consequences that the principle of personality, as voluntarism, had produced. This is the very point upon which (on the one hand) Copernicanism—insofar as it had prepared the way for the metaphysical consequence of infinity with the cosmologically necessary assumption of an immeasurably great world radius—and (on the other hand) the epoch’s interest in self-assertion, in opposition to nominalism, converge. Copernicus offered the point of departure from which to introduce the infinity of the universe, not as a mere speculative extravagance, but rather by letting the consequence of a scientific insight, as it were, ‘unfold’ on the basis of a metaphysical need that had become historically pressing. Bruno shows the age that the new perspective of the (optically unexpected) immeasurability of the heavens, which followed from the surrender of geocentrism, did not need to be translated into disappointment, into the diminution and annihilation of man with respect to the world. Instead, this could be the price paid for overcoming the distressing consciousness of contingency that man had experienced in himself and the world and that now was removed by a newly characterized world. Hence Leonardo Olschki is mistaken when he says of Bruno that he “thought that he had got rid of the Cusan’s theological conclusions by transferring the latter’s doctrine of the infinity of God to the universe.”\(^{23}\)

One should rather say that at a point at which the Cusan stood still with an arbitrary and questionable construction, Bruno took, and was able to take, the decisive step, because in the meantime there had been Copernicus. The transfer of infinity from the divinity to the universe is not a taking over and transformation of a historically pre-given doctrine, but rather a resolute contradiction of one consequence of the conception of the *potentia absoluta* [absolute power] that was
developed and thought through more and more radically by the Middle Ages—a conception in which the world was represented as absolute power’s self-restriction to an arbitrary particle of what was possible for it, and thus drew upon itself the rationally intolerable imputation of unfathomable facticity and contingency. The point at which the Nolan goes beyond the Cusan’s position can be precisely indicated: In the second chapter of the second book of the Docta ignorantia, the Cusan says that the infinite form is only taken up in a finite manner, so that everything created is, so to speak, a finite infinity or a created God (quasi infinitas finita aut deus creatus), and consequently could be more perfect than it is, and that with the “Let there be!” of the Creation, it was only because a God could not come into being (quia deus fieri non potuit) that something came into being that could become ever more similar to God. This sentence designates the limit that is set to the penetration of the omnipotence speculations of theistic religions and their scholasticisms. That limit is in the rejection, which cannot be based on a logical contradiction, of the possibility that omnipotence could become absolute precisely by being able to posit its equivalent, by reproducing itself. Of course, the God Who is jealous of His uniqueness compels one to exclude this idea. But is that an element that a metaphysical theology must accept without inspection?

Perhaps Bruno’s theological sensitivities, which came together in the syndrome of the ‘Incarination trauma’ and made him become a heretic—not a sectarian of arbitrary wilfulness, but the significant ‘heretic’ of the beginning of the modern age—can now be systematized in terms of their central impetus. The seemingly quite diffuse accusations and admissions of the records of the Inquisition gain consistency in the process. In particular, it no longer seems a mere evasion when Bruno insists that his point of departure in these questions was purely philosophical and without regard for what faith commands one to believe, so that his intention consisted not in opposition to religion but rather in the exaltation of philosophy. Consequently his theses had not directly offended against the teaching of the Church, though perhaps they had done so indirectly. With respect to his specific philosophical views, he mentions the infinity of the universe as the effect of infinite divine power (“un infinito universo, cioè effetto della infinita divina potentia”), and in fact with the explicit reason that he would have regarded a finite world as unworthy to be the product of the divine goodness and power. This infinity, he says, relates to both
the magnitude of the universe and the number of worlds. Further, he holds that the earth is a heavenly body like the other heavenly bodies and that there is a universal providence, as an omnipresent world soul or nature, but also explicitly as God's essential omnipresence "in modo inexplicabile" [in an inexplicable manner].

In mentioning the doubled infinity, Bruno spontaneously and explicitly admits that the truth according to faith could be affected by this indirectly: "... onde indirettamente s'intende essere repugnata la verità secondo la fede." This shows sufficient candor for us to be able to believe him also when he says that he adhered to the origin of the world from Creation and to the complete dependence of the creatures on this cause. Bruno does not help his inquisitors to understand the inner connection between this position and his theological offenses, although he goes on immediately and without renewed questioning to the problem of the Trinity and Christology. He was not able to comprehend the Incarnation with the concepts of philosophy; he doubted and faltered in his faith: "Io stando nelli termini della filosofia, non l'ho inteso ma dubitato, e con incostante fede tenuto...." Could it be that Bruno himself did not know how to make explicit the decisive connection between his infinite cosmology, his concept of creation, and his perplexity about the Trinity and Christology—namely, that his infinite universe occupied the very position that the intratrinitarian generation of the second Person occupied in theology?

A God who must actualize what He can necessarily produces Himself once more. Generation and creation coincide. Where the Creation exhausts God's productive power, there cannot be any more room for the trinitarian process. But if, and that is the next step, the absolute self-realization of divine omnipotence is the 'world' and not a 'person,' then the character of personhood must also be denied to the ground that reproduces itself. Accordingly Bruno rejects the concept of a 'person' as a new introduction of Augustine, which he finds incomprehensible. In a later hearing, he repeats that the predicate "person" seemed to him to be incompatible with divinity.

It seems to me that the analysis cannot advance beyond this point. But the result pulls together what we see as the motley, scattered world of the Nolan's ideas, imaginings, and inherited ideas into an intelligible structure. Bruno could after all be the "metaphysician of Copernicanism"—a description that Max Scheler wanted to see kept within quotation marks.
Chapter 3

Systems of ideas—whether explicitly formulated as such in relations of substantiation between propositions and correlations between regional groups of propositions or only potentially formulable as abstracts of the explanatory accomplishments of a historical mental formation or an individual mind—systems of ideas stand to one another in certain relations of equivalence of their elements. This is the more true, the nearer they are to one another in history, so that the later one must transform the assertions of the earlier into questions that it now claims to answer itself. It is not only when the canon of questions, as such, and thus the formal structure of positions, is decisively altered—that is, expanded or reduced—that we have to do with what we call the epochal threshold.

This model conception can be verified in connection with the confrontation of the Nolan and the Cusan. To begin with, it is the case that one can only understand the Nolan's metaphysical cosmology if one sees it in relation to the systematic ‘volume’ of the Cusan’s metaphysics. Giordano Bruno’s universe, as the necessary and unreserved discharge of the potentia absoluta [absolute power] of God the Creator, occupies the systematic position space that for the Cusan had been occupied by the intratrinitarian generation of a divine Person, the creation of the world, and the clamping together of both in the Incarnation of the Son of God. One can verify this once again in the critical point of differentiation of the two systems, in their attitudes to the Incarnation.

For the Cusan, the Incarnation of the Word was the supplementation and perfection of the Creation, complementum et quies, as he says in the sermon Dies sanctificatus. Only in this divine self-insertion into the Creation does God’s power fully actualize itself (quiescit potentia in seipsa). The duality of generation and creation is closed at this juncture and integrated into the unity of God’s self-expression. But this presupposes that time, by which an interval is laid between the Creation and the Incarnation in the midst of history, is a purely human measure of successiveness, which is imposed on the inner and essential unity of the divine action. The Cusan’s theory of time as a category produced from the human spirit accords with this.

Only in the temporal form of human speech is it admissible and necessary to say that the Creation was incomplete and imperfect and contained a reserve of something that was possible for the Divinity before it received its Christological complement. But still more: The
Cusan also interpreted this connection teleologically and used it to prove the singularity of the created world, since the uniqueness of the Son of God presupposed the uniqueness of the world into which he could enter and to which he could bring perfection ("Et ipse quia unus, est unus mundus ... "). And still another step: The essential constitution of this world was defined and relieved of contingency by the complement that was provided for it, in that what remained in reserve for perfection determined just what would be capable of this perfection: "Et propter ipsum omnia, quae in mundo sunt, id sunt quod sunt" [And on account of this, everything that is in the world is what it is].

Just this framework of positions now yields the condition that was to be fulfilled by the Nolan’s cosmological speculation. Since for him creation and generation lose their differentiation, since the Creation is already the whole of what could and had to ‘come forth’ from the discharge of the potentia absoluta, not only the Christological complement but also its teleology, which required the singularity of the world, falls away. The infiniti mondi [infinite worlds] fill the scope that had been left open by discontinuing the restricting teleological intention of the Cusan’s speculation, a scope in which the unreserved logic of absolute omnipotence’s complete self-exhaustion could now be discharged as the double infinity of the created world.

The universe of Nicholas of Cusa was the outcome of the potentia absoluta only insofar as that power imposed on itself the ritual of action of a potentia ordinata. Only this makes it comprehensible that that power posed conditions, in turn, for man’s salvation, which made up an agenda separate from that of rational morality. In spite of his effort to eliminate the voluntaristic element from his metaphysics, the Cusan had only, as it were, shifted it further back, made it less easily recognizable in the obscurity of the speculative prehistory of the Creation. "The world," so he had written in the first book of On the Globe Game, "is not made so perfectly that in its Creation God made everything that He could make, though, on the other hand, it was made as perfect as it could become. . . . But the ‘ability to become’ of that which was made is not the absolute ‘ability to make’ of almighty God."26 One can understand that this is a desperate attempt to remove the contingency of the world as a scandal to rationality without abandoning God’s personhood. The strained character of this attempt indicates the path that leads—instead of to the solution of the problem, which appears impossible—to its elimination.
That the purpose is to take the edge off of the problem rather than to solve it is shown by yet another comparison with Descartes, who did not move, as far as the formulation of the problem is concerned, beyond the point where the Cusan intervened—except that he brings the radical insecurity of voluntarism, as a merely methodical preliminary stage, into a processual relation to the guaranteeing operation of the ens perfectissimum [most perfect being]. God is reduced, for the benefit of His auxiliary function in theory, to the single attribute of His goodness. That is not indeed the denial of His personhood, but it is its purposeful amputation and reduction to the metaphysical functionary God, Who has only to supply the “maître et possesseur de la nature” [master and possessor of nature] with his license. Seen in such historical surroundings, Bruno is not an outsider, not the “knight-errant of a fantastic nature wisdom,” but rather a magnitude that can be precisely classified historically and that clearly indicates the gradient of the problem.

But it is not enough to say that the Nolan philosophized further within the horizon of the given questions and only sought to give new answers. On the contrary, he pressed forward far enough to put the questions themselves in question, that is, at least as far as the possibility of their delegitimation. The firmest evidence of this is his inference, which sounds entirely naive, from the statement that the concept of a person had been invented by Augustine and had no authentic legitimation in the first daytime phase of our history, from which Bruno takes his models of thought, in the ancient world; from which he infers that it should be possible to extirpate from philosophical theology the questions that arose when ‘personhood’ was introduced.

For Bruno’s concept of God, the passage in the Spaccio [Expulsion] is essential in which Simplicità [Simplicity] is placed among the constellations, specifically on account of its similarity to God’s countenance, which consists in the fact that simplicity absolutely cannot go beyond itself, add to itself, or pretend anything, that it is its own immediate self-realization; but it has that self-realization as neither consciousness nor a concept. To think oneself and to have only oneself as the object of this thought was the distinguishing quality, found by Aristotle and through him convincingly offered to the tradition, of the pure and highest being; but the Aristotelian god needed only to move the first sphere of the heavens, by allowing himself to be loved by it, without for his part turning to it or even wanting this—he had an effect without
acting, in that his noetic reflection was translated into the physical metaphor of eternal circular motion. High Scholasticism made use of the pattern of theoretical self-reference and associated with it the element of will, which as the divine will now could only have itself as its goal. If this will wanted a world and a man in the world, it could want this only as the counterpoint of a movement that returns into itself: as means to and mediator of the gloria divina [glory of God].

The enormity of this conception of the God Who serves Himself and nevertheless so evidently manifests Himself, in the world, in His dissatisfaction with Himself has always been perceived in its consequences only, and scarcely ever in the premise. It is personhood—as the imputation of biblical ideas to ancient metaphysics—that first brings out the enormity in this amalgam. Bruno opposes to it the primeval element of the divine, which was given privileged status, alongside immortality, by ancient thought: the self-sufficiency of divinity. Its autarky means that it intends to be neither more nor anything else, and thus excludes not only the will, as a predicate, but also ‘becoming objective to itself,’ self-consciousness. Self-consciousness as the self’s becoming noteworthy and obtrusive to itself is seen here as resulting from a basis of dissatisfaction with oneself, as the decomposition of unity and simplicity into the duality of object and subject, of knowing and known, and thus for the first time as the origin of the will. Here Bruno is taking aim at the connection—which Augustine and Scholasticism had set up—between self-consciousness, as God’s personhood, and the trinitarian process of generation, in which God necessarily, that is as person, loses His simplicity [Einfalt: literally, onefoldness] and only recovers His self-reference and closes the circle of reflexiveness in threefoldness. Against this theory of the divine self-consciousness, Bruno sets his concept of the “semplicissima intelligenza” [simplest intelligence], which finds its realization in the metaphor of light. With this mode of expression, Bruno gives the Neoplatonic tradition a critical applicability, against the concept of a personal God, which it did not originally have: light as excluding the circular process of reference to the world, light as absolute unconcealedness and radiating openness, of which it can only be said negatively that it cannot be hiddenness even from itself: “absolutissimo e semplicissimo lume, solo dunque se dice intendersi negativamente, per quanto non si può essere occulta.”

Here at the same time something is said about the manner in which the ‘world’ is founded in and results from the Divinity, namely, as
the self-manifesting unconcealedness of a principle that by its nature cannot withhold itself. The fact that there is a world is grounded in the nature of the Divinity, not in His will. The world is the correlate of God’s impersonality, and consequently it is manifestation, but not revelation. Revelation presupposes the possibility of God’s being able to conceal and reserve things for Himself. The world is not a communication of the Divinity, and consequently it is not the ‘book of nature.’ It is not accentuated like a mode of expression, it is not ‘order’ in the sense of a ‘documented’ authority originating in the will and its positings and to be made binding for another will. The Nolan’s nature does not provoke the hermeneutics of a lex naturalis [natural law]. It is acentric, indifferent in each of its forms with respect to every other and in each of its positions with respect to all others. Consequently it is filled with movement and the metamorphosis of forms; consequently—and this is its most radical opposition to Leibniz’s universe, which it anticipates in so many ways—it is ruled by the principium rationis insufficientis [principle of insufficient reason], insofar as one poses any other question than that of the right of the whole to existence.

“Plurality of worlds” here is not only rhetorical hyperbole but rather the necessary expression of the principle of unreservedness in the origin of what is real. If one world deserves to exist, all other possible worlds cannot be excluded from this. Put still more briefly: If anything at all exists, everything that is possible exists. That everything that is possible is equal before existence—this overcoming of the ontological comparatives that had proliferated since Plato, and of their legitimation of predestinations behind which thought could not penetrate—is Bruno’s positivization of the nominalistic destruction of the traditional ordo [order] of reality. The pathos of the plurality of worlds—which was taken up so emphatically by the subsequent period—is based on the metaphysical assurance that the Divinity gave up everything and turned it over to the world, in which therefore anything can become of anything. Though this may not yet be formulable as an appeal to man’s effective will, it still implies something like an original metaphysical command. Bruno put such a command in the mouth of the metamorphoser Circe in the preface to the Eroici Furori [Heroic Frenzies]: to traverse the world from form to form and to appropriate reality after reality in the succession of forms.

If the world is therefore nothing but the essential undisguisedness of divinity itself, the concrete contradiction of the deus absconditus [hidden
God] of theology, then there can be no special moments in its temporal subsistence either. Then it makes no sense to speak of a beginning, in which the constitution of the world was posited as an eidetically fixed and self-preserving or again and again self-regenerating substance, so that everything further would depend only on this ‘beginning.’ Instead, time itself becomes the real dimension of the self-reproduction of God, which is continuous, but of equal value in every one of its moments. For the Cusan, time was the instrument of the measuring spirit, mensurantis animae instrumentum; it was only the human aspect of a process that was at bottom simultaneous, operating out of eternity. For Bruno, time is just as much the correlate of the potencia absoluta as is infinite space and the infinite number of worlds in it, since this power must expend itself in every possible dimension. We could ‘invent’ no concept with which such a dimension could be constructed without contradiction, without its having to receive immediately the predicate of existence—this looks like the application of Anselm’s ‘ontological proof’ to the reality of the world. At the moment, we need not concern ourselves with the deficiencies of the argumentation but only with its productivity in exhibiting the consistency of the speculative system: in this case, the sharpening of the differentiation between Bruno and the Cusan in regard to the systematic position and function of the concept of time.

The reality of time is based for Bruno on the fact that it alone admits the identity of possibility and reality as ‘world,’ whereas the Cusan was concerned to distinguish the possibility of the world in the sense of the Aristotelian doctrine of potentiality from the possibility of God in the sense of the theological potencia absoluta, so that while the world does fully actualize its possibility in its reality, it does not actualize His possibility [potentia], in relation to which it retains precisely the character of ‘imprecision,’ of the ‘could be more’ that always remains open. In the third book of the dialogue On the Cause, the Principle, and the One, this contrast to the Cusan’s speculation on possibility is clearly discernible. For Bruno, the posse fieri, the world’s ability to ‘become,’ is not a self-determination of the divine will as potencia absoluta but rather the symmetrical correlate to omnipotence, just another aspect of the same magnitude, so that the eternity of the creative capacity is necessarily accompanied by the eternity of the world’s existence.
But this deductive anticipation is contradicted by the consciousness of contingency that man has with respect to himself and the world, his suffering of finitude in the presence of the idea of infinity. His penetrating experience of himself is that while he is what he can be, he is not everything that can be; while he is the actualization of his *eidos* [form, Idea], he is at the same time the exclusion of every other eidetically definable thing. Here finite time excludes the individual entity from the abundance of possibilities because it holds the concrete being closed within the limits of its nature as a member of a species and leaves it only a coming into being and a disappearance within this outline.

Time as an infinite dimension tears open this limit. If the totality of possibilities can be played through in it, there is no coming to terms with the contingency of what happens only once, what exists now; instead the substratum enters into the great process of variation, into the everlasting metamorphosis, which is how ‘nature’ is to be conceived here. Movement, therefore, is necessarily the fundamental character of what exists, and the distinction, which was essential for the Aristotelian cosmology, between the central body at rest and the bodies in motion on peripheral paths has lost its meaning for Bruno. Here Bruno presses beyond Copernicus, who had still only replaced one central body at rest with another.

But the whole, the world, does not take part in this dissatisfaction of the individual and thus in its movement; it is not only the summation of its individual members and the epitome of their ontological characterization but also their essential surpassing. It is this attempt to place the whole on a different level from its parts that motivates Bruno’s so characteristic reference back to Parmenides, which becomes extremely clear in the Paris disputation theses of 1588 on the Aristotelian physics and cosmology, especially in article 17. In Aristotle, he says, the movement of the heaven of the fixed stars, that is, of the outermost sphere, is not an arbitrary physical determination but rather belongs to the heaven by virtue of its essential definition. But this first heaven is not, of course, a world body among the others that are in motion within the world and can be discovered to be moving by their relation to the first heaven. Movement of the first heaven meant, then, something new in regard to the reality of movement, namely, that with it, the empirical confirmability of *one* movement was in principle no longer given. A movement of the whole becomes
a nonsensical assertion, and such a paradox practically demands that one bring up the Eleatic metaphysics.

To Bruno it seems equally nonsensical that there should be both moved and unmoved world bodies. All individual heavenly bodies, he says, are moved individually, and thus act upon one another; they are all alike in that respect; but as soon as a movement of the whole appears, this must turn out to be an illusion. Hence, still independently of astronomical verifiability, it is philosophically necessary that apparent total movements of the universe, like the daily motion of the heavens and the annual movement, are purely phenomenal, that is, that they must result from change in the observer's standpoint. By the detour via Parmenides, Copernicus is justified in having pronounced the movement of the heavens as a whole, contrary to the tradition since Aristotle, to be an illusion and the movement of the individual world body on which we find ourselves to be the cause of this illusion.

Bruno attempts at the same time to interpret Aristotle better than the latter had understood himself when he said that circular motion is essentially appropriate and natural to heaven. Here he should have used the plural and said that circular motion is proper to all heavenly bodies by nature, but that the turning around the earth of the supposedly rigid vault of the heavens is only an illusion. It had to be such in the systematics of Aristotelian physics if only because the distinction of rest—as the goal of all movement and the state of achieved perfection—could not possibly belong precisely and uniquely to the earth. This perfect and therefore resting thing is, for Bruno, only the whole, in which the movements of all individual members are integrated into the result of the self-exhibition of the potentia absoluta. Thus rest and infinity become identical because only infinity is without the dissatisfaction of what is finite.

Bruno had already referred back to Parmenides earlier, in the fourth of the Paris theses. According to Parmenides, Bruno says, that which exists is spherical, absolutely one and absolutely homogeneous. From this the correctness of Melissus's view is inferred that it must then also be infinite. That infinity and the form of a sphere do not exclude one another is substantiated with the pseudo-Hermetic doctrine, familiar from the Cusan, of the infinite sphere whose limits are nowhere and center everywhere. A totality of being that was conceived as finite and spherical could not, he says, fulfill the requirement of absolute homogeneity, since it would be uniform in every direction only from
its center: "Quod est finitum non est ubique aequale, sed a centro duntaxat..." In a world satisfying Parmenides's demand—as it is understood by Bruno—every point, paradoxically, would have to be the center of a sphere. Thus Bruno's principle of indifference surfaces again. For the universe of sense perception, it implies that no star, no world body, and no standpoint can lie on the periphery for another one, without itself being a possible center, so that from it also a full horizon and the equivalent illusion of a vault of the heavens would be given.40

If we return from here to the text in De la causa, it turns out that the reception of Parmenides, whom Aristotle treated so badly ("ignobilmente trattato da Aristotele"), and that of the mystical doctrine of the infinite sphere explicate the concept of a universe that realizes in its unity the identity of possibility and reality. The meaning of this universe for the description of the difference between the epochs results from the fact that it not only draws to itself theoretical anthropology's unique predicate of the "image and likeness" but also reabsorbs the trinitarian theology's predicate of the "only-begotten." Thus it draws the triad of the Cusan's metaphysics together into one point: "Lo universo, che è il grande simulacro, la grande imagine e l'unigenita natura..." [The universe, which is the great likeness, the great image and the only-begotten nature...]. But this holds only if one coordinates time—as the dimension of movement and of running through possibilities but also of the unity of the many that are scattered in individualities and constellations—with the concept of space, so as to remove from the identical substratum of unceasing change of form the metaphysical odium of the mere negation of definiteness, which it had borne since antiquity.41

As has become evident, in Bruno a Copernicanism drawn out to its consequences and a reception of the "old, true philosophy" are mutually illuminating. We cannot expect any unambiguous result of the analysis to indicate that one of these elements had temporal or logical precedence and that the inclusion of the other was founded only in it. Thus it becomes understandable that the question of the truth of Copernicanism—which had only secondary importance for the purely astronomical calculus, and the exclusion of which, since Osiander's foreword to the Revolutiones, had been meant to blunt the Copernican controversy and to neutralize the theological and metaphysical vulnerability of the system—receives its full weight for Bruno.
In the third dialogue of the Cena [The Ash Wednesday Supper], he makes his Teofilo cite this foreword of Osiander's in detail and ridicules it as the work of an “ignorant and presumptuous ass” (“Epistola super-liminare attacatta non so da chi asino ignorante e presuntuoso”), who, as a questionable doorkeeper, serves the master of the house and his venerable knowledge, without whose acknowledgment the whole art of astronomical reckoning is only an ingenious pastime. Copernicus, Bruno says, was not only the mathematician (to which, in Bruno’s eyes, he had been demoted) but also the natural philosopher who had proved, not merely introduced as an assumption, that the earth moved. The extent of his insights could very well compare with everything that Aristotle and his school had accomplished in the investigation of nature. The conception of a revolution of the heavens as a whole is “falsissima, contra natura e impossibile” [most false, contrary to nature, and impossible], indeed the whole of nature cries out against the assertion that the earth is unmoved. But precisely in connection with the Copernican certainty that he asserts, Bruno insists on his claim to have been the first to bring the full light of day after the twilight of sunrise. Here Copernicus steps back into the great series of supposed forerunners, from the Pythagoreans to the Cusan. They had all, he says, been timid and uncertain in asserting the new and had spoken more out of the conviction of faith than from that of knowledge. He himself was the first—with his authentic and firmer principles, and without any appeal to authorities, but by means of living perception and reason—to make the new system as certain as anything at all.

However great the pathos with which Bruno emphasizes that he procured certainty for the truth of the Copernican system, he did not die for this truth itself. Seen in the broadest perspective, it did indeed have a crucial function in the genesis of his thinking; but in relation to the consequences Bruno thought he could draw from it, it sinks back into the status of a preliminary phase and had only the importance of a key that had opened access to a speculative space. Infinity, with its characterization as the coincidentia oppositorum [coincidence of opposites], swallows up finite realities and problems whether their determinate qualities are of one kind or another. One would simply have to declare a contradiction in Bruno’s evaluations and accents—especially in connection with statements between which there is, biographically, no space for such a thing as ‘development,’ for example, between the
Gena [The Ash Wednesday Supper] and the dialogue De la causa, both of which appeared in 1584—if one did not introduce into the analysis this distinction between genetic function and systematic position.

While the entire Ash Wednesday Supper is devoted to establishing the truth of Copernicanism, the dialogue On the Cause terminates by again divesting the Ptolemaic/Copernican antithesis of its relevance vis-à-vis the infinite universe: “Even if an individual world moves in relation to and around another, as the earth does in relation to and around the sun, yet nevertheless no world moves in relation to the universe itself or around it, but only within it.” Thus the Copernican truth is lost in the higher-level truth that it itself first made possible. This sublime indifference of systems embraces all finite beings and their proportions to one another, their places in the ‘Scholastic’ order, and also touches man and with him the doctrine of a God Who was supposed to have irrevocably involved Himself in human nature as His privileged creature.

During his trial, and specifically during the hearing of June 3, 1592, in Venice, Bruno will appeal to the principle of the indifference of the finite vis-à-vis the infiniti (finiti ad infinitum nulla proportio [there is no proportion between the finite and the infinite]). Without naming him, he summons up the Cusan, who had used this principle to prove the necessity of the Incarnation for salvation in a world that by itself and by virtue of its nature can have no relevance for an absolute and infinite being. Only by God Himself wanting to make Himself into a piece of this world could it acquire the quality that assures it of the divine interest. “Verbum non propter carnem factum est caro, sed propter seipsum” [the Word did not become flesh for the sake of flesh, but for its own sake], says the fundamental formula on the basis of which Christology transforms the divine self-interest into an interest in the world.

Bruno argues in the reverse direction. For him the infinity of the divine nature and the finitude of worldly/human nature exclude a real relation, and still more a union of both natures such as was familiar to Christology. The impossibility of a particular being in the world having a privileged status leaves only a choice between, on the one hand, the reformation of the Cusan’s theory of mediation into the pure principle of transcendence, according to which an involvement in the world could neither be credited nor imputed to the Divinity, and, on the other hand, the principle of consistent immanence, ac-
cording to which the Divinity is already all in all in the same manner forever and by nature. The decision between these alternatives was prescribed for Bruno by the fact that, as a result of thinking absolute power rigorously through to the end, he understood the world as the self-reproduction of the Divinity. The development of the principle of omnipotence that results from this presupposition is neither pantheistic nor polytheistic. Neither designation hits upon Bruno’s authentic train of thought, specifically because the Creation occupies exactly the systematic position that belonged to the “only-begotten Son” in the theological tradition. But neither is Bruno’s immanence that of the “God who is coming to be” [des “werdenden Gottes”: Max Scheler], whose becoming self-conscious, which is identical with the world process, presupposes the possibility of equating process and progress, from which Bruno is still remote.

Once more it is necessary to follow the orientation that the Copernican turning of cosmology had offered Bruno for his metaphysical speculation. The movement of the earth had been excluded in Aristotelianism with the argument that the constituent parts of the terrestrial body, being composed of the primeval element, earth, were by nature “heavy” and hence disposed to a position of rest, so that a movement could only be conceived as violent, and thus not as continuous. But the systematic basis of the earth’s cosmo-centric position of rest was not yet exhausted with this doctrine of the “natural places” of the four elements. In the Aristotelian philosophy, in the form in which it had become the scaffolding of medieval High Scholasticism, physics and metaphysics were connected in such a way that an unambiguous ‘direction’ was laid down, in which all cosmic processes took their causal course—and this direction was centripetal, traversing the cosmos from above to below, from outside to inside along the radii of the sphere. In this way all natural processes could have their ultimate cause in an extraworldly unmoved mover. In this absolute entity, Scholasticism found the philosophical equivalent of its God. Only the first moving thing, the outermost sphere, which is the heaven of the fixed stars, was directly set in motion by this unmoved mover; the spheres of the planets, the sun and the moon, in the order of their arrangement, were moved indirectly by way of the outermost sphere. At the very last, this causal chain—in a weakened form, far distant, as it were, ‘debased,’ from the regularity of its origin—reached the terrestrial body and determined the coming into being and ceasing
to be of the natural beings on its surface. The center of this cosmos was thus at once its weakest position and the one most distant from the divine origin of all movement. Hence the orientation from above to below in this system is at the same time the scale of value and of the dignity of physical objects, and this orientation is defined by the Aristotelian principle received by Scholasticism: *Sursum est unde motus* [Movement is from above].

Scholasticism’s interest in carrying out the cosmological proof of God’s existence gave this identification of the unmoved mover with the Christian God its sanction and would, by itself alone, have made the Copernican reform impossible as an intra-Scholastic event. For if the question of its physical possibility is posed, Copernicanism must actually reverse the ‘direction’ of the causality of movement in the Aristotelian system because it makes the majority of movements, especially the daily movement of the heaven of the fixed stars and the annual movement of the sun, really originate in the center of the cosmos, that is—in Aristotelian terms—from below to above; the cosmic movements, as phenomena, now have their ‘cause’ in the earth’s own complex movement. The intolerability of this reversal for Scholasticism, with its interest in the cosmological proof, is obvious. The system of the transcendent derivation of all intracosmic movements necessarily collapses. This clarifies how it was that the modern age could see in the Copernican reform such a palpable break with the presuppositions of the Middle Ages. By concentrating the real movements in the cosmos in its central region, Copernicus created the diagram in relation to which the idea of cosmic immanence could orient itself.

This exemplary function of the Copernican reform becomes still clearer when we remember that the Aristotelian physics, under the conditions set by its concept of movement, understood the cosmos as a system of ‘energy supplementation.’ This physics knew no assertions about the conservation of states except for the position of rest of the terrestrial body and the natural places of the elements. Movement was not conceived as a state but rather required an operative causal factor at every moment; the principal axiom of Aristotelian mechanics, which was so important metaphysically for the Middle Ages, read, *Omne quod movetur, ab aliquo movetur* [Everything that is moved is moved by something]. Thus the contingency of the world, around which the thought of the Middle Ages circled with complete speculative devotion, lay not only in the origin of everything extant from creation but also
and above all in the fact that every state of this reality, at every moment, required a transcendent causality. Seen from the point of view of the medieval system, then, the really offensive element of the Copernican reform was not the exchange of places between the earth and the sun and the exchange of the predicates of rest and motion between them; rather it was the implication of the real standstill of the heaven of the fixed stars and the real movement of the terrestrial body. This is not the place to discuss how far the radicalness of this reform already had to presuppose a new system of basic views in natural philosophy or only had to draw a new formulation of physics after itself as a consequence.\textsuperscript{51} We may rely on what Giordano Bruno actually found available.

Bruno does indeed hold to the Aristotelian doctrine of the natural places of the four elements, but he relates this localization only to their relation to one another in the structure of any arbitrarily chosen world body and not to their position in the universe, which as an infinite space can no longer offer that sort of structural order. With this carrying over of the elementary structure of the sublunar region of Aristotelian theory to all world bodies, Bruno again takes up a piece of the Cusan’s cosmological speculation. But his interest is different from the Cusan’s; it is now directed above all at the consequence that results for the problem of weight. The constituent parts of the terrestrial body, like those of any other world body, are ‘heavy’ only insofar as when they are forcibly separated from connection with this body, they strive to return to it as their “loco della conservatione” [place of conservation] and no longer in that they belong in a certain absolute place in the universe. The original membership of a part-body in a body that constitutes a whole [that is, in a ‘world body’] indicates its ‘natural place’ and thus the direction of its movement, which is always a movement of ‘return.’ If one may define the original body as the greater mass, one arrives at an idea that at least stands closer to the gravitation theorem than does the original Aristotelian conception because the only straight-line motions that occur in the universe are no longer related to a particular place but rather to a particular body, which always represents the greater mass.

Of course one should not let oneself be deceived, in regard to the material ‘step forward’ that could be realized here, by this approximation to Newton; the transformation of the Aristotelian theory of natural movements is only its adaptation to the general assertion of
the "infiniti mondi" [infinite worlds] and is effected at the price of additional speculative assumptions—some of which remain in the background while some become explicit—which are reducible to an organic metaphor. All world bodies have become totalistic/individual, animated, self-preserving, and self-reintegrating substances.

Such organic ideas do not, indeed, solve the problems that they pose for themselves; but in the early history of modern science, they have an important transitional function between the initial Aristotelian position and a new universal mechanics that is initiated precisely by regarding organisms also as capable of mechanical explanation, as will be the case with Descartes. This transitional function shows itself here in the relativization of the predicate of weight. In thesis 101 of the Paris disputation articles, on the fourth book of the De caelo, it is said that "heavy" and "light" cannot be asserted as predicates of natural bodies in their natural constitution. In the argument for this thesis, Bruno repeats the Aristotelian thought experiment of the earth and the moon changing places, with, in fact, a completely opposite result; whereas Aristotle assumed that if this were done, from then on all heavy (that is to say, 'earthy') objects would fall in their previous direction—that is, toward their natural place—independently of whether the terrestrial body was still there, Bruno concludes that all the parts belonging to the terrestrial body would then also move toward its new location, that is, would no longer 'fall' but rather 'go upward.' And then it is explicitly said that the parts of a world body could not have the tendency to incorporate themselves in another world body any more than is the case with the parts of a living being.

Even with Bruno, in spite of the infinity of his universe, straight-line movements remain in principle finite movements, which always take place 'in the neighborhood' of the bodies they relate to. They must be conceived as corrections of irregularities that can arise from the violence of intrabodily organic processes. Such falling movements are, then, aspects of the circulation processes of the world bodies and are in agreement with the organic guiding image. This explanation of weight takes up again a Stoic theory according to which every part of the world presses toward the world's center and a circular flow process arises from the displacement of the parts that have reached there at any time, so that the same tendency of everything earthly toward rest at the world's center that Aristotle had assumed produces the effect of an uninterrupted pushing and displacing movement.
Since no particle has the special prerogative of occupying the midpoint of the whole body, the indifference principle holds here too as the guarantor of continual movement, of the passage of all parts through a point. 55

With this conception of the inner circulation of all world bodies, the idea of movement as the universal law of the participation of everything in everything, which determines the movement of the world bodies on their paths, is realized for the internal structure of these world bodies as well. In the process, the movements of return that appear in our experience as "free fall" become processes of the "self-preservation" of the organic whole. 56 From this point of view, the Aristotelian theory of "natural location," and thus also of the movement of falling, proves to be a description of regularities that it does indeed pretend to explain, but which it cannot comprehend in their purposefulness. Universal participation is the dynamic principle and constancy of the individual body the conservative principle in this picture of the universe; the possibility of autarkic immanence depends on the balance of the two tendencies.

Bruno criticizes the Aristotelian definition of movement as actus existentis in potentia [actualization of an entity as potential]. It seems to him to be too general, since it explicates not only movement but also such concepts as those of "rest," "life," and "soul." This lack of specificity in the definition is said to be due to the fact that Aristotle assumes a relation between possibility and reality, between potentia and actus [potentiality and actuality], which runs in only one direction. Every movement, then, would have to be exhausted with achievement of the transition from possibility to reality. It is clear that that does not fit Bruno's conception of the relation between possibility and reality, in which no concrete realization ever carries satisfaction with itself but rather precisely as present reality is exclusive and obstructive for that which was also possible. Whatever has in fact realized itself at any given time strives to depotentiate itself again into possibility, by means of the indifference of matter to form, so that the purposefulness of movement is directed both from possibility toward reality and from reality toward possibility. 57 This stipulation is satisfied only by the circular motion in which each point arrived at is at once the goal and the beginning of the total motion.

For Bruno, circular motion is the pattern that dominates all natural processes, but not as a result of merely adopting the Platonic rule.
according to which astronomy had to reduce all phenomena of motion to regular circular motions, where the ideality of the circle could only be realized in the highest precision of its eternal repetition—that is, in the rotation of the outermost sphere. Bruno is not concerned with this precision, that is, with the geometric idealization that is active in the Platonic tradition. For him, the motivation of all cosmic movements consists in the principle of infinite participation, in the variation of situations and aspects, in traversing the total potentiality. The fundamental form of the circle may and must therefore be modified by the utmost complexity of its constructive elements, must be softened in its geometrical purity. In spite of its unmistakable reference to the Cusan’s “imprecision,” this is nevertheless no longer the mere index of the infinite difference from the transcendent absolute, no longer the infinitely futile approximation to the unattainable “precision” of an original, but rather in its insistence on the circular form, it is the figure, immanently realizable in time, of the absolute itself. What was the stigma of difference has become the retraction of transcendence into immanence, the dissolution of the former in the latter.

What for Copernicus was still the annoying concession of the complexity of the movements added to the primary, diurnal rotation—a concession to the cosmic shortcomings of the earth—is reinterpreted as the most suitable fulfillment of the original metaphysical commandment of exhaustive participation. The fact that nature does not follow geometry, that it nowhere realizes purely circular movements, is now an expression of the immanent sense of its form of movement as such. To estimate what was sacrificed with Bruno’s turning, and what was gained, it is necessary to digress by looking back at the gain in order that had been achieved by the traditional solutions. For Plato and Aristotle, the fact that the world is a cosmos had been, through the idea of real spheres as bearers of the moving heavenly bodies alone, a direct spatial observation, an objective datum independent of time. One can understand the Platonic and Aristotelian cosmology as a counterconstruction to Democritus’s attempt to base an atomistic account of nature on the straight line as the primary geometrical element, and accordingly to see the initial state in the parallel paths of the atoms through the limitless void, and thus to exclude the formlessness, which was terrifying to the Greeks, of the *apeiron* [the boundless, infinite]. Accordingly the circular form of the paths of the heavenly bodies on their spheres was the manner of movement that united
endlessness in time with rational uniformity, without requiring Democritus's unlimited space. But time, then, is finitely periodic, all the way up to the Platonic “great year.” Thus it has no overall sense extending beyond the closed cycles. Just as Plato had appealed to the binding force of ideal rationality for the demiurge in the *Timaeus*, so Aristotle deduced the necessary absolute regularity of the circular movement of the heaven of the fixed stars from the logical analysis of the concept of time. The homogeneity of time required a cosmic movement as an ultimate measure that could not be measured again against an overarching standard of measurement. This requirement was satisfied by the unmoved mover as the factor guaranteeing insurpassable uniformity. As a result, there could be a cosmic universal time as the measure of a movement that in turn made it possible to measure all intracosmic movements temporally.

If, since Copernicus, this movement was an illusion produced by the rotation of the terrestrial body, and the spherical form of the heavens also turned out to be a perspectival illusion that would have to appear in the same manner in all world bodies, then it followed—and Bruno recognized this—that with the interchange of the real bearers of motion, the unity of time for the whole cosmos, as a verifiable standard of measure, had disappeared. From now on each world body, in accordance with its own rotation, possessed a different apparent movement of the apparent sphere of fixed stars, and thus also a different time, specific to itself. But since, like the earth, none of these heavenly bodies could any longer have an absolutely uniform movement of its own, even the rotations of the heavens apparent on each of them did not satisfy the time concept’s logical requirement of an absolutely homogeneous standard of measure. The plurality of worlds had brought with it not only the plurality of times, and thus the problematic—which was not yet perceived as aggravating—of simultaneity, but also the contingency of all cosmic clocks, which now could be nothing but the phenomenal projections of the disturbed rotations of one’s own standpoint.60

It has already emerged in another context, however, that the reality of time is an unalterable presupposition of Bruno’s system. It is just as clear that this real time could no longer be *eo ipso* identical with measurable or already measured time. The movements that occur in the world and that seem regular could not serve as a chronometer for that real world time. The distinction between the real world time
and the phenomenal times in the various worlds, which Bruno did not carry through systematically, should have resulted from the metaphysical partiality of movement alone, which, as we have seen, is always only movement of the worlds, not movement of the world as a whole. But the unmoved totality of the world also has its time as duration (duratio), which as such is not measurable and represents only the reoccupation of theological eternity: “Tempus universale aeternitatem dicimus” [We call universal time eternity]. World time is the genus of duration, whose specifications represent the concrete times of the particular worlds on the basis of their specific movements. Movement, then, is the specifying principle of the genus, time: “Esse igitur temporis iuxta suas species pendet a motu” [Therefore the being of time, like its species, depends on movement]. Thus there would have to be time even if no motion existed; but then there could be no measurement of time, and Aristotle should have connected not time but knowledge of time to movement.

Thus logically the Aristotelian definition of time is reversed: Time is not the measure of motion; rather motion is the measure of time. The relation between the universal world time and the partial times of particular worlds is interpreted on the analogy of the relation between infinite space and finite spatial positions and measures: Just as the location of world bodies cannot be given immediately by reference to infinite space, but only by the system of the relations of the bodies to one another, and as the different spatial measures possess no specifiable relation to the immeasurable universal space, so also the times of particular worlds have no proportion to world time; indeed they coincide in it according to the principle of the coincidentia oppositorum [coincidence of opposites].

Here again the characteristic features of the Cusan’s theological metaphysics are fully reabsorbed into immanence. For the problem of time, this has the consequence that the transcendent character of world time deprives physical standardization of application and that technical procedures of time measurement then move alongside and are equivalent to the purely phenomenal measures of time that present themselves in the individual worlds. The principle of indifference, which comes into play here too, isolates each of the infinite worlds, with its time, and man as the fabricator of clocks, with their time, from one another; the unity of the world in space and time is strictly metaphysical and lacks any verifiable theoretical/technical relevance.
Part IV

Here it immediately becomes clear how distant Bruno's speculative theory of space and time is from Newton's concepts of absolute space and absolute time, which, while they do still perform the service of answering metaphysical questions, above all fulfill an assignable function in the definition of physical propositions.

Giordano Bruno was thus the first to see the reformulation of the traditional concept of movement as a consequence of Copernicanism. Admittedly he did not avail himself here of the license that the nominalistic critique of Aristotelian physics had already procured and without which Copernicus himself could hardly have insisted on the cosmological truth content of his reform. Bruno's use of the organic metaphor of the immanent origin of movement is indeed, viewed formally, a step back into a mode of assertion that verges on the mythological; but as insistence on the exclusion of transcendent factors and supplementary assumptions, it has a transitional function in which the logic of Copernicanism is kept alive. The Copernican destruction of the reality of the primary heaven and primary movement also excludes Aristotle's prime unmoved mover and Scholasticism's cosmological proof of God's existence, as well as the assumption, which is dependent upon them, of subordinate spheres and sphere movers. All world bodies, as living beings, have their principle of motion in themselves, by which they carry out the complex circling movements in which they are brought to the optimal exhaustion of universal participation. The assumption of external movers now would force one to classify their movements as "violent." The difficulties for carrying through the Copernican idea that arose from the absence of the principle of inertia are bracketed out with the help of the idea of the organic wholeness of world bodies and their self-preservation. Natural movement is no longer the effect of an 'accompanying causality' of the world cause, though it is certainly an expression of perfection deriving from the primary constitution of the object and from the "communicated causality" (virtū impressa) contained in that. Thus the energetic autarky of immanence is precisely the correlate of the transcendence expended on it.

The talk of "immanence" in which we have engaged so far needs to be made more precise. Strictly speaking, it is incorrect to talk, in connection with Bruno's theory of movement, of what is immanent in the world. For as a whole, the world carries all the 'classical' marks of transcendence, as a clear result, in fact, of Bruno's derivation of
ideas from Parmenides and of his formal transposition of the Cusan’s coincidentia oppositorum. “Immanence” is now the designation of each of the infiniti mondi [infinite worlds], between which there is no causal nexus. Thus the moon cannot be the cause of the tides; for them the moon is not causa but segno [not cause but sign]. The connection between an earthly natural phenomenon and a particular astronomical constellation is not due to dependency but rather to the ‘synchronization’ of immanently elapsing processes and the congruences of the regularities that govern them. The unity of the ancient and medieval, and even of the Copernican world as a causally governed structure of order, is exploded, and the new possibility of representing this unity physically as a system of interdependence of masses in space is not yet even dreamed of.

Giordano Bruno and Leibniz are close to one another in the comparability of their accomplishment—in terms of function, not success—of filling the historical space between the two world concepts of the Scholastic and the Newtonian physics. This interim solution is distinguished by the basic idea of the immediacy of the monadic units of reality to an origin that communicates itself as regularity. This is the source of the guarantee of a “preestablished harmony” as the equivalent of the causal nexus. It is only because of this that cosmic constellations can become ‘signs’ of the course of events within any individual world. This principle of immediacy preserves the possibility of theoretical knowledge across the hiatus between two completely heterogeneous ideas of science.

The naturalness of the orbital movements of the world bodies is no longer due to the special nature of stellar matter but rather to a transfer of the theory of “natural locations” to the relation of the heavenly bodies to their orbital positions. Hence the position of the terrestrial body in space indicates the “natural location” of its constituent parts at any given time, and thus the direction of the straight-line return motion of member bodies that have been expelled. But every point on the orbit that the whole body describes is equally its “natural location.” This indifference of all points on the orbit, of which none can be distinguished from the others, is the source of the ‘naturalness’ of movement on this orbit. Thus Aristotelian physics, with its doctrine of elements, is held to insofar as the fundamental state of the star that is in motion in its orbit corresponds precisely to that which Aristotle’s elements are in when they are at rest in the region of their
natural location. If therefore rest and motion are equivalent in regard to their ‘easiness’ for all situations of a rotating world body and for all points on its orbit, then talk of “rest” now has only the sense of a limiting case derived from the traditional system but no longer realized in the new system. Here all world bodies are regarded as homogeneous; the Aristotelian theory according to which the behavior of bodies composed of a mixture of elements is determined by the predominant element is given up: “Interea pessime assert Aristoteles eo ferri totum quo pars fertur . . .” [However, Aristotle maintains, very wrongly, that the whole is carried in the direction in which the part is carried]. Thus the mode of movement becomes a characteristic of bodies rather than of the elements of which they are composed—in the limiting case, a characteristic given to the smaller partial mass by the total mass.

Circular motion is the general presumption of the system. To continue to assert that a world body like the earth is at rest implies a burden of proof that is contrary to all probability in this system: “Ma chi a trovato questo? qui l’ha provato? La commone ignoranza, il difetto di senso e di ragione.” [But who has discovered this? Who has proved it? Common ignorance, the lack of sense and of reason.] In the same way, at the beginning of the dialogue De l’infinito the burden of proof in relation to the antithesis between the finitude and the infinity of the universe fell to him who wanted to defend its finitude. It could be assumed from the outset that—just as in the Copernican model of the transfer of the movement of one’s standpoint to the movement of the heavens—such a person projected the limitations of our sense perception onto reality without noticing what he was doing.

The principle of indifference is joined by something like an “optimistic principle of completeness,” whose application yields the optimal filling of space by motion as well as the postulate of the infinite plurality of worlds: If it is good that this world in which we live exists and that it can only exist by filling a position in space, then it is also good that space in general is filled, since each position in space is equivalent to every other. In the same manner, it is argued that if there is a reason for the existence of a finite world, such as appears to us, then there is also a reason for the existence of an infinite world, such as we cannot experience. Similarly, from the indifference of a body’s situation in relation to other bodies and light, the rotational
movement of this body about itself is inferred, which makes it take up all possible attitudes to other bodies and light. And this in turn is only a special case of the indifference of matter to all of its form realizations, which yields the world principle of the metamorphosis of matter.

In spite of the Nolan’s proximity to Leibniz, a crucial difference becomes visible, which corresponds to the difference between the impersonal and the personal concept of God; the same ingredients of argumentation will cause Leibniz in his exchange of letters with Samuel Clarke to deny the reality of space and time precisely on account of the indifference of their parts and to elevate the principle of sufficient reason into the premise of the personal world cause because only it could choose one of the infinitely many possible worlds for realization. It becomes evident when we examine this difference that Leibniz falls back to a position behind the very position of the Nolan that had become compelling for the latter as a result of his attempt at overcoming the nominalistic antinomies. It turns out, from this comparison, that Leibniz stood closer to his voluntaristic opponent, Samuel Clarke, in terms of his central stock of presuppositions than to the Nolan, who seems so similar to him in his speculative language. Chronological sequence does not provide an adequate criterion of the direction of relation to the epochal threshold.

The application of the principle of indifference to matter compels one to reinterpret the Aristotelian account of the relation of matter to form. Matter is not desirous of form, but neither is form ‘imprinted’ on it as an undefined substratum; rather it produces form, after the analogy of organic growth, from its womb (“dal suo seno”). But the particular concrete form into which matter enters cannot be its perfected definition, since forms change unceasingly on the surface of matter (“nel suo dorso”), while matter is eternal, and thus is something divine in the things themselves (“uno esser divino nelle cose”). It is not form that conserves matter, because what is transitory cannot conserve what is eternal; instead, matter brings form into existence and maintains it therein (“la materia conserva la forma”). Hence matter is not “as good as nothing,” is not a naked and impotent lack of definition; instead, it is the substantial core of the world, its constants. Form arrives at realization by participation in this being that belongs to matter, but no definite form ‘fills up’ its volume of being. This is the source of the change of forms in the world, of the ‘impatience’
of matter with which it continually disengages itself from one form in favor of another ("ma più tosto che la materia rigetta quella forma per prender l'altra"). It is the intraworldly correlate of the potentia absoluta of the world ground, the 'image' of the latter's insistence on the carrying out of omnipotence. Bruno even goes so far as to say that matter is more averse to form than desirous of it—giving metaphorical expression to the 'facticity' of every particular form, to the blockage of universal participation by each of its concrete phases.\textsuperscript{74}

Once again Bruno’s affinity to Copernicanism is confirmed in connection with a state of affairs that had caused so much disappointment to Copernicus himself with the advance of his reform since the early sketch in the Commentariolus: the increasingly evident lack of simplicity on account of the necessary inclusion of individual motions that are combined in the motion of the earth. Bruno sees this instance as a confirmation of his thesis rejecting the clarity and identity of form in nature. He discusses this Copernican dilemma toward the end of the fifth dialogue of the Cena and sees in it a verification of the fact that in spite of its eternal circular movements, nature has a teleology going beyond the repetition of the identical: "Che nella natura non è cosa senza providenza e senza causa finale" [That there is nothing in nature that is without providence and without a final cause]. This teleology is comprehended in two basic concepts: renewal ("rinovazione e rinascenza") and participation ("participar tutti gli aspetti e relazioni"). The complexity of the earth’s movement prevents constellations from being able to repeat themselves within the period of a year; only thus does the earth take part in the ‘program’ of the processual overtaking of possibility by reality and the drive of the world stuff toward ever new realization.\textsuperscript{75}

The idea of metabolism as the way in which organisms preserve themselves through change is clearly present in the background. But the identity of form that is preserved in that process is only the foreground, phenomenal aspect of the turnover of matter that is possible and taking place in it. The fact that the individual enjoys and seeks to preserve himself in his existence, which, however, is always conditional on the disappearance of other individuals, is only a symptom of the fulfillment of his function within the universal metamorphosis.\textsuperscript{76}

In the context of this reinterpretation of the relation of matter to form, we are also able to understand why Bruno, who says of himself that he had earlier been a partisan of the atomism that derives from
Democritus and Epicurus, had given up this position again to draw near to the schema of the Aristotelian matter/form relation—at bottom, to conserve a piece of Scholasticism:

The atomistic conception unites materiality and specific forms in the ultimate elementary units to which all characteristics of the phenomenal world are reducible. The change of forms in the visible world is then only the sense-perceptible aspect of the real configurations that are taking place in the underground of the invisible. If the analysis of the Nolan’s basic ideas that has been given here is correct, his dissociation from atomism follows as a compelling consequence. The metamorphosis of homogeneous matter that takes place in infinite space and infinite time was an idea that was bound to fascinate Bruno and that for the first time made possible the adequate expression of his conception of unity and multiplicity, of the identity of the world principle of the potentia absoluta and the highest inclusiveness of its realization. But in spite of this approach to Aristotelianism, his concept of form is not that of the orthodox forma substantialis [substantial form] of Scholasticism; on the contrary, it is the sum of the accidental determinations that are brought by local movement, as the elementary factor, into ever new constellations. On these assumptions, the complexity of the earth’s movement—Bruno mentions only daily and annual motion, precession and nutation—fits in effortlessly. A consequence of this complexity is that in the course of time, all parts of the earth participate in all configurations and attitudes to the sun and are thus made subject to all the corresponding influences and conditions. Bruno says that the long-term alterations in the appearance of the earth’s surface, with which Aristotle was perfectly familiar, were nevertheless something that he could not explain, since he knew only the daily and annual motion of the sun as possible factors in these alterations—in other words, he did not know the subtler “imprecisions.”

Bruno’s sympathy with the pagan metamorphosis of the gods—even with the animal multiformity of the Egyptian pantheon—arises from and corresponds to his idea of the condition, as regards form, of matter in the universe, which at no time is content with itself and yet has no need of a transcendent supplement. That is not simply mythology—above all, it is not myth once again, neither a renaissance of the ancient world nor a ‘secularization’ of the Middle Ages; to assume that it is would be to infer what is meant to be expressed from the means of expression. In the syndrome we have described,
of matter and movement, conservation and participation, drive for form and denial of form, what awaits formulation—speculative, fanciful, poetic, cosmological, and any other type of formulation—is the changed overall state of substance. What was called “substance,” following Aristotle, has long been on the point of passing from the eidetic firmness of the unchangeable and metaphysically guaranteed ‘essence’ [‘Wesen’] into the abstract constants to which the modern age will be pledged—into the magnitudes, no longer referable to intuition, of mass, inertial motion, the speed of light, gravitation, power, energy. It tends, then, to be conceived as an unfolding process, and, given the merely ‘foreground’ character of apparent formations and species, to be only a cross section, halted at an arbitrary point and capable of morphological inventory, of a process of those abstract factors that is never terminable in a result. Here also nominalism, with its critique of the realistic theory of concepts, had begun to destroy the substantial core constituents of reality, to dissolve their eidetic contours; but on account of its voluntaristic dogmatics, it had not been able to bring about any antithesis but that of divine abundance and human economy, and thus had not carried the problem beyond the level of logic. Thus man was supposed to continue to be directed to isolate and to assert himself against the world and to seek his salvation outside it.

It is clear that the Nolan has no independent anthropology; for him, man is not a subject sui generis. Man retracts himself, as one of the endless phases through which nature’s self-realization passes, into the universal process, which in his way and with his own means he ‘pushes forward.’ Talk about man is an incidental subject in cosmology. If man rises above the other beings, then that is not to be understood as a central and unique position in the world, but rather as raising to a higher power the universal tendency towards transformation of whatever is given, as a translation of the process into ‘work.’

In the first section of the third dialogue of the Spaccio, Zeus replies to the application of Idleness (Ocio) and Sleep (Sogno) for a place among the constellations with a rejection of idleness in favor of work. The gods had given man intellect and hands, he says, so that he should be able not only to be active according to nature and its order (“secondo la natura e ordinario”), but to go beyond the laws of nature (“ma, e oltre, fuor le leggi di quella”) in order to produce another nature, other courses of events, other orders (“acciò, formando o possendo formar altre nature, altri corsi, altri ordini con l’ingegno”). In this
freedom from being bound by what exists, there lies, according to the words of Zeus, the possibility of man's attaining the likeness of God, as "dio de la terra" [god of the earth]. Going beyond nature, as what already exists, becomes the existential sense provided for man by nature.

With a reversal of Lucretius's culture criticism, Bruno rejects, through the mouth of Zeus, the idea of a golden age of an animallike, idle mode of life of men who depend on and submit themselves to nature. It is true that here also the necessities and difficulties of existence have led to the adaptation of abilities to the exigencies of the surrounding world; but the achievement of autonomy by the inventions and discoveries that were made in this way, as the process of culture, is legitimized as the imitation of divine action. Self-empowerment over against nature is reinterpreted as empowerment by nature. Since now the infinity of omnipotence is imitated as progress from day to day through new inventions and through exertion that continually fits itself for new undertakings, 'Godlikeness' is no longer the signature of his origin imprinted on each individual but rather the ideality, to be realized by the species, of its future. Here the metaphorical interpretation of history as the organic maturation and aging process of a species-being appears to break through into the idea of progress.

The difference from the Cusan is clear; no individual can fulfill the existential sense of the species, and consequently mankind cannot experience its final union with the Divinity in any historical member of the species. The hypostatic union would not be the center and turning point of history but rather the breach of its sense, and its end.

This differentiation is essential in defining relations to the epochal threshold. For the Cusan, man's Godlikeness [Gottebenbildlichkeit, the term that is used to imply being "made in God's image"] is an eidetic characteristic, an essentially definitive predicate, which is capable of a uniquely highest actualization and maximal "precision." For the Nolan, Godlikeness is an ideal that gives a direction to man's distance from his origin in bestiality, but a direction that promises no rest in the attainment of a goal. Here again time is the real condition of the possibility of the ideal; the figure of the substantial form is lost as something present and is projected into the dimension of time. The interpretation of man as a self-developing being who raises himself to higher powers only anticipates the continuum of evolution that, for the fauna of the extrahuman realm, must still provisionally be seen
as metamorphosis, as the change of forms each of which has its own established character. Man in this universe is only the transition from one condition of transformation to another, the continuation of the one great process by new means. He is not a microcosm, not the central dynamis [power, ability] that is able to be every entity over again.

In order to bring the difference between the configurations [with respect to the epochal threshold] fully into focus, one must reread once more what the Cusan had written about man: The unity of what is human, realized in the concrete human existence (humaniter contracta), seems to include the universe in itself, in the manner suitable to it. The power of this unity is a match for the universe and forces it into man’s power, so that nothing escapes his ability (ut nihil omnium eius aequatur potentiam). For he trusts himself to comprehend everything with the senses or reason or intellect. These faculties lying in him lead to a self-assessment that believes itself capable of approaching everything according to the measure of the human. Man is the world, even though he cannot be everything concretely, just because he is man; therefore he is a microcosm or a human world (humanus mundus). The realm of humanity embraces God and the universe in human power. Thus man can be a human God and can be God in a human manner; he can be a human angel, a human beast, a human lion or bear or anything else, since it lies within man’s power to be everything in his own way.81

Despite the ease with which one could mistake the language for his, the Nolan could not have written that. With him, the indefinable potential of the human is encircled by the figures of its possible failure. What man can become, without ever being it—the image and likeness of the Divinity—repeats itself, on a different level, in animals, which, like the ape and the night owl, can figure “ad imagine e similitudine de l’uomo” [as the image and likeness of man] or can be found as the hidden reality in the apparent form of the human, “sub imagine et similitudine hominis” [under the image and likeness of man].82 Metamorphosis and mask game, the reality of an essence and its pretense, real men and those “che son fatti ad imagine e similitudine di quelli” [who are made after their image and likeness] become confusable for the perception that relies on itself.88 The great biblical formulation of anthropology becomes the formula of a docetism, in which truth and illusion belong to one world and assurance can no longer be obtained
from the presence of the *eidos* [form, Idea]. In this indifference of essences, in which the figure is no longer an index of the substance, the "Asino Cillenico" [Cyllenean ass] is supposed to have had Aristotle as one of its reincarnations, and in his address to the ass, Mercury parodies Pico della Mirandola’s *Oratio de hominis dignitate* [Oration on the Dignity of Man].

The wisdom of the *docta ignorantia* [learned ignorance] appears in the form of "Asinità" (Asininity). It oscillates between satire on the *sacrificium intellectus* [sacrifice of the intellect] and parody of a "knowing ignorance" that is no longer the index of the incomprehensibility of a transcendent truth but rather the suspension of a supposed knowledge that blocks the possibility of a new insight and whose surrender sets free movement that can lead to knowledge. The *docta ignorantia* is turned back from transcendence to time; it is the wise ignorance that does not through self-satisfaction and certainty of salvation disguise from itself the new beginning and the gain in truth. The "santi dottori e Rabini illuminati" [holy doctors and enlightened Rabbis] are personified in "Asinità," whose ass’s hoof is the hand, now impotent, of Adam/Prometheus, a hand that can no longer reach out for the forbidden fruit of knowledge, while its pointed ears are adjusted for credulous listening.

The Nolan’s turning away, immediately before the pyre burst into flames, from the image of the God who became man and was crucified—this was not, or was not only, the defiant finale of the escaped monk; it was also, or especially, the gesture that maintains consistency with the vision of a new universe. What had made this vision compelling for the heretic was a unity of reality in which everything was indeed self-reproducing, self-manifesting God, and man also was a being who becomes God, a unity, however, in which the universality of the transformation that embraces all realities did not admit the singularity of a God who forces His way into human history, of an act of salvation that identifies itself as the kenosis of isolation from God, but instead had to reevaluate this as the scandal and provocation of a counter-symbol. The great symmetry of man becoming God and God becoming man, which the Cusan had set up against the conflict that was breaking out between the medieval consciousness of God and the new consciousness of self, had been destroyed by the third element of the system, the no longer limited world, which Nicholas himself had introduced, still with caution, to balance the transcendent infinity.
Between the Cusan and the Nolan an ambivalence in the concept of reality is decided that had seemed to be decided and brought to a close in the early history of Christian dogmatics, in the elimination of the Gnostic phenomenalistic Christologies, but had come to light again. The radical separation between the God of the Creation and the God of the tidings of salvation that was advocated by the Gnostic Marcion made Christ’s corporeality function as a merely episodic adaptation to the conditions of man’s imprisonment in the world, as a means of deceiving the demons who guard the universe and mankind within it.

That is no obscure specialized topic in the history of dogma. To see what has become self-evident as something that was not originally self-evident is the task of all historical reflection. The idea of the Incarnation is ultimately the result of a fundamental difference between biblical and pagan theology, which can be reduced to the simple fact that the word “God” left the tongue of the Jews with as much difficulty as it left the tongue of the Greeks with ease. Whether that was connected with the fact that the God of the Old Testament was the protective power allied with one people, withdrawn from and to be concealed from the rest of the world, while the Greek gods were of the world and enjoyers of the world, were receivable and transportable, need not be decided here. In the area of the Old Testament, a whole gallery of functionaries of salvation had been developed that were not gods and could not become gods, whereas for the Greeks and Romans, that sort of thing easily developed into a god, even into a disguised god capable of many metamorphoses. Thus when the ‘Son of Man’ was offered to the Hellenistic world as the bringer of salvation, it was natural for this world to understand him as the metamorphosis of a god—of the God, if there was only to be this one. But the Hellenistic world had also developed the philosophical critique of the myth of the gods and their ‘stories,’ and for this critique the metamorphoses of myth were in essence a lie, deceitful deception, misuse of the power of a god. He who was supposed to have brought the final truth could not get involved in a dimension of such ambiguity. The idea of the Incarnation as the union of two natures draws the consequence from this situation; it protects a process of dogmatic formation that increasingly justifies and formulates itself philosophically in such a way as to combat the suspicion that it is yet another myth.
Chapter 3

The reconstruction of the term "person," to which Giordano Bruno was to take exception, is the best evidence of this intention. The original meaning of the word is directed precisely not at the core of the real subject but rather at the roles in which it presents and veils itself. The term resists a construction that wants to integrate two "natures" into one "person," and this in a sense that conforms only to our concept of a person, already stamped and established by the subsequent history of its meaning. This conceptual history indicates that problems arise that had not only been unknown to the ancient world but also would have been incomprehensible to it. They were suppressed, rather than resolved, by the device of a change of meaning. This is the origin of the efforts, so rich in controversy, of the early centuries, with their allergic sensitiveness to the slightest appearance of a theological illusionism. The idea of the Incarnation—despite the fact that this could not have been the intention—was an infinite fortification of human self-respect. Because of it, the form that God adopts ceased to be arbitrary and provisional, since this form becomes His special and lasting fate. This finality of the pact was the important thing for theology. It contained the irrevocable guaranty of the 'eternal covenant,' whereas metamorphosis had an episodic character and included the implication that anything can become anything. To renew the mythical category of metamorphosis, to raise it to the level of a cosmic ritual, could only be an assurance on behalf of the universe and the absence of privilege among its fullness of forms, not on behalf of man. Late medieval nominalism had raised this problematic again, without realizing it, by placing the Incarnation under the condition of absolute divine freedom and leaving man with no claim to be the essentially privileged creature in nature, who alone could become the medium of the self-communication of the hidden God.

The Nolan only accepted a challenge that was already historically posed. He gave it an answer that went to the root of the formation of the age that had come to an end. What was received as 'joyful tidings' and in the toil of centuries had finally become 'Scholasticism,' he experienced as trauma. Even if he believed that he sought the new point of departure in what had been the basis of the "old true phi-
losophy," that was a self-deception. History knows no repetitions of the same; 'renaissances' are its contradiction.

Translator's Note

Notes

Part I

Chapter 1


Chapter 2

1. Feuerbach, *Nachgelassene Aphorismen. Werke*, ed. Bolin and Jodl (Stuttgart: Frommann-Holzboog, 1960-1964), vol. 10, p. 318. Incidentally, the term "mediated" in this aphorism is undoubtedly a metaphorical reference to a political state of affairs that is a close neighbor of 'secularization': the suspension of the 'immediate' membership in the Reich of both secular and ecclesiastical principalities by the Rhine Confederation Act of 1806.


9. The supplement to his investigation which Zabel provides in *Archiv für Begriffsgeschichte* 14 (1970):69–85, reinforces the finding of the adaptability of the terms "secularization" and "becoming/becoming made worldly." Paul Yorck von Wartenburg uses them to designate the false embracing of the church by the state (op. cit., pp. 77–78). Richard Roth takes them to mean a transitive 'release' from ecclesiastical guardianship into worldly autonomy—itself a sacral act, by which the church 'desecularizes' the state (op. cit., pp. 82–83).

10. This distinction is intended to render more precise my initial thesis, as it was first presented at the Seventh German Philosophy Congress in 1962: *Die Philosophie und die Frage nach dem Fortschritt*, ed. Helmut Kuhn and Franz Wiedmann (Munich: A. Pustet, 1964), pp. 240–265.


16. F. Delekat, op. cit., p. 60.


Chapter 3

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formerly a theologian, now a philosopher." To which Zunz responded: "A former theologian is always a philosopher"—"Philosophie der Vernunft und Religion der Offenbarung in Hermann Cohens Religionsphilosophie," Sitzungsberichte der Heidelberger Akademie, Phil.-Hist. Kl. 7 (1968):9. Löwith adds, with an eye to Cohen, that the proposition can also be reversed; but that is precisely not the case.


4. Karl Löwith, review of part one of Hans Blumenberg, Die Legitimität der Neuzeit (Frankfurt: Suhrkamp, 1966), in Philosophische Rundschau 15 (1968):195–201. An example of the "vehemence" referred to: The reviewer makes of my sentence that in the second generation Löwith’s thesis "can already be described simply as ‘well known’" the assertion that he "‘simply’ presupposes the derivation of the idea of progress, and of the philosophy of history which it supports, from theological eschatology" (op. cit., p. 196).

5. Karl Löwith, op. cit. (note 4), p. 197: "Since the author’s historical consciousness rejects any substantial tradition or constant basic features, but at the same time makes these into criteria for the demonstration of secularization, he charges his opponent with a burden of proof that he himself considers incapable of accomplishment."


12. Werner Krauss, Studien zur deutschen und französischen Aufklärung (Berlin: Rütten and Loening, 1963), p. 195, for his part describes the "humanization of the historical" as a "secularization of the religious plan of salvation," although he had earlier characterized the turning against Bossuet that took place between Turgot and Condorcet as a "refutation of the plan of salvation in world history" (op. cit., p. 187). Of course a refutation is also dependent on what it is intended to refute, but if this already counted as "secularization," there would not be much point in discussing it further.

13. Kant, Der Streit der Fakultäten, II, 2.

Chapter 4

1. To cite only one example of the imnumerable vestigial formulations of an unspecific pious respect for providence, a leter of Anna Louise Karsch (Karschin) to Goethe (September 4, 1775): "... but I am not despondent: I think the Father of the Whole will deal well with me, the individual part, too, right up to the end." Was even one line of the Bible, one Christian theologian, necessary before this could be written? What is more, would it not have had to be written differently post Christum naturum?


6. Compare K. G. Kuhn's article, "maranathâ," in Theologisches Wörterbuch zum Neuen Testament, vol. 4 (Stuttgart: 1942), pp. 470-475 (on 1 Corinthians 16: 22). Prayer for deferment of the terrors of the end is already recommended at Mark 13: 18 and Matthew 24: 20, but really only as a request for mitigation of circumstances: that it should not occur in the winter or on the Sabbath. In Tertullian, prayer has become state- and world-preserving: he counts among the negotia Christianae fictiones the fact that it press God pro status saeculi, pro rerum quiete, pro morta finis (Apologeticum 39, 2). The self-interest of the Christians and the public interest of the Roman empire coincide, he assures us, because the interval before the sufferings and terrors of the clausula saeculi coincides with the duration of the imperium; he who does not want to suffer the former must be concerned about the latter: "itaque nonumus experiri et, dum precarum differri, Romanae diuturnitatì favantes" (Apologeticum 32, 1). On the process by which acute eschatology was reformed, see Martin Werner, The Formation of Christian Dogma: An Historical Study of Its Problem, trans. S. G. F. Brandon (New York: Harper and Bros., 1957); original edition: Die Entstehung des christlichen Dogmas, problemgeschichtlich dargestellt (Bern: P. Haupt, 1941; 2nd ed. Tübingen: n.d.).

7. Tertullian, Apologeticum 41, 3.


9. Karl Holl, Gesammelte Aufsätze zur Kirchengeschichte III. Der Westen (Tübingen: J. C. B. Mohr, 1928), p. 11, ed. note. Even when the expectation (or fear) of the end presents itself as short term, this is often only literary assimilation; when Lactantius assures us that lapsum ruinamque rerum brevi fore, or even venisse tam finem robus humanim orbique terrarum, but at the same time says that the latitude amounts to 200 years (Divinæ Institutiones VII 25, 5-7), then contrary to the wording, this is still a distant myth because it does not affect those who are alive at the time.
10. *Overbeckiana. Übersicht über den Franz-Overbeck-Nachlass der Universitätsbibliothek Basel*, part 2: Der wissenschaftliche Nachlass, ed. M. Tetz (Basel: 1962), p. 133. In order to allow the inner openness to the *parousia* to persist long enough and to lead into the phase of political victory, as required by his thesis of the repression of eschatology by worldly success, Overbeck distinguishes between exoteric and esoteric modes of speech: It is only externally that the Christians present themselves as the ones who hold the world together (he cites the letter of Diognetus; Justin, *Apologia II 7*; Clement of Alexandria, *Quis divus salvator* 56)—Franz Overbeck, *Studien zur Geschichte der alten Kirche* (Schloss-Chemnitz: 1875), pp. 48–51.


13. C. F. von Weizsäcker, *The Relevance of Science* (New York and Evanston: Harper and Row, 1964), p. 171. The author continues (p. 172): "Were I to return to the philosophical problems, I would at this point have to investigate the Christian and the modern concepts of time. I hope I might be able to make it probable that our concept of history is not less, but to a still greater degree, a legacy of Christianity to the modern world than is our concept of the law of nature."


**Chapter 5**


7. O. Marquard, *Schwierigkeiten*, pp. 16ff: "No doubt it was the cunning of Blumenberg's reason that caused him, with his very attack on Löwith's and Taubes's continuity theses, to provide the sole opportunity for their real defenses: his functional model of history... There Blumenberg comes, willy-nilly, to their aid..."

8. O. Marquard, *Skeptische Methode im Blick auf Kant* (Freiburg: Karl Alber, 1958), pp. 78ff. See also pp. 82–83: "But what is reason? Once it was theological. But in modern times it presupposes reason's renunciation—admittedly only a partial renunciation—of its theological definition. This renunciation was provoked by theology. It is not without theological legitimation that it stresses God's freedom... So reason escapes the judgment of theology through emancipation. It becomes self-willed reason, control reason. But it has to give up its theological vocation. This
resignation is a resignation from its totality mission. Its relation to this resignation is one of uneasiness. Hence we have attempts at reestablishing its theological vocation. Self-willed reason is joined by appended reason. The latter must interpret the divine as the rational; it is forced to engage in theodicy.

Chapter 6


8. Nietzsche, Genealogy of Morals II, 1, trans. W. Kaufmann, Basic Writings of Nietzsche (New York: Random House, 1966), p. 493; original: Gesammelte Werke (Munich: Musarion, 1920-), vol. 15, p. 319. The theme of "forgetting" in Nietzsche is primarily part of his resistance to Platonism, a resistance that relates to amnesia as the mode by which the contents of the background world of the Ideas is conveyed, but it also belongs in the complex under the rubric "detriment of history to life." The late notation, "The art of forgetting is divine!" (Werke, Musarion ed., vol. 20, p. 235), reflects the early "Perhaps man cannot forget anything" (Werke, vol. 6, p. 27), and the doubt "whether there is such a thing as forgetting" (Werke, vol. 10, p. 118).


10. Augustine, De doctrina christiana II 39-40 and 60.

11. Ternullian, De anima I 6. On the context of this argumentation, see part III, chapter 4.

12. Compare Karl Holl, Gesammelte Aufsätze zur Kirchengeschichte, vol. 3: Der Westen (Tübingen: J. C. B. Mohr, 1928), p. 6: "He himself has betrayed to us, by the openness with which he lets his devices be seen, what his purpose is; he who allows himself to become involved in objective argument has already lost half the battle by putting himself on a footing of equality with his opponent and so bringing his convictions into the light of mere opinion. (See De praescr. haer. 18.)" Accordingly the choice of a type of metaphor is already revealing: There is no question of appealing to 'sources,' in the manner of modern philology, because metaphors of 'source' are designed to imply openness to use by anyone—"He who appropriates a property right... does not act disinterestedly [lauter: literally, clearly or purely]," Richard Harder said—"Quelle oder Tradition?" in Les Sources de Platon (Vandoeuvres-Geneva: 1960, Entretiens Fondation Hardt 5), p. 327—criticizing metaphors of 'source' and commenting on the "idea of infringement of an original intellectual property right." Irenaeus of Lyon chooses a different typical image
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of legitimacy in *Adversus haereses* 9, 4—*Patrologia cursus completus. Series graeca*, ed. J. P. Migne (Paris: 1857–1894) (henceforth: *PG*), vol. 7, p. 1147—Christ died so as to set free his servants and put his testament into effect, which makes those who were set free the rightful possessors of what they inherit from him.


Chapter 7

1. See part IV, chapter 3, text to notes 18 to 29.


10. Théomas Hobbes, *De homine* XII 4: “ad spem sufficiunt . . . levissima argumenta. Imo res, quae ne animo quidem concepi potest, sperari tamen potest, si dici potest.”

Chapter 8


3. Carl Schmitt, Politische Theologie. Vier Kapitel zur Lehre von der Souveränität, 2nd ed. (Munich: Duncker and Humblot, 1934) (henceforth: Politische Theologie); pp. 49ff. [The quotations in this paragraph and the next one are from p. 49.] The first edition of this book was published in 1922.


6. C. Schmitt, Politische Theologie, preface to 2nd ed. (dated 1933): “I have dealt with the great problem of the separate stages of the process of secularization—from the theological, by way of the metaphysical, to the moral and human, and to the economic—in my talk 'The Age of Neutralizations and Depoliticalizations' (October 1929 in Barcelona) ... Meanwhile we have recognized the political as the total...”


12. Hegel, Grundlinsien der Philosophie des Rechts, section 280 (Hegel's Philosophy of Right, p. 184): “In the so-called 'ontological' proof of the existence of God, we have the same conversion of the absolute concept into existence. This conversion has constituted the depth of the Idea in the modern world...”


14. T. Campanella, Universii: Philosophi: I 1, prooemium, ed. L. Firpo (Turin: 1960, Monumenta Politica et Philosophica Rarioa, series I, no. 8), par. 5: “...et hinc orru: Machiavellismus, pernici: generis humanni.” In the Diiationes IV (I 1, cap. I a. 4; par. 14) an opinion is cited according to which animals too would have to have religion: “Neque enim posset politica abinue religione existere.” Hitler, according to Speer’s recollection, observed that “...it has been our misfortune to have the wrong religion.” Inside the Third Reich. Memoirs by Albert Speer (New York: Macmillan, 1970), p. 96; German paperback edition: Erinnerungen (Frankfurt: Ullstein, 1969), p. 110.

Chapter 9


20. Jean Paul, *Vorschule II*, section 49; I 1, section 3; and I 7, section 33; *School for Aesthetics*, pp. 130-131, 21, 92 (translations slightly revised).


23. Jean Paul, *Vorschule I*, section 35; II 9, section 54; *School for Aesthetics*, pp. 99, 144.

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Part II

Introduction

Chapter 1

1. Plato, *Timaeus* 47 E-48 A.

2. Equally characteristic is Epicurus’s explicit contradiction of this element of the Platonic myth (Diogones Laërtius X 133–134): Necessity cannot be overcome by persuasion. This view is expressed by a ‘theology’ that does indeed endow the gods with language but does not allow their eternal conversations to have any consequences for the world.


7. *Passio S. Pauli, Acta Apostolorum Apocrypha*, ed. Lipsius and Bonnet (1891; photomechanical reprint Hildesheim: Georg Olms Verlagbuchhandlung, 1959), vol. 1, p. 30: “Haec audiens Nero et ira succensus, quia illundi figuram Paulus dixerat resolvendam, iussit omnes Christi milites igne cremari, Paulum autem... capite... truncari....” The Stoic *Ekpyrosis* [world conflagration] was not a ‘preparation’ for eschatology but itself a cosmic process, which was supposed to precede new world cycles.

8. Augustine, *Sermo* 241.7: “Tu qui dicis ‘corpus est omne fugiendum,’ occide mundum.” The Platonist forgets that Plato allowed his demiurge to guarantee unperishableness to the stars (241.8).

9. Augustine, *De libero arbitrio* I 1: “Non enim iustè vindicarentur (sc. malefacta), nisi fierent voluntate.” The same line of thought appears once again in the second book (II, 3), which was produced only in 395. In the *Confessiones* (X 4, 5), Augustine offers the formula “bona mea instituta tua: mala mea delicta mea sunt et iudicia tua...”

10. *De libero arbitrio* II 49: “... et dubitare de libera voluntate, sine qua recte vivi non posse concedunt, etiam qui pessime vivunt? Et certe nunc responde, quae, quid tibi melius esse videatur in nobis, sine quo recte vivi potest, an sine quo recte vivi non potest.”

11. *De libero arbitrio* I 25: “Quid enim tam in voluntate quam ipsa voluntas sita est?” I 26: “... cum sit tam magnum bonum, velle somum opus est, ut habeatur.” II 51: “Noli ergo mirari si ceteris per liberam voluntatem utimur, etiam ipsa libera voluntate per eam ipsam uti nos posse; ut quodammodo se ipsa utarur voluntas quae utitur ceteris, sic et seipsam cognoscit ratio, quae cognoscit et cetera.” III 7: “Quapropter nihil tam in nostra potestate, quam ipsa voluntas est.”

Chapter 2


4. “Vorarbeiten...,” Musarion ed., vol. 6, p. 14: “Historical thinking and the natural sciences were needed against the Middle Ages: knowledge against faith. We now direct art against knowledge...” P. 108: “People became more clever during the Middle Ages... This sharpening of the spirit by the pressure of a hierarchy and theology was absent in the ancient world.” P. 100: “Science... comes into being... when the gods are not thought of as good.”


10. Nietzsche, Beyond Good and Evil, part One, section 13, Basic Writings, trans. W. Kaufmann, p. 211; Musarion ed., vol. 15. pp. 20–21


Chapter 3

1. Irenaeus, Adversus haereses II 14, 8 (PG, vol. 7, p. 751): “Umbram autem et vacuum ipsorum a Democrito et Epicurâ sumentes, sibimetipsis aptaverunt... Semetipsis ergo in hoc mundo, cum sint extra Pleroma, in locum qui non est, deputaverunt. Quod autem dicunt imagines esse haec eorum quae sunt, rursus manifestissime Democriti et Platonis sententiam edisserunt.”


4. Clarke’s second rejoinder (Leibniz, Philosophische Schriften, ed. C. J. Gerhardt, vol. 7, p. 361): “In reality, and with regard to God, the present frame, and the consequent disorder, and the following renovation, are all equally parts of the design framed in God’s original perfect idea.”


6. Loc. cit., pp. 371 ff: “Une simple volonté sans aucun motif (a mere will) est une fiction non seulement contraire à la perfection de Dieu, mais encore chimerique et contradictoire, incompatible avec la definition de la volonté....” Thus already in the Discours de Metaphyique of 1686: “.... il ne faut pas aussi s’imaginer des decrets absolus, qui n’ayent aucun motif raisonnable....” (section 81). And still earlier, 1680, in a letter to Philipp in Hamburg, in the form of an argument against Descartes: “On voit bien que la volonté de Dieu même ne sera qu’une fiction mise en jeu par éblouir ceux qui ne s’attachent pas assez à approfondir ces choses. Car quelle volonté (bon Dieu) qui n’a pas le bien pour objet ou motif? qui plus est, ce Dieu n’aura pas même d’entendement.... Mais de dire qu’un tel Dieu a fait ces choses, ou de dire qu’elles sont été produites par une nécessité aveugle, l’un vaut l’autre, ce me semble” (Philosophische Schriften, vol. 4, p. 283). W. Kabitz, Die Philosophie des jungen Leibniz. Untersuchungen zur Entwicklungsgeschichte seines Systems (Heidelberg: 1909), p. 122, quotes from a letter to Wedderkopf, the jurist in Kiel, this sentence: “It is not in the power of any being to will whatever it likes [zu wollen, was es will].”


8. William of Ockham, Commentary on the Sentences I 43, 1 M: “Utrum deus possit facere aliqve quae non feci nec feciet... si esset causa naturalis, vel omnia produceret simul vel nulla.” Quodlibeta VI 1: “Deus multa potest facere quae non vult facere.”

9. William of Ockham, Commentary on the Sentences I d. 2, q. 4, D: “... creatio est simpliciter de nilio, ita quod nihil essentia vel intrinsecum rei simpliciter praecedet in esse reali, ergo nulla res non variata praecessit quam in quomque individuo est de essentia istius individui de novo creatum, quia si sic, aliquid essentiale isti rei praecederet et per consequens non creatorum, ergo non est aliqua res universalis de essentia istorum individuum, quia si sic, illa praecesserit omni individuo post primum productum et per consequens omnia producta post primum
productum non crearentur, quia non essent de nihilo." I d. 85, q. 5, E-P: "ipsea creatura est idea prima; ipsae ideae sunt ipsae sept res a deo producibles; ideae orintur et intereunt, quia ideae sunt ipsae met creaturae quae orintur et intereunt."

10. William of Ockham, Commentary on the Sentences I d. 14, q. 2, G: "ex hoc ipso quod vult, convenienter vult, et non frustra." It is especially true of the way of salvation that God often does things mediatis pluralibus, which He could also have done mediatis paucis (Commentary on the Sentences I d. 17, q. 3, DF). The "circumstantiality" of even the potentia ordinata is related to the principle of unthinking submission; the central, if not the sole, "object" of the faith that guarantees salvation thus becomes God's credibility itself.

11. William of Ockham, Quodlibeta VI q. 1: "Hac distinctio ... est sic intelligenda, quod posse deum aliquid quandoque accipitur secundum leges ordinatas et institutas a deo et illa dicitur deus posse facere de potentia ordinata. Aliquando accipitur posse pro posse omne illud quod non includit contradictionem fieri, sive deus ordinavit ex hoc facturum sive non, quia multum potest deus facere quae non vult facere."

12. This formula was applied to the Hellenistic philosophies by Karl Marx in the preparatory work for his dissertation (Frühe Schriften, vol. 1, p. 104): "Thus, for example, the Epicurean and Stoic philosophies were the happiness of their age; when the universal sun has gone down, the moths seek the lamplight of the private man."


16. Lucretius II 1052-1057: "nullo iam pacto veri simile esse putandumst ... nil agere illa foris tot corpora material." It becomes clear to what a great extent this thought still lies within the horizon of the Greek cosmos when one sets beside it Kant's comparison between the improbability of the fundamental metaphysical concepts' producing anything positive and the improbability of the construction of a world in Epicurus's atomism: "... It seems more likely that Epicurus's atoms, after falling eternally, should suddenly for no reason run into one another, so as to construct a world, than that the most general and abstract concepts should do so in order to explain it" ("Träume eines Geisterschers" II 2: Akademie ed., vol. II, p. 858).


18. Diogenes Laertius X 42: Lucretius II 513-514: "... fateare necessest materiem quoque finitis differe figuris." See also Marx's dissertation, trans. Livergood, part two, chapter 2, p. 89 (Frühe Schriften, vol. I, pp. 49-50): "The statement of Leibniz, that no two things are the same, is therefore turned about, and there are infinitely many atoms of the same form...."

19. Lucretius II 508.

20. Cicero, De natura deorum I 20, 53 (= fragment 350 in H. Usener's Epicurea, Leipzig, 1887), formulated this central point of Epicurean 'metaphysics' thus: "Docuit enim nos idem qui cetera, natura effectum esse mundum: nihil opus fuisse fabrica, tamque eam rem esse facilem, quam vos effici negatis sine divina posse sollarit, ut innumerabilis natura mundos effectura sit, efficat, efficeret."

21. For the purpose of presenting the doctrine of his school, the Epicurean Velleius carefully uses the passage just cited from Cicero with natura in the ablative, that is, as a definition of
the mode of the world's coming into existence, whereas in his attacks on the Platonic and Stoic cosmology, he uses *natura* in the nominative, in order to exhibit the hypostatizing of nature as a metaphysical power. Admittedly, the later Epicureans did not keep up this caution in the use of the concept of nature; even Lucretius (V 233ff) rendered nature independent as *daedala rerum* and thus began to efface the difference between Epicureanism and metaphysics.


23. Lucretius II 300–302: "et quae consuerint gigni gignentur eadem/condicione et erunt et crescent vique valebunt./quantum cuique datum est per foedera natural." A conspicuous example of the 'productivity' of assumptions of constancy is his consideration of the extreme hypothesis for explaining the phases of the moon, according to which these phases could be understood as a process of continuous perishing and coming back into existence of the body of the moon (Lucretius V 731–736); this would require the assumption of a very exact repetition of the same process of atomic formation—which, however, would not be unusual: "ordine cum (videas) tam certo multa creari." See also Lucretius I 204: "constat quid posit oriri"; I 586–588, II 709: "eadem ratio res terminat omnis"; III 787: "certum ac dispositumst ubi quicquid crescat et insit" (=V 131). Here also belongs the discussion of the possibility of monstrous beings in nature, like the centaurs (portenta); Lucretius denies it with the argument that atomistic nature in particular does not allow one thing to couple with anything else it likes: "sed res quaeque suo ritu procedit et omnes/foedere naturae certo discrimina servant" (V 923–924). See also VI 906–907, where an attempt is made to explain magnetic stones.


25. Grant McClorey, "The Seventeenth Century Doctrine of a Plurality of Worlds," *Annals of Science* 1 (1936):399ff: "... There occurred in 1277 one of the most interesting events recorded in history ... the power of God definitely overshadows the physics of Aristotle."

26. *Chartularium Universitatis Parisiensis*, vol. 1, p. 545, n. 26: *Quod prima causa posset producere effectum sibi aequali nisi temperaret potentiassum*. In this connection, with the liquidation of the ancient cosmos metaphysics, belong also the sentences nos. 48 and 53: *Quod deus non posset esse causa novi facti, nec posset aliquud de novo producere; Quod deum necesse est facere, quicquid immediate fit ab ipso.*

27. William of Ockham, *Commentary on the Sentences* I d. 17, q. 1, L: "quacumque forma posita in anima potest deus velle animam annihilare antequam det sibi vitam aeternam, et velle numquam eam recreare ... potest contingenter annihilare illud quandocunque placet sibi: sed istam animam contingenter creavit, ergo ipsum potest annihilare." Loc. cit., q. 1, M: "ego autem pono quod nulla forma nec naturalis nec supranaturalis potest deum sic necessitare. . . ."


29. William of Ockham, *Commentary on the Sentences* I d. 17, q. 8, G: "... omnipotens non posset efficere omne illud quod non includit contradictionem, quia non potest efficere deum." This holds also for the initial question of the doctrine of grace: "... quamvis deus non posset facere tantum caritatem quin posset facere maiorem, non sequitur eam posse facere infinitum" (q. 8, G); "... patet quod auctoritas philosophi (sc. Aristotelis) non est recipienda in hac parte ... quia posset deus facere unum alium mundum: immo credo quod non posset facere tot mundos finitos quin posset facere plures" (q. 8 Y). God as Creator is not "causa naturalis: si esset causa naturalis, vel omnia produceret simul vel nulla" (I d. 43, q. 1, M). The created world could be the best of the possible worlds only at the cost of this principle: "... probable autem
reputo quod deus posset facere alium mundum meliorem istum distinctum specie ab isto, et maxime quoad aliquas res distinctas specie, et quoad pluralitatem specierum.”

30. Kant, Universal Natural History and Theory of the Heavens, trans. W. Hastie (Ann Arbor: University of Michigan Press, 1969), part I, p. 64 (Akademie ed., vol. 1, p. 255); Critique of Judgement II, section 86 (Akademie ed., vol. 5, p. 442). Giordano Bruno’s distinction between the ‘world’ as the one universe and “world” as a term for individual cosmic bodies already tends in this direction (Theses de magia V; Opera latina, ed. F. Fiorentino et al. Naples: 1879–1891), vol. 3, pp. 457ff). Telescope and microscope induced as a popular thought experiment the idea of ‘worlds’ nested within one another, best worked out perhaps in the letter from Johann Bernoulli to Leibniz dated November 8, 1698 (Leibniz, Mathematische Schriften, ed. Gerhardt, vol. 3, part 2, pp. 548ff): “The creatures that we observe under the microscope have not only their own ‘world,’ with sun, moon and stars, but also their own microscopes, with which they in their turn observe creatures of whose ‘world’ they know nothing; but this is still not the whole story—are we ourselves perhaps only microscopic objects for beings who don’t imagine that we have a ‘world’ like theirs? Est enim utroque par ratio.” Bernoulli may have developed his ‘conjectures’ from a suggestion in the Port-Royal logic: L’art de penser (1622) IV 1.


32. Lucretius VI 9–11: “nam cum vidit hic ad victum quae flagitat usus/ omnia iam fenne mortalibus esse parata/ et, proquam possent, vitam consistere tutam...”


34. Cicero, De finibus I 13, 45–46: “Quarum (sc. cupiditatum) ea ratio est, ut necessariae nec opera multa nec impensa expleantur; ne naturales quidem multa desiderant, propterea quod ipsa natura divitas, quibus contenta sit, et parabiles et terminatas habet; inaniurn autem cupiditatum nec modus ullus nec finis inveniri potest.”


36. Cicero, De natura deorum I 18, 47–48 (= Usener’s fragment 352).

37. Philodemus, De dis III (from the translation of W. Schmid, “Epikur”—cited in note 33—p. 734). With the exception of immortality, man is capable of the full eudemonia of the gods (Usener’s fragment 602). On provisos with respect to the interpretation of Epicurean theology in terms of its systematic function, see Schmid’s article, p. 739; and also on the authenticity of Lucretius in connection with this question, p. 762.

38. Lucretius V 82–90; see also V 1204–1240: Gazing at the heavens awakes concern (cura) about the powers (immensa potestas), to which man can only surrender (ludibrio sibi habere videtur). The weakness of reason (rationis egestas) makes it constitutionally liable to such concern.


42. Epicurus as quoted by Seneca, Ad Ludilium 9, 20 (= Usener’s fragment 474): “Si cui sua non videntur amplissima, licet rotius mundi dominus sit, tamen miser est.”
48. Cicero, De finibus I 6, 19: “declinare dixit atomum perpaulum quo nihil posset fieri minus; ita effici complexiones et copulationes et adhaesiones atomorum inter se, ex quo officeretur mundus . . .”

44. Lucretius II 251–260.


46. Marx’s dissertation, trans. Livergood, part two, chapter 1, p. 82: “. . . voluit hoc, nulla est causa, Metaphysik 50. suum posse 51. Duns est la plus belle chose-que Dieu quae summum opus est inter divinum ostendi nobilitas unius rei super mundum sensibilem in ordine ad rebus sua cuique voluntas/ principium dat. . .”

47. This idea also penetrated into popular literature; thus in the French Roman de Sidrac of the thirteenth century, which links it to the preeminence of man over all creatures: “Quelle est la plus belle chose que Dieu ait faire en ce monde? L’homme”—cited in Ch.-V. Langlois, La Connaissance de la Nature et du Monde d’après des écrits français à l’usage des laïcs (Paris: 1927), pp. 283, 247.


49. Albertus Magnus, Summa Theologica II tract. 1, q. 3, a. 1: “Creator creando demonstrat suum posse.” Duns Scotus, Commentary on the Sentences I d. 8, q. 5: “. . . quae voluntas voluit hoc, nulla est causa, nisi quae voluntas est voluntas.”

50. J. Lappe, Nicolaus von Autrecourt. Sein Leben, seine Philosophie, seine Schriften (Münster: 1908, Beiträge zur Geschichte der Philosophie des Mittelalters 6, 2), p. 838: “. . . non potest evidenter ostendi nobilitas unius rei super aliam.” This holds logically even for God, whose omnipotence does not enable one to deduce His precedence in regard to nobilitas: “. . . quacunque re demonstrata nullus scit evidenter, quin excedat nobilitate omnes alias . . . nullus scit evidenter, quin ipsa (sc. res demonstrata) sit deus, si per deum intelligamus ens nobilissimum . . . aliquis nescit evidenter, quod una res sit finis alterius.”

51. Duns Scotus, Utrum Christus sit praedestinatus esse Filius Dei, ed. E. Longpré, in Wissenschaft und Weitheit 2 (1935):90–93. The text is governed by the precedence of gloria over gratia: “. . . prius fuit praedestinato Christi ad gloriam quam ad unionem illam . . . summum opus divinum non videtur solum esse occasionatum; sed solum esse facta incarnato Verbi divini, quae summum opus est inter omni opera Dei, propter lapsum hominis, esset solum occasionata.”


54. The “Maximal God” is found in Nietzsche, The Genealogy of Morals, III 20; here the correlate of theological maximalism is the “maximum of the feeling of guilt,” whose transformation into a sort of “second innocence” has atheism as its precondition. The historical nexus of
theological absolutism and human self-assertion is here seen in the narrow form of moral relief. Talk of the theological maximum and minimum is also found in Kant, Vorlesungen über die philosophische Religionslehre, ed. K. Beyer (Halle: Akademischer Verlag, 1957), p. 18, who wants to know what "minimum of theology" is required for 'religion' in the practical sense, and contrasts with this minimum the maximum "which is not necessary for religion in general and is also too strong for healthy reason": "The maximum of theology would be the knowledge that God exists" (marginal notation in the Danzig lecture-transcript)—so radically had the range of the antithesis been narrowed, and indeed for Kant, too, through exclusive reference to the possibility of morality.


Chapter 4

1. W. Heisenberg, Physics and Philosophy. The Revolution in Modern Science (New York: Harper and Row, 1958), p. 74. Francis Bacon saw the new 'seriousness' in the turning of interest from the extraordinary aspects of nature to its lawful regularities, from the curiosa industria that amuses itself with the lusus naturae, to seria utilitas. Special magical intervention must give way to thoroughgoing mastery of reality as soon as one can no longer rely on reality's teleology. The extravagantia et quasi abrupta in nature are not to be written off, but rather to be investigated as particularly instructive instances of universal lawfulness, the miracula naturae being analyzed as cases of the concursus rarius of forma and lex (Novum Organum II 27–28; Works, ed. Spedding, Ellis, and Heath, vol. 1, pp. 280–282).


3. As Schopenhauer observed—Parva I; Sämtliche Werke, ed. W. von Löhneysen (Stuttgart: Cotta, 1960–1965), vol. 4, p. 13—the function of the proof of God's existence in the Third Meditation is only superficially a continuation of the medieval tradition of proofs, and in its real function it inverts that tradition: Descartes "assumed the reality of the external world on the strength of God's guarantee when, in reverse, he proved the existence of the world only from the existence and veracity of God: it is the reverse of the cosmological proof."

4. Descartes, Meditationes I par. 2; Oeuvres, ed. Adam and Tannery, vol. 7, p. 17: "... non minus accurat ab is quae non plane certa sunt atque indubitata, quam ab arte falsis assensionem esse cohendam. ...

5. Descartes, Principia philosophiae, part I, principle 6: "Sed interim a quacunque tandem simus, et quantumvis ille [sc. originis nostrae author] sit potens, quantumvis fallax; hanc nihilominus in nobis libertatem esse experimur, ut semper ab is credendis, quae non plane certa sunt et explorata, possimus abstiner; arque ita cavere, ne unquam erreremus." In the contradiction between mens finita and potentia infinita, the evidence of freedom has precedence over all other ideas: "... libertatis autem et indifferen etae, quae in nobis est, nos ita consodos esse, ut nihil sit, quod evidentius et perfectius comprehendemus" (part I, principle 41).
6. W. Kamlah, “Der Anfang der Vernunft bei Descartes—autobiographisch und historisch,” Archiv für Geschichte der Philosophie 43 (1961):76: According to Kamlah, Descartes gained from this encounter an acquaintance with the ‘Leonardo tradition’ of deplatonized mathematics, and his pretended break with tradition was actually a change of traditions. The result would be that the systemic sequence is the reverse of the biographical sequence: that Descartes only assimilated his conception of the res cogitans to his understanding of the res extensa secondarily and that the turning (stylized as ‘illumination’) that occurred in the overheated room in the Bavarian winter quarters at Neuberg is only the transition (elevated to the status of a ‘beginning’) from a dialogical stimulus to an act of authenticity that is intended to be exemplary: “That in principle any man ‘could’ find, prepare, and traverse the whole path of science does not mean that anyone really could do that—but it seduces one into this stylization that Descartes undertakes, and what is more, it achieves this seduction by means of an enormous egocentric prejudice” (loc. cit., p. 84).


8. Descartes, Meditationes I par. 9; Oeuvres, ed. Adam and Tannery, vol. 7, p. 20: “Verumtamen infixa quaedam est meae menti vetus opinio, Deum esse qui potest omnia...” The position of Descartes’s proof of God’s existence in his overall argument becomes clearer when one observes that: it is not this God whose existence needs to be proved; the ontological argument from the concept of God is indispensable because what is at stake there is more than mere existence; it is a specific attribute.

9. This pretended spontaneity is taken at its word when one charges Descartes with having “made man independent through the power of ratio, having torn him out of the links that, in the totality of his spiritual [geistischen] relations, gave him peace in the Being that was more powerful than him,” L. Landgrebe, “Descartes,” in G. W. Leibniz: Vorträge der aus Anlass seines 300. Geburtstages in Hamburg abgehaltenen wissenschaftlichen Tagung (Hamburg: Hansischer Gildem Verlag, 1946), p. 229. Or M. Heidegger, “The Age of the World Picture,” in The Question Concerning Technology, trans. William Lovitt (New York and London: 1977), pp. 139–140—original edition: Holzwege (Frankfurt am Main: Klostermann, 1950), pp. 91–92—“Descartes’ interpretation of what it is to be and of truth first creates the presupposition underlying the possibility of a theory of knowledge or a metaphysics of knowledge.... With the interpretation of man as subjectum, Descartes creates the metaphysical precondition of the anthropology to come.... Descartes can be overcome only through the overcoming of that which he himself founded.”


11. William of Ockham, Commentary on the Sentences II d. 19, H: “deus autem nulli tenetur nec obligatur tanquam debitor: et ideo non potest facere quod non debet facere: nec potest non facere quod debet facere.”

12. Thomas Aquinas, Summa theologiae I q. 76: a. 5: “Utrum anima intellectiva convenienter tali corpori uniat.” The special concern here is with the objection that it necessarily follows from the materiality of the body that the instrument of the soul is mortal: “Si quis vero dicat, quod deus potuit hanc necessitatem vitare; dicendum est quod in constitutione rerum naturalium non consideratur quid deus facere possit, sed quid naturae rerum convenient...” But the lack of viability of the argument of conformity [conveniencia] in the Christian context can be seen in the way in which in paradise, according to theology, the body that is mortal ‘by nature’ immediately had restored to it—non per naturam, sed per gratias divinae donum—the immortality that it had just lost.
13. William of Ockham, Commentary on the Sentences, Prologus I 1, DD–HH. The notitia intuitiva, which naturaliter does not come about without the existence of its object, is here assimilated to the notitia abstractiva that continues to exist when its object no longer exists (se simplicitur destructa). The same argumentation is given in Quodlibeta VI q. 6: “Utrum cognition intuittiva posset esse de objecto non-existenti.” The principle of the eliminability of secondary causes, which renders the cosmic ‘agenda’ contingent, signifies for the theory of knowledge the possible indifference of the objects that in fact exist, and thus of what is actual compared to what is possible: “Omnem effectum quem mediate causat cum causa secunda potest immediate per se causare. Sed in notitiam intuitivam corporalem potest mediante objecto. Ergo potest in eam immediate per se.”

14. A. Maier, “Das Problem der Evidenz in der Philosophie des 14. Jahrhunderts,” Scholastik 38 (1968) (henceforth: “Das Problem der Evidenz”); 186–187 for Peter Aureoli and p. 194 for Francis of Meyronnes. This last, the magister abstractionum, answers the question regarding the realitas praeossentialitatem non existentis in the negative because knowledge is not a mere quality in the subject but a real relation, which essentially presupposes both termini relationis, so that this is something that even God cannot alter: “dicco et credo quod illa regula, quae est communiter a theologis concessa (that is, the principle of immediacy), est vera in absolutis et tamen non in relativis...” (cited after A. Maier, “Das Problem der Evidenz,” p. 194n26).

15. A. Pelzer, “Les 51 articles de Guillaume Occam censurés, en Avignon, en 1326,” Revue d’Histoire Ecclesiastique 18 (1922): 240–270. In the catalog of incriminated propositions, the thesis that is our present subject is represented in its most cautious formulation by no. 10: “notitia intuitiva secundum se et necessario non plus est existentia quam non-existentia nec plus respicit existentia quam non-existentia.” It is the formulation from the prologue of the Commentary on the Sentences I 1, BB, which limits itself to the persistence of an idea that was once derived from a real object, after the annihilation of that object.

16. William of Ockham, Quodlibeta VI q. 6: “non tamen potest (sc. deus) aliquem effectum facere sine causa prima. Unde sicur non est possibile quod color causet effective visionem suam in oculo nisi sit actualiter praesens, ita non est possible, quod deus causet visionem in intellectu nisi exhibita sua actualiter praesentia.” See A. Maier, “Das Problem der Evidenz,” p. 194.

17. Peter of Ailly, Commentary on the Sentences I q. 1 a. 1, concl. 3 (cited after A. Maier, “Das Problem der Evidenz,” p. 219): “...loquendo de evidentia secundum quid seu conditionata vel ex suppositione scilicet statu dei influentia generali et cursu naturae solito nulloque facto miraculo talia (sc. extrinseca sensibilialia) possumt esse nobis sufficienter evidentia, sic quod de ipsis non habemus rationabiliter dubitare.... Probatur hoc quia statu dei influentia etc. non stat talia nobis apparere et non sic esse, unde quamvis talis apparentia posset esse ipsis objectis non existentibus per potentiam dei absolutam, tamen propter hoc non habemus rationabiliter dubitare. Nam ex hoc multa inconvenientia et absurba sequentur.... Secundo sequitur quod non posset sufficienter inferri ex una re alià nec cx cause posset concludi effectus nec e contra, et sic perirent omnes demonstrationes naturales.”


19. Gregor of Rimini (d. 1358), Commentary on the Sentences I d. 8, q. 1, a. 2. See A. Maier, “Das Problem der Evidenz,” pp. 222ff. Peter of Ailly, in his Commentary on the Sentences of 1375 (I q. 1, a. 1: utrum possibile sit viatorum habere notitiam evidentem de aliqua veritate), gave a typically ‘Scholastic,’ that is, purely verbal solution of the problem: An evidentia secundum quid can be relied upon only under the familiar conditions (stante dei influentia generali et nullo facto miraculo).
20. P. Bayle, *Dictionnaire historique et critique*, 2nd ed. (Amsterdam, 1702), III 2581: “Ne peut-il pas se comporter envers nous comme un médecin envers les malades et comme un père envers ses enfants? Ce sont des personnes que l'on trompe très-souvent et avec sagesse, et pour leur profit. Aurions-nous bien la force de contempler la vérité si Dieu nous la présentait toute nue?”

21. Article 31: *Chartularium Universitatis Parisiensis*, vol. 2, pp. 610–614. See F. Stegmüller, “Die zwei Apologien des Jean de Mirecourt,” Recherches de Théologie ancienne et médiévale 5 (1933): 192–204, and A. Maier, “Das Problem der Evidenz,” p. 195. As is so often the case, the incriminating content of the thesis cannot be unambiguously determined; A. Maier suspects that there were among the censors supporters of the *opus commune* itself, who wanted to resist specifically the deductions directed against Ockham’s thesis.

22. This thesis also stands on the ‘list of errors’ (article 28), though in a more cautious formulation: “Quod probabiliter porest sustiniri cognitionem vel volicionem non esse distinctam ab anima, immo quod est ipsa anima. Et sic sustinens non cogestur negare propositionem per se notam nec negare aliquld, auctoritatem admitendo.”

23. Jean de Mirecourt, *Apologia* I (ed. F. Stegmüller), prop. 45: “Secundam tamem (sc. opinionem) libentius dicercm si audercm. Eligat studens quam voluerit.” In the *Apologia* II, prop. 14, he says he was not speaking of the *potentia absoluta* when he discussed this question: “alius sensus est, quod de potentia dei absoluta, et de hoc nihil dixi.” However, this is a defensive assertion that is entirely inconsistent with the argumentation that was given. Where, on the contrary, the consideration which I have described as pragmatic—that of the unfittingness *inconvenientia* of the impossibility of certainty—appears, it necessarily amounts to the assumption of the *potentia ordinata*, that is, the assumption that God leaves it up to the things to take their own course: “si sensatio exterior causaretur objecto non causante et non existente, periret omniis certitudo . . . si sensatio exterior posses conservari naturaliter sine objecto, periret omnis certitudo de existentia sensibilis non facto miraculo immo deo permittente res agere suos cursus; consequens est inconvenientiae” (Jean de Mirecourt, *Commentary on the Sentences* I q. 1; cited after A. Maier, “Das Problem der Evidenz,” p. 218).

24. Jean Buridan, *Quaestiones super libros quattuor de casio et mundo* I q. 17, ed. E. A. Moody (Cambridge, MA: Medieval Academy of America, 1942), par. 79: “Unde credo quod non sit possibile aliquem effectum proportionari potentiae divinae propter infinitatem illius potentiae.” Buridan takes up the problem again in quaestio I 22: “Utrum sit dare maximum in quod potentia potest.” In regard to the question whether God could move the heavens more rapidly than they actually move, Buridan considers what Aristotle would have said (par. 99). The answer: There is an ‘appropriate’ speed for the motions of the heavens, and this is exactly what is conferred on the spheres by the prime mover. This very accurately conjectured ancient answer conflicts with the nominalist principle of the insurmountable comparative, of which, to be sure, Buridan asserts that although it would not have been acknowledged by Aristotle, nevertheless it is logically suitable to his system (dicendum est secundum Aristotelem). The distinction between what Aristotle would have said and what he would have ‘had to say’ is instructive in what it shows us of the conscious distance of nominalism from the reception of antiquity, even if it is falsely made in this case.


26. Thomas Aquinas, *In Aristotelis libros De casio et mundo* II, lectio 17 n. 450–451; ed. Spaizzi (Turin: Marietti, 1952), pp. 225ff: “... tentare debemus dicere circa istas dubitationes id quod nobis videtur; ita sic licet quod nos repetermus digmum esse quod promptitudo hominis consideratis huissmodi quaestiones, magis debeat imputari vereundiae, id est honestati vel mo-
destiae, quam audaciae, idest praescriptioni; si tamen ille qui huiusmodi dubitationes considerat, diligat etiam parvas sufficientias, idest parum sufficientes rationes, ad inveniendum de illis rebus, de quibus habemus maximas dubitationes; et hoc propter desiderium quod quis habet ad philosophiam, ut scilicet eius principia stent, idest firma permaneant... Illorum tamen suppositiones quas adinvenerunt, non est necessarium esse veras: licet enim, talibus suppositionibus factis, apparentia salvarentur, non tamen oportet dicere has suppositiones esse veras;quiaforte secundum aliquem alium modum, nondum ab hominibus comprehensum, apparentia circa stellas salvantur. Aristoteles tamen utitur huiusmodi suppositionibus quantum ad qualitatem motuum, tanquam veris.” Duhem pointed out as the source of this formula Simplicius’s commentary on the De Caelo (ed. Heiberg, p. 32), which was already available to Aquinas in Latin.

27. Thomas Aquinas, Summa theologiae I q. 32, a. 1, reply to the second point. See In Boethium de trinitate IV q. 3, reply to the eighth point.

Chapter 5

1. Nicholas Copernicus, De revolutionibus orbium caelestium. Praefatio ad Paulum III.

2. Descartes, Principia philosophiae, part 1, no. 28.

3. Descartes, Principia philosophiae, part 3, no. 1.

4. Descartes, Principia philosophiae, part 3 no. 2. The premise of anthropocentrism is admissible, however, as a presupposition of practical philosophy: “Quantum enim in Ethicis sit plurn dicere, omnia a Deo proper nos facta esse.” That which for the Physica consideratio has to be characterized as plane ridicium et inceptum, has its place in the practical relation to the world, and indeed not only in the ethical sense but also as the principle of the universal right to the use of nature, the rebus omnibus uti posses. As the substrate of human intentions—that is, in its materialization—nature has a service function, which because of the unknowability of pregiven ends is freed of any obligatory restriction.

5. Descartes, Principia philosophiae, part 3, nos. 15–19: “... ipsamque (sc. hypothesis) tantum pro hypothesi, non pro rei veritate haberi velim” (no. 19).

6. Descartes, Principia philosophiae, part 3, no. 20.


8. Descartes, Principia philosophiae, part 3, nos. 44,45; part 4, nos. 204,205.

9. Descartes, Oeuvres, ed. Adam and Tannery, vol. 9, p. 123: “... car si cela se trouve, elle ne sera pas moins utile à la vie que si elle estoit vraie, pource qu’on se’en pourra servir en same raison pour disposer les causes naturelles à produire les effets qu’on desirera.”

10. J. Chr. P. Erdeben, Anfanggründe der Naturlehre 13, section 775. Lichtenberg, who edited and made additions to the work beginning with its third edition (Göttingen: 1784), left this section unchanged.

11. Robert Boyle (1626–1691), quoted in J. Meier, Robert Boyle’s Naturphilosophie (Fulda, 1907), p. 12 [retranslated into English]. Compare Heinrich Oldenburg’s letter to Spinoza of April 3, 1668, Correspondence of Spinoza, trans. A. Wolf (London: George Allen and Unwin, 1928), p. 115: “... that he has made use of the Epicurean principles, which will have it that motion is innate in the particles; for it was necessary to use some Hypothesis to explain the Phenomenon;...”


20. Hobbes, *De cive* I 11: “Nam effectus eius iuris idem pene est, ac/si nullum omnino ius exstiterit.”

21. Hobbes, *De corpore* XXV 1: “... ratiocinationis principia prima, nempe definitiones, vera esse facimus nos net ipsi, per consensionem circa rerum appellationes. ... Principia igitur, unde pendent que sequuntur, non facimus nos, nec pronunciamus universaliter ut definitiones, sed a naturae conditore in ipsis rebus positâ observarnus. ...”


24. Bacon, *Essays*, XV: “Of seditions and troubles”: “Generally, it is to be foreseen that the population of a kingdom (especially if it be not mown down by wars) do not exceed the stock of the kingdom which should maintain them.”


28. H. S. Reimarus, *Abhandlungen von den vornehmlichen Wahrheiten der natürlichen Religion* (Hamburg: 1754; cited after the 6th ed., 1791), vol. 1, p. 13: “And this observation leads us necessarily to the conclusion that we must finally reduce the human species to the smallest possible number and to its first origin and beginning. For it is not possible that the species should be eternal because otherwise there would have to have been already from time out of mind at least just as many men as there are now....” Reimarus reports the controversy between Hume and Wallace and finds himself in agreement with the skeptic: “He argues for the multitude in recent times, and makes dubious and laughable (not without probability) many testimonies of the old historians to the immense quantity of men in those days.” But Wallace also gets credit for his learning and his political observations: “Perhaps by comparing the two authors, each of whom is anxious to populate only his world, one can achieve closer insight into the truth.” Reimarus was the first to connect population growth with the turning to technology, in his application of his theory of animals’ “mechanical instincts” [“Kunstrieben”] to human self-knowledge—Allgemeine Betrachtungen über die Triebe der Tiere, hauptsächlich über ihre Kunstrieben (Hamburg: 1760; quoted from the 4th ed., 1798), p. 898: “But the more the numbers of people in a country increase, the more arts [Künste], as necessary means of subsistence, must be devised, perfected, and disseminated, indeed promoted to the point where complete convenience and pleasure are the results. And it is impossible for this to be done without the help of the sciences, particularly of mathematics, physics, chemistry and the like....”


30. Dolf Sternberger, *Panorama of the Nineteenth Century*, trans. Joachim Neugroschel (New York: Urizen Books, 1977), p. 84: “These immeasurable eras, never really subdivided and reckoned, which have nothing to do with any familiar time, whether finite or infinite, but are merely an indefinite, even astonishing expression of the ‘gradualness’ with which variation is piled upon variation until a new and always better species is produced—this vast time spreading tremendously everywhere, is needed to allay all differences, mediate all boundaries, and fill all gaps with countless transitions” (translation slightly revised). Original: *Panorama oder Ansichten von 19. Jahrhundert* (Hamburg: 1988), p. 98.


**Part III**

**Introduction**


Notes to Pages 233-248


5. Otto Liebmann, Die Klimax der Theorien (Strasbourg: 1884), pp. 4-5.


8. Montesquieu, Discours sur les molets qui doivent nous encourager aux sciences, Oeuvres complètes (Paris: Didot), p. 579: "Le premier, c'est la satisfaction intérieure que l'on ressent lorsque l'on voit augmenter l'excellence de son être, et que l'on rend intelligent un être intelligent. Le second, c'est une certaine curiosité que tous les hommes ont, et qui n'a jamais été si raisonnable que dans ce siècle-ci. Nous entendons dire tous les jours que les bornes des connaissances des hommes viennent de l'être infiniment reculées, que les savants sont étonnés de se trouver si savants, et que la grandeur des succès les a fait quelquefois douter de la vérité des succès...."


10. Lactantius, Divinae Institutiones III 20, 10. Erasmus included the sentence in his Adagia I 6, 69, and interpreted it as follows: "Dictum Socraticum deterrens ad curiosam investigationem rerum coelestium et arcanorum naturae." Characteristic of the attempt to trace the sentence back to its original context is Erasmus's conclusion that one could also interpret it thus: "Quae infra nos, nihil ad nos, ubi significamus res leviusculas, quam ut nobis curae esse debeant."

Chapter 1


2. Goethe, Maximen und Reflexionen, Werke (Zurich: Artemis, 1948-), vol. 9, p. 611.

3. Cicero, Tusculanae Disputationes I 45: "Haec enim pulchritudo etiam in terris patritam illam et aviam, ut ait Theophrastus, philosophiam cognitionis cupiditate incensam excitavit."

4. Plato, Theaetetus 174 A.

5. Diogenes Laertius II 32 reports the pertinent remark that one should only pursue geometry far enough to be able to undertake the measurements oneself when acquiring or relinquishing a piece of land.

6. Xenophon, Memorabilia I 1, 9; 12-13.

7. Xenophon, Memorabilia I 1, 15-16.

8. Diogenes Laertius II 92.

9. Diogenes Laertius VI 103.

10. The attempt to deny Anaxagoras credit for the ideal of pure theory of the cosmos and to label this a Peripatetic projection has rightly been rejected by G. Müller, "Probleme der
aristotelischen Eudaimonielehre," *Museum Helveticum* 17 (1960): 124-127. In fact, the unambiguous formula of the *Eudemian Ethics* (1216 a 11-14), that Anaxagoras had specified “observation of the heavens and of the order of the entire cosmos” as the value content of life, makes comprehensible for the first time what it was that Socrates sought to overcome as his philosophical inheritance, and for which Plato (from the *Phaedo* onward) went in search of a new justification and role. The charge of impiety brought against Anaxagoras may nevertheless have shown that it was not enough to ascribe absolute value to the theoretical framework of life, under the circumstances of the polis; this is also suggested by the defense that Euripides allotted to his friend—see Euripidis Perditarum Tragoediarum Fragmenta, ed. A. Nauck (Leipzig: Teubner, 1892), #910—in which he protested that pure theory had immanent ethical returns, thus coming close to the Socratic solution of the problem as the identity of knowledge and virtue: “Blessed is he who won knowledge from inquiry, proceeding neither to offend his fellow citizens nor to act unjustly, but rather contemplating the ageless order of immortal reality, the configuration it possesses and how and in what manner it is so. Such men never aim at shameful deeds.”

W. Nestle, “Apragmosyne,” in *Griechische Studien* (Stuttgart: H. F.C. Hansmann, 1948), pp. 374-386 places the figure of Socrates in the wider context of the argument over the form of political life in Athens, an argument that had been induced by the penetration of Sophism and to which Thucydides had given expression (in Pericles’s speech of 429 B.C.) with his polemic against political indifference and with his moral critique of Athenian power politics (in the editing of the second book in 404 B.C.).

11. Plato, *Apology* 19 BC.
12. Diogenes Laertius II 45.
13. Plato, *Phaedo* 96 AC.
17. Plato, *Gorgias* 523 A.
18. Plato, *Gorgias* 527 A.
19. Plato, *Timaeus* 29 D.
21. Plato, *Timaeus* 41 E.
26. On account of the goal cited here of making oneself immortal, an accusation of *asebía* [impiety] was to be made against Aristotle too, as we know from Athenaeus (fragment 645 R). It is presupposed here that it is only through a *homoioiásis* [assimilation] of the knower that he acquires knowledge of the object, that is, that not only do ‘eternal objects’—in particular, the
stars—presuppose for their knowledge something divine in man (according to the Presocratic principle that like is known by like), but also, in the realization of this knowledge, that potentiality is actualized—to this extent the Aristotelian doctrine of potency and act gives the schema of knowledge a tendency toward metamorphosis [that is, divinization]. One must keep this in mind in order to understand the reproaches of an admixture of ‘magic’ in the cognitive will, especially in relation to the subject of cosmology.

27. Averroës, In de generatione animalium V 1: “Aristotelis doctrina est summa veritas, quoniam eius intellectus fuit finis humani intellectus. Quare bene dicitur de illo, quod ipse fuit creatus et datus nobis divina providentia, ut non ignoremus possibilia scribi.”

28. The origin of this maxim cited in Walter Burleigh (1275–ca. 1343), De vita et moribus philosophorum, ed. H. Knust (Tübingen: 1886), c. 121, cannot be established, but it is unlikely that the philosopher and writer of the Almagest was its author.

29. On the verbal history of curiosus and curiositas, see A. Labhardt, “Curiositas. Notes sur l’histoire d’un mot et d’une notion,” Museum Helveticum 17 (1960):206–210; even if hardly determined the Scholastic antithesis between curiositas and studiositas, the original analogy to studium, which induced the -i-, is interesting.


32. Sextus Empiricus, Adversus mathematicos VII 416.

33. Sextus Empiricus, Pyrrhonian Hypotyposes II 253.

34. SVF, vol. 2, #116: “Quodsi aliquid aliando acturus est (sc. animus), necesse est id ei verum, quoq occurrit, videri.”

35. SVF, vol. 1, #66.


37. Seneca, De otio, c. 32; see Epistulae ad Lucilium 94, 56.

38. Seneca, Naturales quaestiones VII 25, 5.

39. Of the curiosus spectator, he could also say that he inquires after what concerns him: “quidnisi quererit? scit illa ad se pertinere” (Naturales quaestiones I 12). Here the hiding places of nature and the secrets of the gods set no bounds to the courage of the inquiring spirit: “Magni animi res fuit, rerum naturae latebras dimovere, nec continentur exteriori eius conspectu, introspiciere et in deorum secreta descendere. Parinum ad inveniendum cultuit, qui speravit posse reperi.”


Chapter 2

1. Cicero, De natura deorum I 20, 54: “Itaque imposuistis in cervicibus nostris sempiternum dominum, quem dies et noctes tumcremus. Quis enim non timeat omnia providentem et
cogitantem et animadvertendem et omnia ad se pertinentem, curiosum et plenum negotii deum?”


3. Epicurus, Ratae sententiae 18.

4. Lucretius, De rerum natura II 1033ff.


7. The primitive, preastronomical condition as a situation in which man must fear the presumed lawlessness of natural phenomena is also mobilized against Epicurus by the Stoic Manilius in his Astronomicon I 66–72:

Nam rudis ante illas (sc. sacerdotes), nullo discrimine, vita
In speciem conversa, operum ratione carbat:
Et stupefacta novo pendebat lumine mundi,
Tum velut amissis macrens, tum lacta renatis
Sideribus, variosque dies, incertaque noctis
Tempora, nec similis umbras, iam sole regresso,
Iam proptere, suis poterat discernere causis.

Both justification and impeachment of astronomy can be found in the background of Stoic motives. Pliny, Historia naturalis II 95, tells of the cataloging of the fixed stars by Hipparchus (in the second century a.c.), who asked himself, at the appearance of a ‘new star,’ whether such a thing often happens and whether there are changes in the location and size of the fixed stars; he thereupon presumed (ausus rem etiam deo improbam) to carry out determinations of the location and size of the fixed stars with his own apparatus (organis expositis), so as to make it possible for posterity to observe changes on this basis (caelo in hereditate caret relicto). Pliny is full of praise for this long-term research undertaking (numquam satiis laudatus), but he reveals how unusually far cosmological curiosity had gone in this case, how implausible were the motivating doubts regarding the traditional conception of the heavens (ad dubitationem est adductus), by painstakingly embedding this subject in a justification of astronomical knowledge through the essential kinship between souls and stars. Victor Hugo misunderstood the passage: “Parfois la science fait obstacle à la science. Les savants sont pris de scrupules devant l’étude. Pliny se scandalise d’Hipparche; Hipparche, à l’aide d’un astrolabe informe, essaie de compter les étoiles et de les nommer. Chose mauvaise envers Dieu, dit Pline. Ausus rem Deo improbam. Compter les étoiles, c’est faire une méchanceté à Dieu. Ce réquisitoire, commencé par Pline contra Hipparche, est continué par l’inquisition contre Campanella. La science est l’asymptote de la vérité…” (William Shakespeare, part one, book 3, chapter 4).

Chapter 3


2. Augustine, Opus imperfectum contra secondam Juliani responsionem 6, 26: “Beati quippe omnes esse volumus, quod ipsi quoque philosophi huius saeculi, et Academici de rebus omnibus dubitantantes, teste patrono suo Tullio, coacti sunt confitteri idque unum esse dixerunt, quod disputatione non egerat.”
Notes to Pages 272-281

9. Plato, *Timaeus* 48 D; 72 D.


9. Sextus Empiricus I 33, 226; compare I 38, 280.


11. That an attitude of radical questioning derives unavowed support from the conservative disposition of a reality on which one thinks one can depend is more tangibly demonstrable in the field of political theory because it always or usually has its documented practice: "In practice the very person who theoretically puts everything in question depends on everything going on in the old way. Theoretical radicalism depends on its practical opposite..."—H. Lübbe, "Zur Theorie der Entscheidung," in *Collegium Philosophicum. Studien Joachim Ritter zum 60. Geburtstag* (Bazel: 1964), pp. 136ff. The practice of the Skeptic evades us; we can only imagine what it might be. The art of ignoring all questions and submitting oneself to present 'conditions' presupposes a trust (concealing itself from itself) in the way of the world that Nietzsche will entitle "absurd."

### Chapter 4

1. Cicero, *De finibus bonorum et malorum* IV 5, 11: Common to human *modestia* and cosmic-*divine moderatio* is the observation of measure, of which astronomy provides knowledge even when it remains purely phoronomic and mathematical.

2. Cicero, *De finibus* IV 5, 12: "Inest in eadem explicatione naturae insatiabilis quaedam e cognoscendis rebus voluptas, in qua una confectis rebus necessariis vacui negotiis honeste ac liberaliter possimus vivere."


4. Cicero, *De officiis* I 6, 18: "Omnes enim trahimus et ducimus ad cognitionis et scientiae cupiditatem..."

5. Cicero, *De officiis* I 6, 18: "In hoc genere et naturali et honesto duo vitia vitanda sunt, unum, ne incognita pro cognitis habeamus hisque temere assentiamur, quod vitium effugere qui volet—omnes autem velle debent—adhicibit ad considerandas res et tempus et diligentiam."

6. Cicero, *De officiis* I 6, 19: "Alterum est viium, quod quidam nimium magnum studium multarque operam in res obscuras atque difficiles conferunt easdemque non necessarias."

7. Cicero, *De officiis* I 6, 19: "... quae omnes artes in veri investigatione versantur, cuius studio a rebus gerendis aducre contra officium est. Virtutis enim laus omnis in actione consistit..."
8. Cicero, De finibus V 18, 48: "Tantus est igitur innatus in nobis cognitionis amor et scientiae, ut nemo dubitare possit, quin ad eas res hominum natura nullo emolumento invitata rapiatur."

9. Cicero, De finibus V 18, 49: "Vidit Homerus probari fabulam non posse, si cantiusculis tantis vir irretitus teneretur; scientiam pollicentur, quam non erat mirum sapientiae cupido patria esse cariore. Atque omnia quidem scire, cuiuscumque modi sint, cupere curiosorum, duci vero maiorum rerum contemplatione ad cupiditatem scientiae summorum virorum est putandum."


13. Ambrosius, De officiis ministrorum I 26-27; see also Exameron V 24, 86.


15. Philo, De migratione Abrahami 186.


17. Augustine, De moribus ecclesiæ catholicae et de moribus Manichæorum I 58. The passage is cited by, for instance, Thomas Aquinas, Summa theologica II 2, q. 167, a. 1.


20. Philo, De migratione Abrahami 38.

21. Philo, De migratione Abrahami 40, 46. Thus even God’s words are ‘seen’ (47–52), and God ‘sees’ men’s thoughts, while among one another men depend on the deficient mode of hearing, having to ‘translate’ their thoughts into words (81). The ethos of the Migratio Abrahami is the steadfastness of properly oriented vision (222). On the transformation of the Old Testament language of hearing into the Greek language of seeing, see Hans Jonas, Gnosis und spätestädtischer Geist (Göttingen: Vandenhoeck and Ruprecht, 1934–54), vol. 2, part 1, pp. 95ff., and Hans Blumenberg, "Licht als Metapher der Wahrheit," Studium Generale 10 (1957):442.

22. Philo, De migratione Abrahami 40.

23. Philo, De sommatis I 21-32.

24. Chagigah tract II, 1, cited by Hans Jonas, op. cit. (note 21), p. 206. The references are to cosmology and demonology, cosmogony and eschatology, as the spatially and temporally extreme poles of reference of curiosity.

part 2, fragment 53—this is ascribed to Indian wisdom under the postulate of the unity of knowledge of the divine and of the human: Plato is said to have placed the treatment of the whole of nature before that of human matters and that of logic; as the doctor must have knowledge of the whole organism before he can treat a particular organ, so also man can only meaningfully be viewed as a member of the cosmos. This insight is supposed to have been transmitted to Socrates himself through association with Indians in Athens, when he was asked what he philosophized about, and answered that he investigated human life. At that, one of the Indians laughed at him and said that one could only fathom human affairs through knowledge of the divine. This etiological anecdote furnishes an origin for an entire tradition; see Plato, Phaedo 96 Aff; Aristotle, De part. anim. I 1; 642 a 28ff; Metaphysics I 6; 987 b 1ff; STF, vol. 1, p. 486, vol. 3, p. 584; Cicero, Academ. post. I 4, 15ff; Tusc. disp. V 4, 10; De republ. I 10, 15.

26. Plotinus, Enneads IV 8, 2.
27. Plotinus, Enneads I 8, 4.
29. Plotinus, Enneads IV 8, 1.
31. Irenaeus, Adv. haer. II 1, 3: "... et in infinitum de his quae continentur, et de his quae continentur, incidet sermo." Irenaeus recognizes dualism as the root of the unappeasable compulsion to continue 'and so on'; he makes cogitare into the (so characteristic of anti-Gnostic language) excogitare, the compulsion to arbitrary speculation: "et semper necessitas erit excogitare altera Pleromata, et altera Bythos, et nunquam aliquando consistere, semper quae renes alios, praeter dictos" (II 1, 4). Dualism, if it is to function, has to admit a presupposition that is incompatible with the nature of divinity, namely, that the one authority does not trouble himself with the other—the premise, that is, of the Epicurean theology of 'carefree' gods: "Et cum haec sic se beant, unusquisque deus suis contentus erit, et non curiosi (!) et de alienis; sic quo minus, inustus erit et avarus, et cessans esse quod deus est" (II 1, 5). But if a god should choose not to assert his power over everything, he would contradict himself and lose an essential attribute: "... et solvetur omnipotenter appellatio." Thus the readiness of faith to stop at a 'last resort' has its correlate in the nature of the divine itself, which includes the element (originally a reproach against the Stoics' god) of the curiosum.
32. Irenaeus, Adv. haer. II 1, 3: "... ut nunquam sest eorum excogitatio in uno deo, sed per occasionem plus quam est quae in uno deo, et abstasit a vero deo."
33. Irenaeus, Adv. haer. II 16, 1: "Rursus igitur si illorum imago conditio est, qui prohibit illa eorum, quae super ea sunt, imagine esse dicere, et quae super ea sunt, rursus aliquando, et in immensas imagine immisci eider?
34. Irenaeus, Adv. haer. II 16, 3: "... ipse a semetipso exemplum et figurationem eorum quae facta sunt, accipiens ... cogi aliquando in aliquo utraque sensum, et ex eo figurationem factorum confiteri ...
35. Irenaeus, Adv. haer. II 25, 4: "Ordinem ergo serva tuae scientiae et ne ut honorum ignorat supertranscendas ipsum deum; non enim transibis est: neque super diem illum rawrequires quid sit, non enim inventes ... Non enim excogitabitis, sed contra naturam sentiens, eris insipiens; et si in hoc perseveraveris, incides in insaniam, sublimiorem te ipsum melioremque factore tuo existimans, et quod pertransas regna eius.
37. As an example, Irenaeus, *Adv. haer.* II 28, 7: "Nos autem adhuc in terra conversantes, nondum assidentes throno eius...."


39. Irenaeus, *Adv. haer.* II 28, 2: "Et non est mirum si in spiritualibus, et coelestibus, et in his quae habent revelati, hoc patimur nos: quandoquidem etiam eorum quae ante pedes sunt (dico autem quae sunt in hac creatura, quae et contrectantur a nobis, et 'videntur, et sunt nobiscum), multa furgerunt nostram scientiam, et deo haec ipsa committimus. Oportet enim eum praec omnibus praecellere." As examples he cites the causes of the flooding of the Nile, the phenomenon of migratory birds, the tides, meteorological phenomena, phases of the moon, etc. "In his omnibus non quidem loquaces erimus, requercus causas eorum; qui autem ea fecit solus deus, viridicus est." The passage also makes clear, incidentally, the origin of the *verum factum* convertibility axiom, which seems so ‘epistemological,’ from the theological reservation of majesty.


43. Irenaeus, *Adv. haer.* II 27, 2: "Itaque secundum hanc rationem homo quidem semper inquiret, nunquam autem inveniet, eo quod ipsam inventionis abiecerit disciplinam."

44. Clement of Alexandria, *Stromateis* I 17, 81.

45. Clement, *Stromateis* V 1, 10.

46. Clement of Alexandria, *Protreptikos* IX 86, 2. The interpretation of Odysseus’s wanderings is prepared for here by the biblical analogy of the desert wandering of the Hebrews after the exodus from Egypt ( *Protreptikos* IX 85, 2).

47. Clement of Alexandria, *Stromateis* VI 11, 89.


49. Clement, *Stromateis* VI 10, 83 (compare I 9, 43).


51. Clement, *Stromateis* II 1, 2.


55. Plutarch, *De curiositate* 516 DE.
56. Plutarch, *De curiositate* 519 C.

57. Plutarch, *De curiositate* 517 CE.

58. Apuleius, *Metamorphoses* I 2: "... non quidem curiosum, sed qui velim scire vel cuncta vel certe plurima."

59. Apuleius, *Metamorphoses* III 14, 1: *familiaris curiositas* (thus also IX 12, 2; IX 13, 4: *ingenita curiositas*; IX 15, 1: *genuina curiositas*.

60. Tertullian, *De baptismo* 12.

61. Tertullian, *De anima* III 4; II 6: "late quaeeruntur incerta, latius disputantur praesumpata. Quanta difficiliora probandi, tanta operositas suadendi." *Operositas* serves here, as it did already in Quintilian (*Institutio Oratoria* VII 3, 65), as the precise equivalent of the Greek terms *periergia* and *polypragmosyne*. One can perhaps define the difference in meaning between *operositas* and *curiositas* by saying that the intellectual difficulty and complication produced by *curiositas* is converted into *operositas*, and manifests itself as *curiositatis labor* (*De testimonio animae* I 2).

62. Tertullian, *De praescriptione haereticorum* (henceforth: *De praescr. haer.*) 9: "Unius... et certi instiuiti infinita inquisitio non potest esse. Quaerendum est donec inventas, et credendum, ubi inveneris."

63. Tertullian, *De praescr. haer.* 7.

64. Tertullian, *De resurrectione carnis* 5: "ita nos rhetorici quoque provocant haeretici, sicut etiam philosophari."

65. Tertullian, *De praescr. haer.* 7.

66. Tertullian, *De testimonio animae* 1: "Te simplicem et rudem et impolitam et idioticam compello qualem te habent qui te solam habent..."

67. Tertullian, *De testimonio animae* 5: "Haece testimonia animae quanto vera tanto simplicia, quanto simplicia tanto vulgaria, quanto vulgaria tanto communia, quanto communia tanto naturalia, quanto naturalia tanto divina."

68. Tertullian, *Adversus nationes* II 4: Thales stands for the philosophers "qui stupidam exercerunt curiositatem naturae quam prius in artificem eius et praesidem."

69. Tertullian, *De anima* 10, 4–5. The anatomist Herophilus serves here to typify *a curiositas* that, in its pursuit of knowledge, despises man: "ille medicus... quid hominem edid, ut nosset..." That the organic object might always have been altered by the anatomist's intervention was a consideration raised by Skepticism: "... quia possit fieri ut patefacta et detecta mutentur" (*Cicero, Academica* II 89, 122).

70. Tertullian, *De anima* 1, 6.

71. Tertullian, *De anima* 1, 4.

72. Tertullian, *De praescr. haer.* 14: "Adversus regulam (sc. fidei) nihil scire omnia scire est."

73. Tertullian, *Apologeticum* 47, 8–4; *De anima* 2, 4: "cum maxima iniuria veritatis."

74. Tertullian, *Apologeticum* 1, 8: "hic tantum curiositas humana torpescit: amant ignorare... malunt nescire."
75. Tertullian, *Adversus Marcionem* 1, 2.

76. Tertullian (Oratio ad Graecos 40, 2) and Clement of Alexandria (Stromateis I 17, 87), had made use of the metaphor of counterfeit coinage in order to characterize pagan *periergia*’s supposed drawing from biblical sources, and no doubt with the specific implication that by restamping the genuine coin, the marks of its origin were to be destroyed.


81. Lactantius, *Div. inst.* II 8, 71.

84. Lactantius, *Div. inst.* III 20, 2: “Non inficioruisse illum paulo cordatiorum quam ceteros qui naturam rerum putaverunt ingenio posse comprehendi. In quo illos non exercordes tantum fuisses arbitrator, sed eum impios: quod in secreta caelestis illius providentiae curiosos oculos voluerint immittere.”


86. Lactantius, *De ira dei* 7, 5: “Homo autem recto statu, ore sublimi ad contemplationem mundi excitatus confert cum deo vulsum et rationem ratio cognosci.”


Notes to Pages 307–313

89. Arnobius, *Adversus gentes* II 51.


Chapter 5

1. Augustine, *Confessiones* V 3, 4: “Mente enim sua quaerunt ista et ingenio, quod tu dedisti eis, et multa invenerunt et praemunierunt ante multis annos defectum luminarium solis et lunae quo die, qua hora, quanta ex parte futuri essent, et non eos scellent numerus et ita factum est ut praemunierunt.”

2. Augustine, *Confessiones* V 3, 4: “Et mirantur haec homines, et stupent qui nesciunt ea et exsultant atque extolluntur qui scitunt; et per impiam superbiam recendentes et deficientes a lumine tuo, tanto ante solis defectum futurum praevident et in praesentia suum non vident. Non enim religiose quaerunt unde habeant ingenium, quo ista quaerunt.” See V 3, 5: “sibi tribuendo quae tua sunt ac per hoc student perversissima cæcitate etiam tibi tribuere quae sua sunt. . . .” (Same section) “Sed non noverunt viam... per quod fecisti ea quae numerant et ipsos qui numerant et sensum quo cernunt quae numerant et mentem de qua numerant...”


4. Augustine, *Confessiones*, V 3, 6: “Multa tamen ab eis (sc. philosophis) ex ipsa creatura vera dicu retinebant et occurrebat mihi ratio per numeros et ordinem temporum et visibiles attestationes siderum. . . .”

5. Augustine, *Confessiones* X 35, 55: “Hinc etiam in ipsa religione deus tentatur, cum signa et prodigia flagrantur, non ad alium salutem, sed ad solam experiendam desidera.”

6. Augustine, *De diversis quaestionibus* LXXXIII 30: “Frui ergo dicimur ea re de qua capimus voluptatem. Utimur ea quam referimus ad id unde voluptas capienda est. Omnis itaque humana perversio est, quod etiam virtutem vocatur, fruendis uti velle, atque utendis frui. Et rursus omnis ordinatio quae virtus etiam nominatur, fruendis frui, et utendis uti.”

7. Augustine, *De doctrina christiana* I 20: “Nos itaque qui fruimus et utimur alius rebus, res aliaque sumus. Magna enim quaedam res est homo, factus ad imaginem et similitudinem dei. . . . Itaque magna quaestio est utrum frui se homines debant, an uti, an utrumque. . . . utrum propter se homo ab homine diligentius sit. . . .”

8. Augustine, *De doctrina christiana* I 21: “Sed nec seipsum quisquam frui deberi, si liquido advertas, quia nec seipsum debet propter seipsum diligere, sed propter illum quo fruendum est. . . . sed ad seipsum conversus, non ad incommutabile aliquid convertitur.”
9. Augustine, De Genesi ad litteram IV 26: "... vidium est et infirmitas animae, ita sui operibus delectari, ut potius in eis, quam in se requiescat ab eis; cum procul dubio melius aliquid in illa sit quo ea facta sunt, quam ipsa quae facta sunt ..." God must enjoy being able to create His Creation without this power: being 'confirmed' by its actual exercise; this is due to His self-sufficiency. But the fact that for man self-enjoyment derives precisely from the confirmation of his power in his works is an implication of finitude that is not yet seen here, and that it would have been difficult for Augustine to comprehend with the means employed in the critique of curiositas.

10. Another catalog of the levels of curiositas is given by the commentary on the first Epistle of John 2: 16 (the triad of vices). In epistolam Ioannis II 13: "Iam quam late patet-curiositas? Ipsa in spectaculis, in theatris, in sacramentis diaboli, in magicis artibus, in maleficiis ipsa est curiositas. Aliquando tentat etiam servos dei, ut velint quasi miraculum facere, tentare utrum exaudiat illos deus in miraculis, curiositas est ..."


13. The Scholastic formula for this state of affairs was given very precisely by William of Ockham in his Commentary on the Sentences (I q. 27, a. 2 R): "(Augustinus) ponit quod talis notitia qua anima novit se antequam se cogitaret, est ipsamet substantia animae, quae est memoria, quia sc. nisi esse aliquid impedimentum, ita posset anima cogitare virtute illius substantiae." One needs only to put curiositas in place of impedimentum to perceive Augustine's position: "... et omnia ista sunt intelligienda de anima si non esset impedimentum qualiter impeditur pro statu isto." Augustine's Gnostic presuppositions—in which the schema is laid out, according to which awakening from forgetfulness already is deliverance—have such far-reaching reflex effects that the salutary knowledge is not received from outside as a revelatory 'teaching' but rather is 'set free' as self-consciousness as soon as the 'call' to remembrance is heard.


15. Augustine, De moribus ecclesiae et de moribus Manichaeorum I 38: "Quamobrem recte etiam curiosi esse prohiberetur, quod magnum temperantiae munus est ... philosophia est amor studiumque sapientiae. ..." From this passage, which he cites in Summa theologica II 2, q. 167, a. 1, Thomas Aquinas may have acquired the distinction between curiositas and studiositas, between presumption to and exertion toward knowledge.

16. Augustine, Confessiones V 3, 5: "Non noverunt hanc viam qua descendant ad illum a se et per eam ascendant ad eum. Non noverunt hanc viam et putant se excelsos esse cum sideribus et lucidis; et ecce nuerunt in terram. ..." The metaphor of the stellarization of man points, on the one hand, to self-elevation, and, on the other hand, to the refusal, in starlike 'self-illumination,' to recognize the human spirit's need for illumination from outside.

17. Augustine, De Genesi ad litteram I 89.


19. Augustine, Retractiones II 24: "In quo opere plura quiesita quam inventa sunt: et eorum quae inventa sunt, pauciora firmata; cetera vero ita posita, velut adhuc requiranda sint."

20. Augustine, De Genesi ad litteram II 20: "... sed spiritum dei, qui per ipsos (sc. auctores nostros) loquebatur noluisse ista docere homines nulli saluti profutura."
21. Augustine, *De Genesi ad litteram* II 29: “Quid enim ad me pertinet, utrum coelum sicut sphaera undique conclusat terram in media mundi mole libratam, an eam ex una parte desuper velat discus operiat?”

22. Augustine, *De Genesi ad litteram* II 29: “... nobis autem de intervallis et magnitudine siderum subtilius aliquid quaerere, talique inquisitioni rebus gravioribus et melioribus necessarium tempus impendere, nec expedit, nec congruit.”

23. Augustine, *De Genesi ad litteram* II 34: “... et occupantes (sc. res), quod peius est, multum pretiosissimae et rebus salubribus impendendum, temporum spatia.»

24. Augustine, *De Genesi ad litteram* II 23: “Et ab ipsis quippe qui haec curiosissime et otiosissime quaesierunt, inventum est, etiam, coelo non moto, solum que aliquid velut discus operiat.”


26. Augustine, *De cuitate dei* XXI 3, 1: “... et haec est corum tota ratio, ut quod experti non sunt, necquaquam esse posse arbitrentur.”

27. Augustine, *De cuitate dei* XXI 7, 1: “Brevis sane ista est ratio, fator, sufficiensque responsio. Sed cum deus auctor sit naturarum omnium, cur nolint fortiorum nos reddere rationem, quando aliquid velut impossibile nolunt credere, esque redditionem rationis poscentibus respondentem, hanc esse voluntatem omnipotentis dei; qui certe non ob aliud vocatur omnipotens, nisi quoniam quidquid vult potest; qui potuit creare tam multa, quam nolint et extenderentur, aut a credendis hodieque testibus dicerentur, profecto impossibilis putarentur, non solum quae ignorantissima apud nos, verum etiam quae notissima posse.”

28. Augustine, *De cuitate dei* XXI 8, 2: “Portentum ergo fit, non contra naturam sed contra quam est nota natura.”

29. Augustine, *De cuitate dei* XXI 8, 4: “Si turbavit profecto tunc, si ulli iam fuerunt canones astrologorum, quos velut inerrabili computatione de praeteritis ac futuris astrorum motibus conscriptos haebent, quos canones sequendo assunt dicere hoc quod de Lucifero constipt, nec antea, nec postea contingisse”; translated by Marcus Dods, *The City of God* (New York: Hafner, 1948), vol. 2, p. 429. Augustine formulates very elliptically what he wants to say in accordance with the logic of his antithesis of miracle and science: namely, that the astronomers deny altogether any event, whether past or future, like that said to have befallen Venus.

30. “Turbavit profecto tunc, si ulli iam fuerunt canones astrologorum, quos velut inerrabili computatione de praeteritis ac futuris astrorum motibus conscriptos haebent, quos canones sequendo assunt dicere hoc quod de Lucifero constipt, nec antea, nec postea contingisse”; translated by Marcus Dods, *The City of God* (New York: Hafner, 1948), vol. 2, p. 429. Augustine formulates very elliptically what he wants to say in accordance with the logic of his antithesis of miracle and science: namely, that the astronomers deny altogether any event, whether past or future, like that said to have befallen Venus.

31. Augustine, *De cuitate dei* XXI 8, 4: “... quo communeantur, cum aliquid adverterint in aliqua institutione naturae, eamque sibi notissimam fecerint, non se inde deo debere praescibere, quasi eam non posse in longe alium, quam eis cognita est, vertere atque mutare.” See 8, 5: “Sicut ergo non fuit impossibile deo, quos voluit instituisse; sic ei non est impossible, in quidquid voluerit, quis instituit, mutare naturas.”

32. Arnobius, *Adversus gentes* I 1: “... apud nos ... causas, per quas suis mundus aberravit ab legibus.”

33. Augustine, *De cuitate dei* II 3.
Chapter 6


3. Gerhoch von Reichenberg (died 1169), Libellus de ordine donarum Sancti Spiritus: “... ipsae cursus suos tam certa tamque firma legem custodiant, constuctione dei et praecepto quod ille posuit, ut recte illarum fortemando homini rationali pro miraculo pariter et exemplo, arguens illius oboedientiam si quando a proposito sibi exorbitat praecepto.” Curiositas appears in Gerhoch in the triad of Adam’s temptations as the motive of et mala scire (De investigatione Antichristi II 18). Citation after P. Classen, Gerhoch von Reichenberg (Wiesbaden: Franz Steiner, 1960).


5. Peter Damian, De sancta simplicitate scientiae infantii anteponenda, section 8, in PL, vol. 145, pp. 701ff: “... noli huismodi sapientiam quaerere, quae tibi simul cum reprobis et gentilibus perturbant puritatis orationem, sed ad virtutem vel materiam rerum, sed ad modum et ordinem disserendi et consequentiam verborum...”


7. De divina omnipotentia 5: “Videant ergo imperite sapientiam et vana quaerentium caeca temperitas; quia si haec quae ad artem pertinent disserendi, ad deum praviter referant... Hac igitur quaestio, quoniam non ad discutendi maiestatis divinae potentiam, sed potius ad artis dialecticae probatur pertinere peritiam; et non ad virtutem vel materia rerum, sed ad modum et ordinem disserendi et consequentiam verborum...”

8. De divina omnipotentia 5: “Secundum naturalem namque variae vicissitudinis ordinem potest fieri, ut hodie pluat; potest et fieri, ut non pluat. Sed quantum ad consequiam disserendi, si futurum est ut pluat, necesse est omni ut pluat; ac per hoc prorsus impossible est ut non pluat. Quod ergo dicetur de praeteritis hoc consequitur nihilominus de rebus praesentibus et futuris: nimirum, ut sic et omne quod est, et quod est futurum, est necesse sit esse: et omne quod futurum est, necesse sit futurum esse.”

9. De divina omnipotentia 5: “Et quia inter rudimenta discentium vel artis humanae nullam apprehendere pertinat, curiositatis suae nabilio perturbed puritatis ecclesiasticae disciplinam... absit, ut sacris legibus se pertinaciter inferant et divinae virtutis conclusionis suae necessitates opponant. Quae tamen artis humanae pertita... non debet ius magisterii similitum arroganter arriper, sed velut ancilla dominae quodam famulatus obsequius servire...”

10. De divina omnipotentia 14: “Ipsa quippe rerum natura habet natum suum, dei sollicit voluntatem, ut sicut illius leges quaelibet creata conservant, sic illa cum iubetur sui juris obilta, divinae voluntati reverenter obediant.”
11. De divina omnipotentia 12.


13. Albertus Magnus, loc. cit. (cited in note 12): “... curiositas est investigatio eorum quae ad rem et ad nos non pertinent. Prudencia autem tantum est de his quae ad rem et ad nos pertinent.”

14. Albertus Magnus, loc. cit. (note 12): “Et hoc vocatur vitium curiositatis et non est de operabilibus prudentiae, sed potius est de scibilibus speculativae, licet mala intentione scientia ipsorum quae taliter acquiratur.”

15. Thomas Aquinas, In Aristotelis librum de anima commentarium I, lect. 1, n. 3: “... sciendum est, quod omnis scientia bona est: et non solum bona, venun etiam honorabilis. Nihilominus una scientia in hoc superexcellit aliam. Quod autem omnis scientia sit bona, patet; quia bonum rei est illud, secundum quod res habet esse perfectum: hoc enim unaquaeque quae scitur, acquiratur.”

16. Thomas Aquinas, Summa contra Gentiles III c. 25, n. 8: “Naturaliter illud omnibus hominibus desiderium cognoscendi causas eorum quae videntur; unde propter admirationem eorum quae videbantur, quorum causae latebant, homines primo philosophari cepérunt; invenientes autem causam quiescebant. Nec sísit inquisitio quasque perveniatur ad primam causam; et tunc perfecte nos scire arbitrarum quando primam causam cognoscamus. Desiderat igitur homo naturaliter cognoscere primam causam quasi ultimum finem...”


18. Summa theologica II 2, q. 167, a. 1: “Aliter autem est judicandum de ipsa cognitione veritatis et aliter de appetitu et studio veritatis cognoscentiae.”

19. Significantly, Thomas cites for this idea not Confessiones V 8, but rather a ‘harmless’ passage from De vera religione 28 which fits the cosmological turning better. See Summa theologica II 2, q. 167, a. 1: “homo appetit cognoscere veritatem circa creaturas, non referendo ad debitum finem, scilicet ad cognitionem dei.”

20. Summa theologica II 2, q. 167, a. 1, reply to the first point: “bonum hominis consistit in cognitione veri; non tamen summum hominis bonum consistit in cognitione cuiuslibet veri, sed in perfecta cognitione summae veritatis...”

21. Summa theologica II 2, q. 167, a. 1, reply to the third point.


23. Summa theologica II 2, q. 35, a. 4.
24. Thomas Aquinas, De malo, q. 11, a. 4.

25. Siger of Brabant, Quaestiones in Metaphysicae, ed. Craaff (Louvain: Institute Superior de la Philosophie, 1948) II 4: “Quaritur utrum potentia hominis quam habet ad addiscendum vel ad sciendum possit compleri per actum, vel sit potentia ad infinitum. . . . Dico quod potentia talis non est ad infinitum, sed ad actum qui compleri potest. . . . Sed scilicet non sunt infinita, cum nec species entis sint infinitae. Nec propter infinitatem quae sit in modo scendi clarus et clarus, quia perfectio scientiae dupliciter est: quaedam enim est per definitionem: quaedam per demonstrationem . . . possibile est ut sciatur perfecte per demonstrationem . . . quando enim habemur definitio perfecta alicuius, tunc scitur perfecte: et tunc scitur sicam homo potest scire.”

26. Francis Bacon, Works, ed. Spedding, Ellis, and Heath (London: Longmans, 1889), vol 1, p. 119. In the preface dedicating De dignitate et augmentis scientiarum II to the King (Works, vol. 1, p. 485), Bacon identifies the traditional literature with the Pillars of Hercules and the addressee of the dedication with the guiding star of the voyager of the new science who is unconcerned by the Nec plus ultra: “Quosque enim tandem pauculos aliquos scriptores stamenus nobis tanquam Columnas Herculis, nec plus ultra in doctrinis progrediamur; cum habeamus Majestatem tuam instar lucidi et benigni syderis, quod nos inter navigandum conducat et fortunet?” The allegory is formulated yet more strongly in the preface of 1620 to the Instauratio magna (Works, vol. 1, p. 125), where man’s false assessment of himself appears as embodied in the Pillars of Hercules: “Videmur nobis homines nec opes nec vires suas bene nosse. . . . Quae sunt et sua scientiis columnae tanquam fatales; cum ad ulterior penetrandum homines nec desiderio nec spectemur.”

27. Joseph Glanvill, Plus ultra or the Progress and Advancement of Knowledge since the days of Aristotle (London: 1668; Gainsville, Scholar’s Facsimiles and Reprints, 1958).

28. Petrarch, Epistolae de rebus familiaribus IV 1: “Altissimun regionis huius montem . . . hodierno die, sola videndi insignem loci altitudinem cupiditate ductus, ascendi.”

29. For the ancient world, just as for the Middle Ages, there is an odd inhibition against viewing the world from above or thinking of it as viewed from above by man. Man’s ‘natural abode’ is below, and his constitutive direction of gaze is upward from below, the gaze of the contemplator caeli. Jacob Burckhardt writes, “It is true that lovingly executed representations almost always relate to the neighborhood, indeed to what is narrowly enclosed, to forest glens, grottos etc. . . . On the other hand, however many acropolises towered high above their cities, there is no representation of the view from the heights into the deep and the distance. Solon on the Acropolis of Athens sees only the roofs of the city round about and thinks of the great misery that sits there below.” The view of the world from above is reserved for the gods, as already in the Iliad XVI 297, where Zeus has driven the clouds from the summit of the mountains and now the splendid view of the world lying below him opens up: Jacob Burckhardt, Griechische Kulturgeschichte (Berlin and Stuttgart: W. Spemann, 1898–1902), vol. 3, p. 2. Also, in the Nachträgen: “But especially the ascent of the highest and steepest summits, of which Greece has no lack, is not a matter of course. The earliest association of ideas, which suspected that the mountain summits were the seat of the gods, may have been due to the fact that at the time these heights were unclimbed. The sun illuminated them with its first rays: brooks and springs flowed down from them; storms gathered on them. A second stage was that one ascended them and doubtless immediately made sacrifices there. . . . ” The gaining of the view “from above” in painting is one of the innovations of the beginning of the modern age, especially on the part of Leonardo but also in Altdorfer’s Battle of Alexander; see J. Gantner, Leonardo, Visionen von der Stiftung und vom Untergang der Welt. Geschichte einer künstlerischen Idee (Bern: A. Francke, 1958), pp. 138, 143, 148-149.

30. Petrarch, Epistolae de rebus familiaribus IV 1: “Occupavit inde animum nova cogitatio atque a locis traduxit ad temporar.”
31. Petrarch, loc. cit. (note 30): "Obstupui fato. ... iratus mihimet quod nunc etiam terestria mirarer, qui tampridem ab ipsis gentium philosophis discere debuissem nihil praeter animum esse mirabile, cui magno nihil est magnum. Tunc vero montem satis vidisse contentus, in me ipsum interiores oculos reflexi. . . ."

Chapter 7

1. Petrarch, Epistolas de rebus familiaribus III 1.

2. Petrarch, Epistolas de rebus familiaribus V 7.


4. William of Ockham, Commentary on the Sentences, Prologus III 9 CC: "... dico quod theologia nostra non est de omnibus nec complexis nec incomplexis: quia intellectus vix sufficit ad illa quae sunt necessaria ad salutem."


12. Gerson, Contra vanam curiositatem I: "curiositas est vitium quo dimissis utilioribus homo convertit studium suum ad minus utilia vel inattingibilia sibi vel noxia" (par. 91). "singularitas est vitium, quo dimissis utilioribus homo convertit studium suum ad doctrinas peregrinas et insolitas" (par. 91).

13. Gerson, Contra vanam curiositatem I: "Physica siquidem percussatio ductum ratioceptionis naturalis sequens nequit immensum progredivi, certis enim limitibus coarctetur oportet, quos
limits dum praetergeré di superba curiositate conatur, quid mirandum si praeceps et si absque ducitore et lumine caeca ambulans offendat ad lapidém erroris et impingens se conterat” (par. 91). “... curiositas non contenta suis finibus felifit philosophos...” (par. 93).

14. Gerson, Contra vanam curiositatem I: “Quia certe ea quae in liberrima potestate dei posita erant, dum attingere et ad quasdam necessitatis regulas adducere conati sunt, ipsi evanerunt in cogitationibus suis et obscuratum est insipiens cor eorum.” At the center of the rejection stands inquiry about the origin and end of the world: “Qualiter et quando mundus inceperit aut si finituris sit, sciri neque ex quibuscumque experimentis quas philosophia sequitur, quoniam hoc in liberrima conditoris voluntate situm est. Philosophi igitur dum hoc secretum divinae voluntatis penetrare, duce experientia, mobiuntur, quidni deficient? Quoniam sicut divina voluntas huius ratio est, ita solis illis scire concessum est, quibus ipsa voluerit revelare” (par. 92).

15. Gerson, Contra vanam curiositatem II: “Signum curiosae singularitatis est fastidire doctrinas resolutas et plene discussas et ad ignotas vel non examinatas velle converti. Mavult enim curiositas quaerere invenienda, quam inventa cum veneratione studiosa intelligere” (par. 97). “Signum curiosae singularitatis est indebita doctorum et doctrinarum appropriatio” (par. 97). “Provideremus insuper novis theologizantibus qui per tales materias magis ad admirationem et ad admiramationes ad curiosam perscrutionem quam ad accidificationem solidam commoverunt” (par. 101). “Figuram huius considerationis praebet nobis aedificatio ilia illius qui exterius apparere et multa per sensus experiri ... sed gratia non hoc resolutas et plene percipere quia totum hoc de vetustate eorruptionis est” (par. 105).

16. Thomas à Kempis, De imitatione Christi III 54: “Natura appetit scire secreta et nova audire, vult extrius apparem et multa per sensus experiri ... sed gratia non curat nova nec curiosa percipere quia totum hoc de vetustate corruptionis est ortum.” III 58: “Cave ergo, fili, de istis curioso tractare quae tamen scientiam excudent.”

17. Nicholas of Cusa, De venatione sapientiae I: “Sollicitamur appetitu naturae nostrae indito ad non solum scientiam sed sapientiam seu sapidam scientiam habendum.” See De docta ignorantia I 1: “Quam ob rem sanum liberum intellectum verum, quod insatiabiliter indito discursu cuncta perstruendo attingere cupit, apprehensum amoroso amplexu cognoscere dicitur.”

18. Nicholas of Cusa, De venatione sapientiae 12.


20. Nicholas of Cusa, De berylo c. 32.

21. Nicholas of Cusa, De berylo c. 32: “Nam si (sc. Plato) considerasset hoc, reperisset utique mentem nostram, quae mathematicalia fabricat, ea quae sui sunt officii verius apud se habere quam sint extra ipsam. Puts homo habet artem mechanicam et figuris artis verius habet in suo mentali concepturn quam ad extra sint figurabileis; ut domus, quae ab arte fit, habet veriorem figuram in mente quam in lignis. ... Sic de circulo, linea, triangulo atque de nostro numero et omnibus talibus quae ex mentis conceptu initium habent et natura carent. ... Ideo Plato non videtur bene considerasse, quando mathematicalia, quae a sensibilibus abstrahuntur, vidit veriorem in mente, quo proprie illa adhuc haberent alid esse verius supra intellectum. ... Et si sic considerassent Pythagorici et quicumque alii, clare vidissent mathematicalia et numeros, quae ex nostra mente procedent et sunt modo quo nos concipimus non esse substantias aut principia rerum sensibilium, sed tantum entium rationis, quorum nos sumus conditores.”

22. Nicholas of Cusa, De docta ignorantia II 13: “Quic (sc. deus) etiam vult ut in admirationem ex mundi machina tam mirabili ducamur; quam tamen nobis occultat eo plus, quo plus admiramus, quoniam ipsa tantum est, qui vult omni corde et diligentia quaereri.”

23. Nicholas of Cusa, De docta ignorantia II 1: “ars etiam naturam imitatur, quantum potest, sed numquam ad ipsius praecessionem poterit pervenire.”

Chapter 8

1. Copernicus, *De revolutionibus orbium caelestium* I 4: “Quam ob causam ante omnia puto necessarium, ut diligenter animadvertamus, quae sit ad caelum terrae habitudino, ne, dum excelsissima scrutari volumus, quae nobis proxima sint, ignoramus, ac eadem errore, quae telluris sunt, attribuamus caelestibus.”

2. Copernicus, *De revolutionibus orbium caelestium* I, prooemium: “At cum omnium bonarum artium sit abstahere a vitiis et hominis mentem ad meliora dirigere, haec praeter incredibilem animi voluptatem abundantius id praestare potest.”


13. Thomas Digges, _Perfit Description_ (note 12): “Heerein can wee never sufficiendy admire thys wonderfull and incomprehendible huge frame of goddes woorke propone to our senses . . . .”

14. Thomas Digges, _Perfit Description_ (note 12): “. . . even tyll our syghte being not able farder to reache or conceyve, the greatest part rest by reason of their wonderfull distance invisibile vnto vs. And this may well be thought of vs to be the gloriouse court of ye great god, whose unsearcheable works invisibile we may partly by these his visible coniecture, to whose infinit power and majesty such an infinite place surmountinge all other both in quantity and quality only is conveniente.”


17. Galileo, _Dialogo dei massimi sistemi del mondo_ III: “. . . all’ età nostra è piaciuto a Dio concedere all’ umano ingegno tanto mirabil invenzion, di poter perfezionar la nostra vista . . . .”

18. Kepler, _De macula in sole observata_: “O multischiom et quovis Sceptro pretiosius perspicillum! an qui te dextra tenet, ille non dominus constitutur operum Dei?”

19. Christoph Scheiner, _Rosa Ursina sine sol ex admirando facularum et macularum suarum phaenomeno varius nec non circa centrum suum et asem fixum . . . mobilis ostensus_ (1630) II, c. 1, par. 68.

20. Joseph Glanvill, _Plus ultra or the Progress and Advancement of Knowledge since the days of Aristotile_ (London: 1668; Gainesville, 1958), chapter 7.


Chapter 9


3. On “pedantry as the substitute attitude of a consciousness which is blocked from meeting its needs”: T. W. Adorno, introduction to Emile Durkheim, _Sozioologie und Philosophie_ (German trans., Frankfurt: Suhrkamp Verlag, 1967), p. 32n, commenting on the passage corresponding to this one in _Die Legitimität der Neuzeit_ (Frankfurt: Suhrkamp, 1966), pp. 380-381.


5. Francis Bacon, _Novum organum_ II 9. On the distinction between nature’s _cursus consuetus_ and its _praeter-generations_, see his _De augmentis scientiarum_ II 2.

6. _Novum organum_, praefatio: “. . . ut mens suo jure in rerum naturam uti possit.”

7. _Novum organum_ I 129: “Recuperet modo genus humanum jus suum in naturam quod ei ex dotatione divina competit, et detur ei copia: usum vero recta ratio et sana religio gubernabit.”
8. *Novum organum*, praefatio: "Id tamen posteris gratum esse solet, propter usum operis expeditum et inquisitionis novae rationis et impatien.tiam."  

9. *Novum organum*, praefatio: "Nemo enim rei alicuius naturam in ipsa re recte aut feliciter perscrutatur; verum post laboriosam experimentorum variationem non acquisitis, sed invinit quod ulterior quaret." Hence the importance of 'negative instances' in the cognitive process; man cannot know ab initio contemplationis, rather his path goes by the procedere primo per negativus ... post omninam exclusionem (*Novum organum* II 15, 2).  

10. *Novum organum* I 28: "... ex rebus admodum variis et multum distantibus sparsim collectae (sc. interpretationes)...."  

11. *Novum organum* I 98: "... occulta naturae magis se produnt per vexationes artium...." Here it is presupposed that the Aristotelian distinction between 'natural' and 'violent' movement is no longer made or should no longer be made; otherwise the latter could not provide information that can be carried over to the former. An indirect reference to its object defines the 'interpretation' of nature: "... omnis verior interpretatione naturae conficitur per instantias, et experimenta idonea et apposita; ubi sensus de experimento tantum, experimentum de natura et re ipsa judicatur." (*Novum organum* I 50). In contrast to this 'translated' explanation of nature the instrumental strengthenings of the senses, the *organa ad amplificandos sensus*, lose importance for Bacon.  

12. F. Schalk, "Zur Vorgeschichte der Diderotischen Enzyklopädie," *Romantische Forschung* 70 (1958):40ff: "The peculiar disdain, both of mathematics and of the mechanical aids to research, that Bacon exhibits and that brought him the censure of his critics in the nineteenth (the 'technical') century becomes intelligible only when one turns one's gaze, with him, to the Adam who ruled the cosmos by giving names." But the typified nonviolent dominion by means of the word is suspended on this side of paradise and becomes a utopian figure; where Bacon describes paths to knowledge in the present, his language is filled with expressions of toil and violence. The "idea of the regnum hominis as the dominion of the magician over the cosmos and the management of this dominion in the service of humankind" (Schalk, *loc. cit.*, p. 46) gives its character only to the totality of completed knowledge.  

13. Francis Bacon, *Valerius terminus* 1: "In aspiring to the throne of power the angels transgressed and fell; in presuming to come within the oracle of knowledge man transgressed and fell. ...."  

14. *Valerius terminus* 1: "... he was fittest to be allured with appetite of light and liberty of knowledge; therefore this approaching and intruding into God's secrets and mysteries was rewarded with a further removing and estranging from God's presence."  

15. *Valerius terminus* 1: "... it was not that pure light of natural knowledge, whereby man in Paradise was able to give unto every living creature a name according to its propriety, which gave occasion to the fall; but it was an aspiring desire to attain to that part of moral knowledge which defineth of good and evil, whereby to dispute God's commandments and not to depend upon the revelation of his will, which was the original temptation."  

16. *Valerius terminus* 1: "... as if according to the innocent play of children the divine Majesty took delight to hide his works, to the end to have them found out...." Compare *Novum organum*, I 182.  

17. *Valerius terminus* 1: "... God hath framed the mind of man as a glass capable of the image of the universal world, joying to receive the signature thereof as the eye is of light, yet not only satisfied in beholding the variety of things and vicissitude of times, but raised also to find out and discern those ordinances and decrees which throughout all these changes are infallibly observed."
18. Valerius terminus 1: “And although the highest generality of motion or summary law of nature God should still reserve within his own curtain, yet many and noble are the inferior and secondary operations which are within man’s sounding.”

19. Valerius terminus 1: “... but it is a restitution and reinvesting (in great part) of man to the sovereignty and power (for whencesoever he shall be able to call the creatures by their true names he shall again command them) which he had in his first state of creation.”

20. Valerius terminus 1: “And therefore knowledge that tendeth but to satisfaction is but as a courtesan, which is for pleasure and not for fruit or generation.” Compare Valerius terminus 9.

21. Valerius terminus 1: “... the new-found world of land was not greater addition to the ancient continent than there remainedeth at this day a world of inventions and sciences unknown, having respect to those that are known, with this difference, that the ancient regions of knowledge will seem as barbarous compared with the new, as the new regions of people seem barbarous compared to many of the old.” Compare Valerius terminus 5.

22. Valerius terminus 17: “That those that have been conversant in experience and observation have used, when they have intended to discover the cause of any effect, to fix their consideration narrowly and exactly upon that effect itself with all the circumstances thereof, and to vary the trial thereof as many ways as can be devised; which course amounteth but to a tedious curiosity, and ever breaketh off in wondering and not in knowing...”


25. Leibniz to Johannes Bernoulli, February 21, 1699, Mathematische Schriften, ed. C. I. Gerhardt (Berlin and Halle: 1850-1863), vol. 3, p. 574: “Sçi multos dubitare, ut insinuas, an nos possimus cognoscere, quid sit Sapientiae, Justitiaque divinae conformae. Puto tamen, ut Geometria nostra et Arithmetica etiam apud Deum obìnent, ita generales boni justique leges, mathematicae certitudinis et apud Deum quoque validas esse.” Animadversiones in partem generalem Principiorum Cartesianorum, ed. C. I. Gerhardt, Philosophische Schriften (Berlin: 1875-1890), vol. 4, pp. 375ff; commenting on on II 45: ‘... sed natura, cujus sapientissimus Auctor perfectissimam Geometriam exercet, idem observat, aliqui nullus in ea progressus ordinatus servarecur.” Mathesis divina, for its part, is not an independent and final principle, but rather is founded on the principle of sufficient reason; it is the form in which the rational explanation of realized possibilities displays itself: Tentamen anagogicum (Philosophische Schriften, vol. 7, pp. 278-274, 304; compare vol. 2, pp. 105, 438; vol. 3, p. 51; vol. 4, p. 216; and vol. 7, p. 191). This converges with the observation that Leibniz’s divine geometry is not spatial/intuitive but rather, after the model of analytic geometry, the epitome of the generative calculus of bodies. Spatial/corporeal nature is only the pictorial equivalent of this geometry; but the Platonic sense of this assertion is suspended, though for Kepler it was still bound up with the God Who practices geometry: “Non aberrat... ab archetypo suo Creator, geometriae fons ipsissimus, et, ut Plato scripsit, acternam exercens geometriam...” (Harmonice mundi, Gesammelte Werke, ed. Caspar (Munich: Beck, 1957-7) vol. 6, p. 299). The progress of mathematics represents the process by which man penetrates into the coherence of ratio sufficient and the world calculus and thus at the same time withdraws his knowledge from the requirement of legitimation.

26. Galileo, Dialogo dei massimi sistemi (henceforth: Dialogo) I: “... adunque bisognerà dire che ne anco la natura abbia inteso il modo di fare un intelletto che intenda.”

27. Dialogo I: “... dico che l’intelletto umano ne intende alcune così perfettamente, e ne ha così assoluta certezza, quanto se n’abbia l’istessa natura...”
28. *Dialogo* I: "... poiché arriva a comprenderne la necessità, sopra la quale non par che possa esser sicurezza maggiore."

29. *Dialogo* I: "... anzi, quando io vo considerando quant'è e quanto maravigliose cose hanno intese investigate ed operate gli uomini, pur troppo chiaramente conosco io ed intendo; esser la mente umana opera di Dio, e delle più eccellenti." The argument is less medieval than it looks; it assigns the burden of giving a satisfactory account of the intellect's author to its verifiable accomplishments instead of presupposing illumination and man's having been created in the image of God.

30. *Dialogo* IV: "Mirabile e veramente angelica dottrina: alla quale molto concordemente risponde quell'altra, pur divina, la quale, mentre ci concede il disputare intorno alla costituzione del mondo, ci soggiunge (forse acciò che l'esercizio delle menti umane non si trochi o ammottissica) che non siamo per ritrovare l'opera fabbricata dalle Sue mani."

31. *Materialien zu Brechts "Leben des Galilei"* (Frankfurt: Suhrkamp, 1963), pp. 12-18. In addition, the note in "Construction of a Role" (p. 60): "He appealed to his irresistible inquisitive drive, as a detected sex criminal might appeal to his glands." The anthropological systematics in which Brecht's figure of Galileo belongs are clarified by the categories of his theory of the theater; in place of the Aristotelian dyad of 'pity and fear' in the dramatic reception, there enter, for the non-Aristotelian experimental theater, "curiosity and helpfulness" (compare *Materialien*, pp. 168, 169).

32. Galileo, *Discorsi* [*Dialogues Concerning Two New Sciences*] I: "Ma se le digressioni possono arrecarci la cognizione di nuove verità, che pregiudica a noi, non obligati a un metodo serrato e conciso, ma che solo per proprio gusto facciamo i nostri congressi, digredir ora per non perder quelle notizie che forse, lasciata l'incontrata occasione, un'altra volta non ci si rappresenterebbe? anzi chi sa che bene spesso non si possano scoprire curiosità più belle delle primariamente cercate conclusioni?"

33. Galileo, *Dialogo* III: "... un conoscere che infinite cose restano in natura incognite."

34. Descartes to Mersenne, October 11, 1638, in *Oeuvres*, ed. Adam and Tannery (Paris: Cerf, 1897-1913), vol. 2, p. 380: "Il me semble qu'il manque beaucoup en ce qu'il fait continuellement des digressions, et ne s'arrete point à expliquer tout à fait une matière; ce qui monstre qu'il ne les a point examinées par ordre, et que, sans avoir considéré les premières causes de la nature, il a seulement cherché les raisons de quelque effets particuliers, et ainsi qu'il a basti sans fondement."

35. U. Ricken, "Gelührter" und "Wissenschaft" im Französischen. Beiträge zu ihrer Bezeichnungsgeschichte vom 12. bis 17. Jahrhundert (Berlin: Akademie Verlag, 1961), pp. 167-168. In the *Discours de la Methode* (I), the sciences curiuses are the disciplines lying apart from the Scholastic curriculum. See Etienne Gilson in Descartes, *Discours de la Methode, texte et commentaire* (Paris: J. Vrin, 1947), p. 109, with the gloss reproduced there from Furetière's *Dictionnaire universel*. A trace of the magic and the mantic remains in such unusual interests, an excess over what is useful in life, which bars them from the system of the Method. (Gilson, op. cit., pp. 120-121, 140-141). The antithesis, *pour mon utilité*/*pour ma curiosité* is found in the letter to Mersenne of February 9, 1689 (*Oeuvres*, ed. Adam and Tannery, vol. 2, p. 499). The defense of *curiosité* by now is only incidental and without argumentative effort: "Ce n'est pas un crime d'estre curieux de l'Anatomie ... j'allois quasi tous les jours en la maison d'un boucher, pour luy voir tuer les bestes ..." (vol. 2, p. 621). The unanswerable questions automatically exclude themselves under the criterion of the Method because their treatment evades mathematization: *Regulae ad directionem ingenii* 8 (vol. 10, p. 398). There remains the radical significance of the carefulness exerted in assuring oneself of the evidence: "Atque haec omnia quo diutius et curiosius examino, tanto clarius et distinctius vera esse cognosco ..." (*Meditationes* III 16; *Oeuvres*, vol. 7, p. 42).
Chapter 10

1. Regarding this terminology: by “world model,” I mean the systematic representation of reality that is dependent on the state of the natural sciences at a given time and that integrates the totality of their assertions; I designate as a “world picture” the summary of reality in which and by whose means man coordinates himself with this reality, orients his evaluations and the ends of his actions, grasps his possibilities and needs, and understands himself in his essential relations.

2. Voltaire, Questions sur l'Encyclopédie: Bornes de l'esprit humain, ed. R. Naves (Paris: Garnier, 1961), pp. 472ff: “On demandait un jour à Newton pourquoi il marchait quand il en avait envie, et comment son bras et sa main se remuaient à sa volonté. Il répondit bravement qu'il n'en savait rien. Mais du moins, lui dit-on, vous qui connaissez si bien la gravitation des planètes, vous me direz par quelle raison elles tournent dans un sens plutôt que dans un autre; et il avoua encore qu'il n'en savait rien.” The antithesis to Leibniz’s principle of sufficient reason as the hypertrophy of a pretension of reason that is indifferent to life stands in the background here.


6. In his *Dictionary* article "Curiosité," Voltaire had criticized the beginning of the second book of Lucretius's didactic poem, where the image of the onlooker observing a shipwreck from security on the shore was used to illustrate the attitude of the Epicurean wise man to the world of atomistic accident: "Suave mare magno turbantibus aquea venuit/ E terra magnum alterius spectare laborem. . . ."

7. The iconology of the triumphant sufferer on behalf of *curiosité* is perfected by the Berlin Academy's orator of the day, Emile Du Bois-Reyrond, in 1892: "It was the crowning moment in Maupertuis's life. One sees him standing in the snow, wrapped in his reindeer hide, perhaps carrying out, by the light of a pine torch that barely illumines the polar night, the short calculation in his diary that shows the flattening of the earth at the poles, and thus yields Newton's victory and his own victory. To describe him in this way would certainly have been better than in the attitude in which he was ridiculed by Voltaire, where he was indeed dressed in the costume of Lapland but had his hand on a globe, as though he were flattening the North Pole of an earth that was still plastic."


10. In general, the telescope here again is still the classical instrument of *curiosité*: "Rien n'avanceroit plus ces découvertes que la perfection des télescopes . . ." (*Lettre sur le progrès des sciences*, section 9). Maupertuis's impatience for the perfection of this instrument was justified when one considers the 'leap' that was still to occur in the performance of the telescope not many years later, with the Herschels.


20. Maupertuis, *Essai de Cosmologie* I, *Oeuvres*, vol. 1, pp. 11ff: "Le hasard, droit-on, avait produit une multitude innombrable d'individus; un petit nombre se trouvait construit de manière que les parties de l'animal pouvaient satisfaire à ses besoins; dans un autre infiniment plus grands, il n'y avait ni convenance, ni ordre: tous ces derniers ont péri . . . ces espèces, que nous voyons aujourd'hui, ne sont que la plus petite partie de ce qu'un destin aveugle avait produit." Here Maupertuis opposes the wave of literature in the first half of the eighteenth century aiming to prove the existence of God by teleological arguments—not the least of his motives being to emphasize the solitary position of his own proof of God's existence based on the principle of minimal action: "N'est pas faire tort à la plus grande des vérités, que de la vouloir prouver par de tels arguments."

22. Maupertuis, *Venus physique I 1, Oeuvres*, vol. 2, pp. 4ff: "Peu curieux sur le passé, nous interrogeons avec avidité ceux qui nous promettent de nous apprendre quelque chose de l'avenir... Cependant l'obscurité est la même sur l'avenir et sur le passé..."

23. Maupertuis, *Essai de Cosmologie III, Oeuvres*, vol. 1, p. 74: "Quand je réfléchis sur les bornes étroites dans lesquelles sont renfermées nos connaissances, sur le désir extrême que nous avons de savoir, et sur l'impuissance où nous sommes de nous instruire; je serois tenté de croire que cette disproportion, qui se trouve aujourd'hui entre nos connaissances et notre curiosité, pourroit être la suite d'un paréid désordre."

24. Rousseau, *Si le rétablissement des Sciences et des Arts a contribué à épuiser les mœurs* (First Discourse): "Le voile épais dont elle a couvert toutes ses opérations semblait nous avertir assez qu'elle ne nous a point destiné à de vaines recherches. Mais est-il quelqu'une de ses leçons dont nous ayons su profiter, ou que nous avons négligée impunément? Peuples, sachiez donc une fois que la nature a voulu vous prêter de la science, comme une mère arrache une arme dangereuse des mains de son enfant..."

25. Rousseau, *Discours sur l'origine et les fondements de l'inégalité parmi les hommes* (1755) (Second Discourse), 1: "Les modiques besoins se trouvant si aisément sous sa main, et il est si loin du degré de connaissances nécessaire pour désirer d'en acquérir de plus grandes, qu'il ne peut avoir ni prévoyance ni curiosité. Le spectacle de la nature lui devient indifférent à force de lui devenir familier. C'est toujours le même ordre, ce sont toujours les mêmes révolutions; il n'a pas l'esprit de s'étonner des plus grandes merveilles; et ce n'est pas chez lui qu'il faut chercher la philosophie dont l'homme a besoin, pour savoir observer une fois ce qu'il a vu tous les jours. Son âme, que rien n'agite, se livre au seul sentiment de son existence actuelle, sans aucune idée de l'avenir, quelque prochain qu'il puisse être..."; translated by G. D. H. Cole in *The Social Contract and Discourses* (New York: Everyman's Library-Dutton, 1950), p. 211.

26. Rousseau, *De la société générale du genre humain* (the second chapter of the first draft of the *Contrat social*, not included in the definitive version). Kant defined the function of Rousseau's theory of the state of nature thus: "Rousseau does not want us to return to the state of nature but rather to look back to it" (Akademie edition, vol. 15, part 2, p. 890).


29. David Hume, *A Treatise of Human Nature*, vol. 2, part III, section X, *Philosophical Works*, ed. Green and Grose (London: 1874–1875), vol. 2, pp. 226ff: "Human life is so tiresome a scene, and men generally are of such indolent dispositions, that whatever amuses them, tho' by a passion mixed with pain, does in the main give them a sensible pleasure."


34. Edmund Burke, *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*, ed. J. T. Boulton, (London: Routledge and Kegan Paul; New York: Columbia University Press, 1958), p. 31: “The first and the simplest emotion which we discover in the human mind, is Curiosity. By curiosity, I mean whatever desire we have for, or whatever pleasure we take in novelty. We see children perpetually running from place to place to hunt out something new: they catch with great eagerness, and with very little choice, whatever comes before them; their attention is engaged by every thing, because every thing has, in that stage of life, the charm of novelty to recommend it. But as those things which engage us merely by their novelty, cannot attach us for any length of time, curiosity is the _Illost superficial of all the affections_; it changes its object perpetually; it has an appetite which is very sharp, but very easily satisfied; and it has always an appearance of giddiness, restlessness and anxiety. Curiosity from its nature is a very active principle. . . . Some degree of novelty must be one of the materials in every instrument which works upon the mind; and curiosity blends itself more or less with all our passions.” It is instructive to see what reshapings and shiftings of accent are consistent even with ‘strong influence’; disinclination and inclination toward what is playfully excessive appear to determine the difference, and “troublesome labor” as the price appropriate to the truth is unalterable even for Mendelssohn.


37. Lichtenberg, “Einige Betrachtungen,” p. 50: “. . . little more is left to man than the cultivation of the surface, by which I mean, the field of the moral world . . . .”


46. Lichtenberg, *Aphorismen* L (1796–1799) 10. On the limitation of human knowledge by the need for happiness, Lichtenberg had already noted this in 1777: “It is always depressing for me when I consider that in the investigation of many things one can go too far; I mean that they can become detrimental to our happiness. I have a specimen of this in myself: I wish that I had been less fortunate in my efforts to learn to get to know the human heart . . . .” (*Aphorismen* F 507).

47. Lichtenberg, “Einige Betrachtungen,” p. 27.


50. A. Stadler, *Kants Teleologie und ihre erkenntnistheoretische Bedeutung* (Berlin: 1874), p. 14: "In its boundary concept, the thinking understanding reached its highest stage by recognizing therein its own innermost nature. This concept is at the same time the expression of its authentic dignity. For the fact that it was able to discover the limits of its activity from within the region that they mark off, even though it could not see beyond these same limits, demonstrates the magnitude of its competence. On the other hand, this concept is also a source of calm for the human inquisitive drive." Here the active components of the Kantian balance sheet are seen not so much from the point of view of the pathology of reason and its painful cure by amputation as rather in the achievement of a new intensification and calm, lying, as it were, in the line of progress, but also concluding it. One need not say that such a reception of Kant is a misunderstanding; but the aspect of therapeutic intervention, of the curtailing that cuts into the flesh, is overlooked.

Chapter 11


4. Friedrich Just Riedel, *Theorie der schönen Künste und Wissenschaften* (Vienna and Jena: 1774), p. 168. Still, at almost the same time a more assiduous author, who is still constrained by theology, can announce to his readers that he will not "pander to any extraordinary curiosity," so that, for example, in regard to the soul he will do no more than what is "fundamental and useful," namely, to investigate its powers as accurately as possible. This from Georg Friedrich Meier, *Metaphysik* (2nd ed. Halle: 1765), vol. 3, section 471. (I owe this reference to W. Strube.)

5. *Gespräche* (note 2), pp. 237-238. It is significant, though, that when Humboldt is interrupted by the respectful revolutionaries, he is not directly in the presence of his 'subject matter,' and in the attitude appropriate to that, but instead is in the role of the producer of literature, the author of the best-seller, *Kosmos*. The comparison with Archimedes stems from Gauss (letter to Schumacher, April 17, 1849).


7. *Gespräche*, p. 279. This same distinction is contained in the memoirs of the Egyptologist, Heinrich Brugsch, *Mein Leben und mein Wandel* (2nd ed. Berlin: 1894), pp. 25ff, whose patron Humboldt had been. His account of his first visit to the Egyptian section of the Berlin Museum in 1839 culminates in this sentence: "I was seized not by mere curiosity [Neugierde] but by the sincerest desire for knowledge [Wissbegierde]..."


11. Feuerbach, _Die Einheit der Seelen- und Gotteslehre_, _Werke_, vol. 10, p. 174: “God alone decides the fate of the soul; He alone is the concept—articulated in full clarity, exhibited and realized—of the soul; He alone is the soul that has been drawn into the light and out of the obscure and confused ideas that arise from its connection with the body.”


14. Feuerbach, _Nachgelassene Aphorismen_, _Werke_, vol. 10, p. 317. Compare Ernst Bloch, _Atheismus im Christentum_ (Frankfurt: Suhrkamp, 1968), p. 282: “In this way, then, Feuerbach’s atheism is conceived both as the destruction of an enervating illusion and also precisely as an inspiring retransformation of the theological overcoming of restrictions into a finite, human one.”


30. Freud, Beyond the Pleasure Principle (1920), Complete Psychological Works, vol. 18, p. 24; original: Jenseits des Lustprinzips, Gesammelte Werke, vol. 13, p. 23. Freud introduces The Ego and the Id with the comment that he is pursuing trains of thought begun in Beyond the Pleasure Principle, trains of thought that he regards "with a certain benevolent curiosity" (Gesammelte Werke, vol. 13, p. 237).


Part IV

Chapter 1


2. In 1781 Goethe could still write to Charlotte von Stein, "These days constitute an epoch for me again [machen wieder in mir Epoche]," simply because he feels driven "to certain decisions"
(May 3, 1781). Or a little later: acquaintance with Friedrich Melchior Grimm "certainly constitutes an epoch for me [mach gewiss Epoche bey mir], in the way I am situated" (October 1, 1781). And again, to the absent Charlotte: "It is an amazing epoch for me, just when you are not with me" (July 9, 1786). Shortly thereafter, after his flight to Italy, he writes in the diary he is keeping for Charlotte: "Farewell! Remember me in this important epoch of my life" (October 14, 1786). Here the epithet "important" is still required in order to reinforce "epoch."


5. Goethe, _Diary_, June 24, 1881.

6. Bossuet, _Discours sur l'histoire universelle_ (3rd ed. Paris: 1700; 13th ed. Amsterdam: 1788) I 5: "C'est ce qui s'appelle Époque, d'un mot Grec, qui signifie s'arrêter, parce qu'on s'arrête là pour considérer comme d'un lieu de repos, tout ce qui est arrivé devant ou après, et éviter par ce moyen les anachronismes, c'est-à-dire, cette sorte d'erreur qui fait confondre les tems." The term "epoch" is also applied to the most prominent turning point in the history of science. Alexis-Claude Clairault, who was admitted to the Academy of Sciences at the early age of eighteen on account of his accomplishments in mathematics and later participated in the expedition that Maupertuis led to Lapland to demonstrate the flattening of the earth at the pole, said in the open meeting of the academy on November 15, 1747, regarding the work of Newton: "Le fameux livre des Principes mathématiques de la Philosophie naturelle a été l'époque d'une grande révolution dans la Physique"—_Du système du monde, dans les principes de la gravitation universelle_, published in 1754, cited by I. Bernard Cohen in "The Eighteenth-Century Origins of the Concept of Scientific Revolution," _Journal of the History of Ideas_ 37 (1976): 268. The connection of the concept of 'epoch' to the fundamental idea of 'revolution' is still based exclusively on the metaphor of the special point in the orbit of a heavenly body. Voltaire, finally, conceives of [the] 'enlightenment' as both the state of a republic of intellects extending across Europe and beyond and also an extension of time that is characterized by a radical change: "Je vois avec plaisir qu'il se forme dans l'Europe une république immense d'esprits cultivés. La lumière se communique de tous les côtés...Il s'est fait depuis environ quinze ans une révolution dans les esprits qui sera une grande époque"—letter to D. M. Golitsuin, August 14, 1767, _Correspondance_, ed. T. Besterman (Geneva: Institut et musée Voltaire, 1953–1965), vol. 66, p. 181. Here the relation between 'revolution' and 'epoch' has reversed itself; the revolution introduces the epoch as the subsequent state that results from it.


11. Jacob Burckhardt, _op. cit._ (note 10), no. 18. For Burckhardt this means something negative: The Jews, who were on the side of the Arians—no doubt because their situation was bound to be made easier because, according to this doctrine, they had not killed the Son who was equal to God—would have survived, with the victory of Arianism, in safety and "in one or two centuries [would have] become the masters of all property and would already, in those days, have made Germans and Romans work for them." In other words, there would have been a capitalistic Middle Ages that would have made the modern age superfluous!

13. Goethe, diary entry, February 8, 1830, “Looking at pictures that were sent [to him].”


Chapter 2

1. Nicholas of Cusa, *De venatione sapientiae VIII* 22.

2. An aftereffect of the originally processual transcendence of the biblical idea of God is the absorption of a dynamic element into the postbiblical idea of transcendence, as, for example, when Clement of Alexandria describes the Lord of the universe, to whom the Christian philosophy is supposed to lead upward, as a goal object, which is difficult to hunt down, which "always draws back and distances itself further from him who strives for it" (*Stromateis* II 2; section 5, 3).


4. Nicholas of Cusa, *De venatione sapientiae XII* 32: “Quanto igitur quis melius sciverit hoc sciri non posse, tanto doctior.”

5. Nicholas of Cusa, *De venatione sapientiae XIII* 32.

6. Nicholas of Cusa, *De venatione sapientiae XIV* 41: “Habent igitur omnia ut non alia sint quam sunt, quia deus ipsa diffinit, et ab ipso non-aliud habent non aliud in specie generare, sed sibi simile efficere.”

contradictorium videtur necessario esse.” The argument is only modeled on the ontological proof that proceeds from the mere concept of God; in fact the inference is not from the concept but rather from the truth implication of the judgment—indeed independently, in fact, of the relation of the subject and the predicate given in it, that is, independently of its formal truth. For this purpose an additional Platonicizing assumption is required: that each judgment, insofar as it claims to be true, participates in the ‘idea’ of truth and thereby presupposes the existence of this idea itself. For the Cusan, its identification with God needs no argument.


9. Nicholas of Cusa, De docta ignorantia II 4, 5, 11 and 12.

10. Nicholas of Cusa, De docta ignorantia I 12.


14. Philo, De specialibus legibus I 40; De migratione Abrahami 134.


16. Rousseau to Voltaire, September 10, 1755: “... ce que nous ne savons point, nous n'aimons pas que ce que nous croyons savoir. Or, quel plus sûr moyen de courir d'erreurs en erreurs, que la fureur de savoir tout? Si l'on n'eût prétendu savoir que la terre ne tournait pas, on n'eût point puni Galilée pour avoir dit qu'elle tournait.” Somewhat later, Lichtenberg appeals explicitly to docta ignorantia in order to prevent natural-scientific comprehension from becoming a hindrance to its own extension: “It is not such a bad idea to explain a phenomenon with some mechanics and a strong dose of the incomprehensible rather than entirely by mechanics—that is, docta ignorantia is less of a disgrace than indocta”; see Vermischte Schriften (Göttingen: 1800-1806), vol. I, p. 170.


18. Johannes Wenck von Herrenberg, De ignota litteratura, ed. Vansteenberghe, in Beiträge zur Geschichte der Philosophie des Mittelalters 8 (1910) (henceforth: De ignota litteratura), par. 24: “Sic ergo scriba doctae ignorantiae, intrans caliginem tenebrarum linquens omnem speciem et decorum creanarum, evanesce in cogitationibus, et non valens Deum inveni sicuti est, quia adhuc visor, ipsum nequaquam glorificat, sed in tenebras suas errans, culmen divinae laudis ad quod omnis psalmus perduditur derelinquit et postponit, quod fore nefandissimum et incredulum quis fidelium ignorat?” In the Conclusio III, the reproach of having broken through the reservation of pure contemplation is explicitly raised against “knowing ignorance”: “Sed homin ille doctae ignorantiae vult in eodem docta ignorantia, sequestrata omni simulitudine, ren in sua puritate intelligere” (par. 28). It is only an apparent inconsistency when Wenck says in Conclusio IX, “... scriba doctae ignorantiae simulitudinem accept pro re” (par. 37), since such a confusion is in his eyes the necessary consequence of failure to recognize the eschatological reservation, as it was formulated in Conclusio IV: “... futuros sanit facialis Dei visum, quam hic (sc. scriba doctae ignorantiae) transilendo simulitudinem intelligere videtur, reservata est” (par. 30).
19. Wenck also appeals to the doctrine of the 'figurative' sense of the text: “Quapropter scriptura sancta in symbolis nobis tradidit divinitus inspirata ac revelata pariformiter ad consequendum naturalis nostrae conceptionis.”

20. Wenck, *De ignota litteratura*, par. 29: “... si esset inattingibile (sc. quidditas rerum) motus ille intellectualis esset sine termino ad quem, et per consequens non motus, et per consequens infinitus et frustra quod esset destruere propriam operationem intellectus.”

21. Wenck, *De ignota litteratura*, par. 27: “Unde et ipsa praecissa veritas, in eo quod praecissa habituinem importat et proportionem ad alias veritates non praecisas, sicut et maximitas absoluta ad maximitas habituinibus concretas.”

22. Wenck, *De ignota litteratura*, par. 27: “Deus in vestigio et in imagine est cognoscebibilis... Nec oportet in medio scientia habere adequatam proportionem, quia illa esset identitas potius quam similitudo.”

23. Nicholas of Cusa, *Apologia doctae ignorantiae* (Paris ed.), fol. 36v: “Veritas enim in imagine nequaquam, uti est, videri potest; cadit enim omnis imago eo ipso, quod imago a veritate sui exemplaris... Sed qui vident, quomodo imago est exemplaris imago ille transfendo imaginem ad incomprehensibilem veritatem incomprehensibiliter se convertit.”

24. Nicholas of Cusa, *Apologia doctae ignorantiae*, fol. 37r: “Vident enim ibi constitutus id, quod discurra vario vestigialiter quaeurur per vagantem in agro; et quantum ipse quarens accedit aut elongatur a quaesito, plane intuctur.”


26. Nicholas of Cusa, *De Possess*: “Quiest mundus nisi invisibilis dei apparitio, quid deus nisi visibilium invisibilitas?”

27. Nicholas of Cusa, *Excitationes IX* (Paris ed.): “Posse credere est maxima animae nostrae virtus, excedit omnem virumet intellectivam; ad illa enim pertinet, quae vult, procedit enim ex libertate voluntatis. Potest enim credere vel non credere rationalis anima, si vult vel non, et hoc est donum maximum dei. Ista spiritus seu libera voluntas per fidem, quam assumit, dominatur intellectui, et informat eum sua forma... Credit sibi vera esse numita, et capit quasi vasa, hoc est in certitudine, ac si vidisset. Sic fides quoad intellectum, est in coincidentia visibilis et invisibilis.”


29. Nicholas of Cusa, *De genesi* (Paris ed.), fol. 73v: “Experientia didici auctoritatem maxime studio conferre, qui enim recipit dictum aliquod quasi divina revelatione propalatum et id quaecum omni conatu intellectualiter videre, quod credit; qualemque dictum illud fuerit thesaurus ubique latens, se inapprehensibiliter ibi reperibilem ostendit. Hinc altissima fide ad altissima ducimus...”


33. Loc. cit. (note 32): “Consideravi quod non est possibile quod aliquid sit praecise circularis; unde nulla stella describit circulum praecisum ab arm ad annum.”

34. Loc. cit. (note 32): “Necesse est igitur milium punctum furum in octava sphaera esse polum; sed variabitur continue, ita quod semper alius et alius punctus instabiliter erit in loco poli.”


36. Loc. cit. (note 32): “Consideravi, quod terra ista non potest esse fum sed movetur, ut aliae stellae. Quare super polis mundi revolvitur, ut ait Pythagoras, quasi semel in die et nocte, sed octava sphaera bis, et sol parum minus quam bis in die et nocte.”

37. Nicholas of Cusa, *De docta ignorantia* II 1.

38. Nicholas of Cusa, *De docta ignorantia* II 1: “Universum vero cum omnia complectatur, quae deus non sunt, non potest esse negative infinitum, licet sit sine termine et ista privativa infinitum; et huc consideratione nec finitum nec infinitum est.”

39. Nicholas of Cusa, *De docta ignorantia* II 2: “ac si dixisset creator: Fiat, et quia deus fieri non potuit, qui est ipsa aeternitas, hoc factum est, quod fieri ponit deo similius.”

40. Nicholas of Cusa, *De docta ignorantia* II 3.

41. Wenck, *De ignota litteratura*, par. 37.

42. Nicholas of Cusa, *De venatione sapientiae* VII 22; the problem of the *administrator mundi*, who appears linguistically as a peculiar foreign body in the Cusan’s doctrine, comes up once again in connection with the subaltern *dii participantes* of Proclus in chapter XXI 62.

43. Nicholas of Cusa, *De docta ignorantia* II 11: “Nam si quis esset supra terram et sub polo arctico et alius in polo arctico,—sicut existenti in terra appareret polum esse in zenith, ita existenti in polo appareret centrum esse in zenith.”

44. Nicholas of Cusa, *De docta ignorantia* II 11: “Vides mundum et eiusmod motum ac figuram attingi non posse, quoniam apparebit quasi rota in rota et sphaera in in sphaera, nullibi habens centrum vel circumferentiam...”

45. Nicholas of Cusa, *De docta ignorantia* II 12.

46. Wenck, *De ignota litteratura*, par. 35.

47. Nicholas of Cusa, *De ludo globi* I.

48. Thomas Campanella, *Universalis Philosophia* I 1, c. 1, a. 7, n. 4, Monumenta Politica et Philosophica Rarioria, ed. L. Firpo, series I, no. 3 (Turin: 1960), 17 AB: “Deinde respondet Aristoteles, quod coelestia sunt maximae entitatis, ita ut tellus, quasi punctum ad ipsa, et propter aera sufficit, quod de coelestitibus est sapientia. Sed profecto insipiente loquitur, cum quia scientia hominis est de rebus, quae nobis circumstant; quae licet ad caelum sint quasi punctum, tamen scientia nostra de hoc puncto est, qui nobis non est punctum. Coelestia vero remota sunt a nobis, nec de ills certitudo est...”

49. Nicholas of Cusa, *De venatione sapientiae* XXI 63. The unjustified censure of Plato and Aristotle is combined with an equally unjustified appeal to Epicurus, to whom a God *cuncta...*
ad sui laudem creatum et optima providentia gubernat is ascribed. On God's cosmic self-praise compare De contextu I 3: "Deus autem omnia propter seipsum operatur..."

50. Nicholas of Cusa, De docta ignorantia II 12: "Et sic qualibet stella alteri communicat lumen et influentiam non ex intentione, quoniam omnes stellae movens tantum atque choriscant, ut sint meliori modo, unde ex consequenti participatio oritur,—sicut lux ex sua natura lucet, non ut ego videam, sed ex consequenti participatio fit, dum utor lumen ad finem videndi—:

51. Nicholas of Cusa, "Dies Sanctificatus," sermon (in note 5), p. 30. Where there is talk of man's special position, it relates to his being the representative of all creatures in the Incarnation: "Hominem autem sursum creavit ad se: omnia enim animalia, et omnia creatas, in homine, quasi in fine, quiescunt" (Sermon XXIII); "Creavit autem ultimo Deus hominem, tanquam in quo complementum et creaturarum perfectio consistere" (Sermon XIX); "Et non fuit possibile universam naturam conditam ad Divinitatem veli posse nisi in homine..." ("Dies Sanctificatus," par. 32). Occasionally the traditional formula also recurs, which defines the role of man as witness to the gloria dei; God must 'exhibit' his work if he wants to be glorified: "Nihil enim movit creatorem, ut hoc universum conditer pulcherrimum opus, nisi laus et gloria sua quam ostendere voluit; finis igitur creationis ipse est qui et principium. Et quia omnis rex incognitus est sine laude et gloria, cognosci voluit omnium creator, ut gloriam suam ostendere posset. Hinc qui voluit cognoscere intellectualem naturam cognitionis caparem" (letter to Nicholas Albergati, ed. G. von Bredow, Sitzungsberichte der Heidelberger Akademie, Phil-Hist. Kl., 1955, no. 3).

52. Nicholas of Cusa, De docta ignorantia II 12: "Non enim appetit homo aliam naturam, sed solum in sua perfectus esse."

53. Nicholas of Cusa, De venatione sapientiae XXVII 81. The (up to the present) first and last German translator deprives the passage of its instructive contortedness by reading it as saying that "God possessed from eternity the idea of the creative will."

54. Loc cit. (note 5): "Ipsa (sc. mens) enim illa in se rationabiliter determinavit."

55. Nicholas of Cusa, De docta ignorantia III 3: "... sicut ipse est maximus, ita et opus eius."

56. Nicholas of Cusa, De venatione sapientiae XXVII 81: "... cum nihil esset creatum:..., non fuerunt illa plus creabilia quam alia, quae nihil commune cum istis habet et de quibus nihil possumus conceptum facere."

57. The creative will and the plan of creation are, as such, contingent; God could also not have created anything, and He could have created something else. But His action cannot be measured against these possibility assertions because even 'possibility' originates in divine determination, which precedes the real creation from eternity. Thus only in relation to divine freedom is it correct that God's determinatio could also have turned out differently. As an assertion about the world, it is false to say that it could also not have been created or could have been created differently. The Platonic Ideas simply do not exist any longer, and neither are they simply shifted into the divine Spirit as a fixed canon of what is thinkable, as Augustine could still assume; rather, what is thinkable exists only as what has once actually been thought. This is the basis of the core sentences of chapter XXVII in De venatione sapientiae: "Non enim praeecessit ipsam mentem divinam alia mens, quae ipsam determinaret ad creandum hunc mundum. Sed quia ipsa mens aeterna libera ad creandum et non creandum vel sic vel aliern, suam omnipotentiam, ut voluit, intra se ab aeterno determinavit." One easily sees that the voluntaristic abundance is involved in the ut voluit, which blocks the given interpretation of determinatio as the thinkable's being thought, just as it blocks laying stress on a posited posse fieri, which oscillates between possibilites and potentia in the Aristotelian/Scholastic sense.
58. Nicholas of Cusa, *De docta ignorantia* I 22: “Unde quamvis deus multa potuisset providisse, quae non providit nec providebit, multa etiam providit, quae potuit non providere, tamen nihil addi potest divinae providentiae aut diminui.”

59. Loc. cit. (note 58): “... humana natura infinita complicat et completitur, quia non solum homines qui fuerunt, sunt et erunt, sed qui possunt esse, licet numquam erunt, et ita completitur mutabilia inmutabiliter, sicut unitas infinitia omnem numerum...”

60. Nicholas of Cusa, *De docta ignorantia* III 1: “Nihil in universo quod non gaudeat quadam singularitate quae in nullo alio reperibilis est.”


62. Giovanni Pico della Mirandola, *Heptaplus*, e. 5, c. 6, ed. E. Garin (Florence: Vallecchi, 1942), pp. 300ff: “Est autem plerumque constat a regibus usurpata et principibus terrae, ut si forte magnificam et nobilium civilitatem considerem, iam urbe absoluta, imaginem suam in medio illius visendum omnis spectandamque constituant. Haud aliter principem omnium Deum fecisse videmus, qui tota mundi machina constructa postremum omnium hominem in medio illius statuit ad imaginem suam et simulitudinem formatum.” Written four years after the *Oratio*, this is the regression of a man who for years was driven about from place to place, who was pardoned in 1493, and for whom one year later Savonarola was to deliver a funeral oration.

63. Giovanni Pico della Mirandola, *Oratio de hominis dignitate* (note 61): “Definita ceteris natura intra praescriptas a nobis leges coeicientur. Tu, nullis angustiis coercitus, pro tuo arbitrio, in cuius manu te posui, tibi illam praefinies. Medium te muni posui, ut circumspiceres inde commodius quicquid est in mundo. Nec te caelestem nec terrenum, neque mortalem neque immortalem fecimus, ut tui ipsius quasi arbitarius honorariusque placent et factor, in quam malius nate formam effingas.” The “center” has become a location of indifference to the possibilities lying on the radii; one’s position in the world is no longer an indication of one’s essence, but rather the theme of a chosen self-image: “Poteris in inferiora quae sunt bruta degenerare; poteris in superiorea quae sunt divina ex tui animi sententia regenerari.” Man is the self-definitive being, “cui dam id habere quod optat, id esse quod velit.”

64. Plato, *Theaetetus* 151 E-152 A.


66. Nicholas of Cusa, *De ludo globi* II.

67. Nicholas of Cusa, *De beryllo* 6: “homo habet intellectum qui est similitudo divini intellectus in creando.”

68. Nicholas of Cusa, *De beryllo* 29: “Ego autem attendo quomodo et si Aristoteles reperisset species aut veritatem circa illa; adhuc propter eam non potuisset attigisse quid erat esse nisi eo modo quo quis attingit hanc mensuram esse sextarium: qua est quod erat esse sextario. Puta quia sic est, ut a principe reipublicae ut sit sextarium est constitutum. Cur autem sic sit et non alter constitutum, propter eam non sciret, nisi qui demum resolutus diceret: quod principi placuit legis vigorem habet. Et ita dico cum sapienti, quod omnium operum dei nulla est ratio scilicet cur caelem caelum et terra terra et homo homo, nulla est ratio nisi quia sic voluit qui fecit. Ut eum investigare est fanum, ut in simili dicit Aristoteles, vellem inquirere prius principii modolabest vel non est demonstrationem. Sed dum attente consideratur omnem creaturam nullam habere essendi rationem aliiunde nisi quia sic creata est quodque voluntas creatoris sit ultima essendi ratio sitque ipse deus creator simplex intellectus qui per se creavit ita quod voluntas non sit nisi intellectus seu ratio, immo fons rationum; tunc clare videt quomodo id
quod voluntate factum est, ex fonte prolebit rationis. Sicut lex imperialis non est nisi ratio imperantis, quae nobis voluntas apparat."

69. Nicholas of Cusa, *De Berylo* 31. Between the essence *quidditas* of the creature and the intention *intentio* of the Creator, there is a relation similar to that between the spoken or written sign and the communicative intention of the speaker or writer: "... ut sensible sit quasi verbum conditionis, in quo continetur ipsius intention, qua apprehensa scimus quidditatem et quiescimus. Est autem intentionis gratia manifestatio, intendit enim se sic manifestare ipse loquens seu conditor intellectus. Apprehensa ignar intentione, quae est quidditas verbi, habemus quod erat esse. Nam quod erat esse apud intellectum, est in intentione apprehensum, sicut in perfecta domo est intention acdificatoris apprehensu, quae erat apud eius intellectum." One sees how the Cusan too becomes entangled in the ambiguities of the metaphor, so rich in orientation for our tradition, of the 'book' of the world or nature and vacillates back and forth between the picture book and the book of symbols, where indeed even the picture book is not yet unambiguously tied down to the concept of the picture that 'signifies itself.'

70. Nicholas of Cusa, *De berylo* 16: "Nominant autem theologo exemplaria seu ideae dei voluntatem... voluntas autem, quae est ipsa ratio in primo intellectu, bene dicitur exemplar ...."


72. Peter Lombard, *Sentences* II, d. 7, a. 10: "... non est creator nisi qui principaliter ista format, nec quisquam hoc potest nisi unus creator deus. Aliud est enim ex intimo ac summo causarum cardine condere ac ministrare creaturam, quod facit solus creator deus; aliud autem pro distributis ab illo viribus ac facultatibus aliquam operationem forinsecus admovere, ut tunc vel tunc, sic vel sic, exeat quod creator. Ista quippe originaliter et primordialiter in quidam textura elementorum cuncta iam creata sunt, sed acceptis opportunativatis postea prodeunt." This distinction between the (primary) establishment of creatures and their (secondary) production should not be understood as an admission of the possible reduction of nature to its purely material character for human production; instead, everything whatsoever that can 'become' of the Creation is here already foreseen and anticipated in the Creation, even if it is not definitively actualized.

73. William of Ockham, *Quodlibeta* VII, q. 28.

74. The question arises implicitly with the problem of the possibility of the actually infinite, insofar as the denial of the actually infinite seems to be a restriction of God's *potentia absoluta*; compare A. Maier, *Die Vorläufer Galileis im 14. Jahrhundert* (Rome: Edizioni di storia e letteratura, 1949), pp. 115-215. The 'infinitists' who came forward in the first half of the fourteenth century decided against Aristotle and in favor of the *potentia absoluta* when they regarded the creation of an *infinitum in actu* as possible and thus as free of contradiction. There, of course, the problem of an activity that is equivalent to the divine potency emerges only in connection with the question of a created *intensive* infinity, for instance in the *Commentary on the Sentences* of Paul of Perugia: "concedo quod Deus posset facere agens infinitae virtutis intensive," cited by A. Maier, *Mintaphysische Hintergründe der Spätscholastischen Naturphilosophie* (Rome: Edizioni di storia e letteratura, 1955), p. 381.

75. Nicholas of Cusa, *De coniecturis* II 14.

76. Loc. cit. (note 75): "... nec est alius ipsum admirabili virtute ad cuncta lustranda pergere quam universa in seipsa (sc. humanitate) humaniter complicare."

der Bibliothek Warburg 10; reprinted Darmstadt: Wissenschaftliche Buchgesellschaft, 1963), p. 218, does not hit upon the exact sense of ae magis perfectior quam imitator. The authentic sense of the text is more 'conservative,' to the extent that it holds to the Aristotelian distinction (from PhysiX III 8; 199 a 15-17) in the definition of ae, according to which 'art on the one hand perfects what nature is not able to bring to a finish, and on the other hand imitates (nature)." The spoon carver associates his handicraft with the skill that 'perfects'; but this association falls critically behind what he has said just before, and specifically because he gives up his own language as illiteratus and ventures onto the level of his Scholastic partner in the dialogue. The mere fact that his material is taken from nature does not, even on Aristotelian principles, justify regarding spoon carving as an activity that 'completes'; the question of the pregivenness or novelty of the 'form' must be fundamental here. Thus the translator remained closer to the consistent train of thought than did his text. But it is more important to see how the Cusan 'labors,' how he hesitates to step completely out of the cover of the traditional categories and play through his opening moves.

78. It is noteworthy that Nicholas makes his layman speak a more daring language than he uses where he himself is the immediate speaker and where, in addition, he addresses himself to a prospective cleric, in the document "spiritual testament," the letter to Nicholas Albergati of 1468 (ed. G. von Bredow, Sitzungsberichte der Heidelberger Akademie, Phil.-Hist. Kl., 1955), in which he summarizes his thought as the scientia laudis. Here we are told, "Sicut enim deus invisibilis per verbum, artem seu conceptum suam, sibi soli notum, omnia quae in natura subsistunt creativit, ita et intellectus per artem seu verbum suum sive conceptum omnia quae in arte sunt imitando naturam operatur, ut aedificia, picturae, texturae, scripturae et similia intellectus opera ostendunt" (n. 18). Essential examples that Nicholas uses elsewhere for man's creativity are absent here in favor of 'natural' examples. In paralleling divine and humane predicates, the sibi soli notum that is applied to God's creation is left out, and in the place of the theological creativit there stands the anthropological operatur. Thus also ae, verbum, and conceptus receive meanings that are only analogous. Accordingly it goes on: "Sed opus dei nihil praesupponit quod sit ante... Sed intellectus praesupponit opus dei. Omnis enim conceptus eius est imitatorius operis dei..." (n. 19-20). And: "Non igitur potest unquam intellectus ad divinam creativam artem, ut sit sicut magister, per se venire, et tamen nisi ad illam perveniat, non attingit quod apprehendere cupit..." (n. 23). It is questionable whether the editor hits on the intention of this text and does not level off the difference between it and other passages when she writes regarding it, "The sovereignty of the Creator is reflected in the freely creating power of the spirit. It can think out and invent new things, which no one before it has thought of, and make them artificially. So when it is said that the spirit operates by imitating nature, then that does not by any means mean that its works of art are copies of natural objects. The imitation relates not to individual natural things but rather to nature as God's work." Even if this letter of the Cusan falls in the same year as the dialogue On the Globe Game, still one should not harmonize the linguistic difference between them by reading in here the inventiv natura that is central there. There are more than stylistic differences between Nicholas the preacher and letter writer, on the one hand, and the speculative author, on the other hand.

79. Nicholas of Cusa, De mente, c. 18: "unde mens est creatura ab arte creatrice, quasi ari illa scispsam creare vellet... in hoc enim infinitatem imaginis modo, quo potest, imitatatur..."

80. Nicholas of Cusa, Compendium VI.


82. Nicholas of Cusa, De contexturis I 18: "Coniectura est positiva assertio in alteritate veritatem uti est participans."
83. Nicholas of Cusa, Compendium VIII: "Demum (sc. cosmographus), quando in sua civitate omnem sensibilis mundi fecit designациюem, ne perdat eam, in mappam redigit, bene ordinatam et proportionabiliter mensuratam, convertitque se ad ipsam, sicut ipse ut cosmographus ad mappam. . . . Et hinc in se reperit primum et propinquitum signum conditoris, in quo vis creativa, plus quam in aliquo alio noto animali reducit."

84. Nicholas of Cusa, De venatione sapientiae IV 9-10.


86. Nicholas of Cusa, De venatione sapientiae V 11: "Videtur autem naturam imitari geometer, dum circulum figurat." In the first German translation of this treatise of the Cusan, by P. Wilpert (Hamburg: Felix Meiner, 1964), the autem that marks the distinction between the two examples is not taken into account, evidently in the belief that both similes, that of the logician and that of the geometer, refer to the same point of analogy.

87. Nicholas of Cusa, De docta ignorantia I 11.

88. Nicholas of Cusa, De berylio, c. 32.

89. Nicholas of Cusa, De docta ignorantia II 12.

90. Loc. cit. (note 89): "Unde erit machina mundi quasi habens ubique centrum et nullibi circumferentia, quotiam circumferentia et centrum deus est, qui est ubique et nullibi."

91. Nicholas of Cusa, De visione dei, c. 7: "Cum sic in silentio contemplationis quiesco, tu domine intra praecordia mea respondens, dicens: sis tu tuus, et ego ero tuus. O domine. . . posui in libertate mea ut sim, si voluero, mei ipsius. Hinc nisi sim mei ipsius, tu non es meus . . . Et quia hoc posui in libertate mea, non me necessitas, sed expectas, ut ego eligam mei ipsius esse."

92. Augustine, Opus imperfectum contra Julianum I 78.

93. Loc. cit. (note 92): "Libertas arbitrii, qua a deo emancipatus homo est, in admittancei peccati et abstiendi a peccato possibilitate consistit. -Emancipatum hominem dicis a deo; nec attendis hoc cum emancipato agi, ut in familia patris non sit."

94. Nicholas of Cusa, "Dies Sanctificatus," sermon (cited in note 7), par. 30: "Notandum hic, quomodo incarnatio Christi fuit necessaria nobis ad salutem. Deus creavit omnia propter se ipsum et non maxime et perfectissime nis universa ad ipsum; sed nec ipsa ad ipsum uniri potuerunt, cum finit ad infinitum nulla sit proporcio. Sunt igitur omnia in fine in Deo per Christum. Nam nisi Deus assumptisset humanam naturam, cum illa sit in se medium alias complicans, totum universum nec perfectum—ymmo nec esset."

95. Preliminary stages in the development of the terminology of contractio were already present in Scholasticism. The sense of 'drawing something to oneself' is involved in a quaestio of Thomas Aquinas’s Summa theologica: "Utrum Christus defectus corporales contraxerit" (III, q. 14, a. 8). This drawing to oneself is something neither volitional nor accidental; rather it is a matter of natural 'endowment': "Illud enim contrahere dicimus quod simul cum natura ex origine trahimus." In the context of Christology it has the connotation of 'allowing oneself to become involved with,' not that of the necessity that is more characteristic of natural philosophy: "... illud dicatur contraheri simul cum sua causa ex necessitate trahitur." The contractio relation
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is not identical with the relation of Platonic ‘participation’; not only does the ideal draw the reality to it, but matter too is urged toward conceivability: “Unaquaeque materia per formam superinductam contrahitur ad aliquam speciem” (Summa contra Gentiles II 16, a. 2). This latter use most nearly anticipates the “restriction” that the Cusan conceives the infinite and indefinite as underlying, in order to become a universe, a maximum contractum that, although it is an ‘everything,’ a universe, still only represents a posse contracta with its gradus contractionis: the potestas furti contractum ad id quod fit (De venatione septimiae 93, 114; also see De docta ignorantia II 4-8). A century later the concept of contractum recurs in the “Zimmur” of the Kabbalist Isaac Luria, the self-restriction of God in which “of His own accord He draws Himself into Himself” and thus makes it possible for something to exist that is not Himself—Gerschom Scholem, Über einige Grundbegriiffe des Judentums (Frankfurt: Suhrkamp, 1970), pp. 85-86. Bruno’s position will be the antithesis of this: God exhausts Himself when He creates, so that what He creates can only be Himself. Thus “restriction” for Bruno can never be anything but the “restriction” of matter (contraction di materia), which cannot realize the universe in any of its temporal states, but only in the passage through all of them.

96. Nicholas of Cusa, De docta ignorantia III 1: “Et universum non evacuat ipsum infinitam absolute maximam dei potentiam, ut sit simpliciter maximum terminans dei potentiam.”

97. Nicholas of Cusa, De docta ignorantia III 2.

98. Nicholas of Cusa, De docta ignorantia III 3: “Sed si homo elevatur ad unitatem ipsius potentiae, ut non sit homo in se subsistens creatura, sed in unitate cum Infinita potencia, non est illa potens in creatura, sed in seipsa terminata.”

99. Nicholas of Cusa, De docta ignorantia III 4: “... subiungentes dicimus temporis plenitudinem praeteritam ac ilesum semper benedictum primogenitum omnis creaturae esse.”

100. Wenck, De ignota litteratura, par. 85: “... dicet idem generare Filium et creaturas creare.”

101. Wenck, De ignota litteratura, par. 40.

Chapter 3

1. V. Spampanato, Vita di Giordano Bruno, con documenti editi e inediti (Messina: Principato, 1921), p. 786: Documenti Romani XI. It is surprising that the consciousness of the testimonial character of such a freely accepted death had so disappeared in the practice of the Inquisition that the possible reversal of the early Christian effect of the deaths of martyrs, against Christianity, does not seem to have occurred to anyone. This state of affairs belongs to the history of the elemental change in the subterranean idea of the ‘powerful’ truth, which coincides with the change of epoch itself; compare Hans Blumenberg, “Paradigmen zu einer Metaphorologie,” Archiv für Begriffsgeschichte (1960):12-17. Against this background, it sounds like historical irony that the Avventi di Roma of the February 12, 1600, introduced the announcement of the postponement of the burning of the “eretico obstinatissimo,” which had been fixed for this day, with this disappointed turn of expression: “Oggi credevamo vedere una solennissima iustizia, e non si sa perché si sia restata...” (V. Spampanato, Vita di Giordano Bruno, p. 784: Documenti Romani VIII). The only witness of the burning who is accessible to us, the professor Caspar Schopp (1576-1649), turns out to have had a subaltern’s atrophied faculty of vision for what took place before him: “Hodie igitur ad rogum sive piram deductus, cum Salvatoris crucifixi imago ei iam moritura ostenderetur, torvo oam vultu asperrnatus reiect, sicque ustulatus miserem perit, renunciaturas credo in requies illis, quos finxit, mundis, quonam pacto hornines blasphemli et implii a Romanis tractari soletant”—D. Bertu, Vita di Giordano Brunu di Nola (Firenze: 1668) (henceforth: Vita), p. 401. Nevertheless, this onlooker appears to be the only one who, in expressing his scorn, established a connection between Bruno’s rejection of the God become man and his vision of the infinite multiplicity of worlds.
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2. Berti, *Vita*, p. 390, Doc. XXIII: “... et l’esser in somma publico heresiarca et non già intorno articoli leggeri, ma intorno alla Incarnazione del Salvator nostro et alla Santissima Trinità...”


7. Bruno, *La cena de le ceneri*, Dialoghi, p. 83: “Or ecco quello, ch’ha varcato l’aria, penetrato il cielo, discorse le stelle, trapassati gli margini del mondo, fatte svanir le fantastichissime muraglìa de le prime, ottave, none, decime ed altre, che vi s’avessero potuto aggiungere, sfera, per relazione de vani matematici e cieco veder di filosofi volgari.” The opened outlook on nature—“nudata la ricoperta e velata natura”—results from the removal of a hindrance, an obstructing cage, which had been erected in human history by deceitful manipulation, and does not result from overcoming cognitive difficulties given with the material itself and its ‘natural’ obscurity. One sees that Bruno still stands before the threshold of the seventeenth century and the surprise, which reversed its ‘attitude’ to nature, that it received from the telescope and the microscope; he believes in the adequacy of man’s visual powers to nature, as long as the hindrances of sophistical constructions are cleared from the path of the faculty of vision—he is still the *contemplator coeli*, who needs only to be led out of the cave of the constructors of artificial images in order to be able to experience reality as such and in its evidence. The other ‘savior’ images in the *Cena* also come out this way: the eyes provided to the moles, the blind men made to see, the dumb and lame who are healed, “che non valean far quel progresso col spirito...”. It is sufficient to produce ‘presence’ with respect to the subject matter in order to lay bare its nature: “Le rende non men presenti che si fussero proprii abitatori del sole, de la luna ed altri nomati astri.” Theoretical man does not step out of the all-enclosing and all-furnishing maternal process of nature; he relies on what is nearest to him and is thereby certain of what is farthest: “E n’apre gli occhi a veder questo nuone, questa nostra madre, che nel suo dorso ne alimenta e ne nutrisce, dopo averne prodotti dal suo grembo, al qual di nuovo sempre ne riacquista, e non pensar oltre lei essere un corpo senza alma e vita, et anche feccia tra le sustanze corporali. A questo modo sappiamo che, si noi fussimo ne la luna o in altre stelle, non saremmo in loco molto dissimile a questo...” Here the homogeneity of the universe, the key axiom of the cosmology of the modern age, is not a rational/economic postulate but rather a postulate, pressing forward from the organic background metaphor, of the universal familiarity of being.

8. Copernicus, *De revolutionibus* I 11: “Sed cum modica sit differentia, non nisi cum tempore grandescens patefacta est: a Ptolemaeo quidem ad nos usque partium prope XXI, quibus illamiam anticipant.”


10. This complaint, which breaks forth from the sober recitation of the enhancement of the possibilities of astronomical knowledge, about the unlived lives, the time left empty of history, the ‘backwardness’ of reality with respect to possibility that threatens and actually occurs in man and only in man—this complaint loses the apparently accidental character that it has in this passage only from the point of view of the whole of the Nolan’s speculation: “Ma che di questi alcuni, che son stati appresso, non siamo però stati più accorti, che quel che furon prima,
e che la moltitudine di que' che sono a nostri tempi, non ha però più sale, questo accade per ciò che quelli non vissero, e questi non vivono gli anni altrui, e, quel che è peggio, vissero morti quelli e questi ne gli anni propri" (Dialoghi, p. 41).

11. For himself—who, since Copernicus, had scarcely been able to extend the temporal basis and, even assuming that he had been able to do so, could not have made anything of it because he knew almost no astronomy at all—Bruno claims not to see with the eyes of those who did not live, and these do not see the years of others, and, that is worse, lived during their own years.” But at bottom, he adds, these mathematicians are like translators from one language to another who themselves could not penetrate more deeply into the sense of what is translated—“ma sono gli altri, che profondano ne’ sentimenti, e non essi medesimi.” And Bruno counts himself among these “others,” even with respect to Copernicus.


13. Bruno, La cena de le ceneri V, Dialoghi, p. 145: “... e sappiamo che il principio de l’inquisizione è il sapere e conoscere, che la cosa sì, o sì possibile e conveniente, è da quella si cave profito.”


21. William of Ockham, Quodlibeta VI, q. 1.

22. William of Ockham, I. Sent. 48 1 M: “... si esset (sc. deus) causa naturalis, vel omnia produceper simul vel nulla.”


24. Berti, Vita, p. 352, Doc. XI (from June 2, 1592): “La materia de tutti questi libri parlando in generale è materia filosofica e secondo l’intitullation de detti libri diversa, come si può veder in essi, nelli quali tutti io sempre ho definito filosoficamente e secondo li principii e lume naturale, non avendo riguardo principal a quel che secondo la fede deve esser tenuto e credo che in essi non si ritrova cosa per la quale possa esser guidicato, che de professio piutosto voglia impugnar la Religione che esaltar la filosofia quantunque molte cose impie fondate nel lume mio naturale possa haver esplicato.”
25. Berti, *Vita*, p. 555, Doc. XI: "... perché io stimavo cosa indegna della divina bontà e potenza che possendo produr oltre questo mondo un altro e altri infiniti, produceisse un mondo finito. ..." In *The Christianity of Reason*, Lessing was to derive very similar results from the Aristotelian concept of God's thought that thinks itself if "God's every idea is a creation" and He thinks of nothing but Himself, then either He creates Himself or the created is, like Him, *ens infinitum* (section 13), in fact either as "infinitely many worlds" (section 15) or as the absolutely complete contingency of a unique world (section 18).

26. Bruno did not go along with one of the most obscure distinctions in the history of dogma, the distinction between *generatio* and *creation*: the production of the Son of God as "generation," the production of the world as "creation." He holds to the Cusan's fundamental idea that the absolute "ability" must manifest itself in the arising of *aequalitas* from *unitas*—but the position of *aequalitas* in Bruno is occupied by not the Son but the infinite universe. What the Cusan and the Nolan have in common is the compulsion of omnipotence to exhaust itself.


28. Berti, *Vita*, p. 558, Doc. XII: "... e ho dubitato che queste tre possino sortire nome di persone, poiché non mi pareva che questo nome di persona convenisse alla divinità... ."


30. F. J. Clemens, *Giordano Bruno und Nicolaus von Cusa* (Bonn: 1847), p. 222. Hermann Cohen repeated the negative evaluation of Bruno in comparison to the Cusan, though according to different criteria, in his introduction to Lange's *Geschichte des Materialismus*, in 1914. Nicholas, he says, "rediscovered the Platonic path to mathematics," and thus "became the first founder of modern philosophy." But "late he did him the dubious favor of having Giordano Bruno inscribe his name on his banner, and while the latter could not abuse and revile other people sufficiently, he declared the deepest gratitude to the Cusan, and hardly to anyone else." Cohen solves the problem of the lack of influence of the Cusan's "profound initiating impulses to modern thought" by the "slight suspicion" that Bruno's applause could have frightened later philosophers away; see *Schriften zur Philosophie und Zeitgeschichte*, vol. II (Berlin: Akademie Verlag, 1928), pp. 190–191.

31. Bruno, *Spaccio de la bestia trionfante II 3*, Dialoghi, p. 708: "E questo procede dal non avere intelligenza ed appresione di se stessa; come quello che è simplicissimo, se non vuol essere altro che semplicissimo, non intende se stesso."

32. Bruno, *Spaccio de la bestia trionfante II 3*, Dialoghi, p. 708: "Perché quello che si sente e che si remira, si fa in certo modo molto, e, per dir meglio, altro ed altro; perché si fa obietto e potenza, conoscente e conoscibile; essendo che ne l'atto dell'intelligenza molte cose incorrono in uno."

33. Bruno, *De l'infinito universo e mondi*, proemiale epistola, *Dialoghi*, p. 349: "... da quel che, siccome è bene che sia questo mondo, non è men bene che sia ciascuno di infiniti altri."

34. Bruno, *De gli eroi fioriti*, argumento, *Dialoghi*, p. 946: "Per largo e per profondo peregrinata il mondo, cercate tutti gli numerosi regni, significa che non è progresso immediato da una forma contraria a l'altra, né regresso immediato da una forma a la medesima; però bisogna trascorrere, se non tutte le forme che sono nella ruota delle specie naturali, certamente molte e molte di quelle." Here Circe personifies the *omniparente materia*. In this context, an instructive misinterpretation is given of Origen's *apokatastasis*, which is conceived as the lawfulness of a physical revolution of the contents of the world, whereas in Origen himself, each new world that is set up is the result and realization of the free moral decision of the preceding world
phase—Origen, De principiis I 6, 2, ed. P. Koetschau (Leipzig: Hinrich, 1918), p. 81: “in hoc iam iustum iudicium de providentiae est, ut unicuique secundum diversitatem motuum pro merito sui decessus et commotionis occurrat.” The reason why this incidental misunderstanding is so instructive is that the Nolan passes over the difference—which is an index of his own authenticity—between the great world systematizer Origen and himself—the difference between the thoroughgoing personalization of the universe on the one hand and consistent impersonality on the other. This corresponds to the fact that the plurality of worlds in Origen is a sequence of judgment and creation in time, whereas in Bruno it is a simultaneity in space.

35. Such realism of the imagination can also be found in the arguments for the infinity of the world in De l'infinito universo II, Dialoghi, p. 394: “Oltre, sicome la nostra imaginazione è potente di procedere in infinito, immaginando sempre grandezza dimensionale oltre grandezza e numero oltreo numero, secondo certa successione e, come se dice, in potenzia, cosi si deve intendere che Dio attualmente intende infinita dimensione ed infinito numero. E da questo intender seguita la possibilita con la convenienza ed opportunità, che ponemone essere: dove, come la potenza attiva è infinta, cosi, per necessaria conseguenza, il soggetto di tal potenza è infinito. . . .”

Imagination is the criterion of what is possible, what is possible is the criterion of original power, and this power is the criterion of what is real—“il possier fare pone il possier esser fatto. . . .”

36. Bruno, De la causa, principio et uno III, Dialoghi, pp. 280ff: “... onde se sempre e stata la potenza di fare, di produrre, di creare, sempre e stata la potenza di esser fatto, prodotto e creato; perche l'una potenza implica l'altra; voglio dir, con esser posta, lei pone necessariamente l'altra. . . . Perche la possibilita assoluta per la quale le cose che sono in atto, possono essere, non e prima che la attualita, né tampoco poi che quella. Oltre, il possiere essere è con lo essere in atto, e non precede quello; perche, se quel che può essere, facesse se stesso, sarebbe prima che fusse fatto.”

On the Cusan’s concept of possibility in its specific differentia, see A. Faust, Der Möglichkeitgedanke. Systemgeschichtliche Untersuchungen (Heidelberg: C. Winter, 1931-1932), vol. II, pp. 266-293, especially the notes on pp. 287-288.

37. Bruno, De la causa III, Dialoghi, p. 281: “Lo uomo è quel che può essere, ma non e tutto quel che può essere.” As for the divine original ground—“il quale è tutto quel che può essere, e lui medesimo non sarebbe tutto se non potesse essere tutto. . . .” For all other things—“. . . le quali, quantunque sono quello che possono essere, potrebbono però non esser forse, e certamente altro, o altramente che quel che sono; perche nessuna altra cosa è tutto quel che può essere.”

38. Bruno, Opera latina I/1, pp. 112-114.

39. Bruno, Opera latina I/1, p. 72: “Sphaericum esse non tollit infinitum esse.”

40. Bruno, Opera latina I/1, p. 98: “... quod ubique centrum habet, estque ex omni parte sphaericum. Sicut juxta intelligibilem modum est in Deo, in natura, in universi una substantia, juxtaque rationem propriam in hoc sensibili universo conjiciatur, in quo nulla Stella, nullus mundus, nullus orbis in circumferentia dictur aliter, qui sibi non sit in centro, quia unicamente in universo aequalis habetur ad magnum parvumque horizontem respectus. Infinitum igitur sit oportet, quod undeque aequale esse debat.”

41. Bruno, De la causa III, Dialoghi, p. 285: “La potestà si assoluta non è solamente quel che può essere il sole, ma quel che è ogni cosa e quel che può essere ogni cosa: potenza di tutte le pontentia, atto di tutti gli atti, vita di tutte le vite, anima di tutte le anime, essere de tutto l'esser; onde altramente è detto dal Revelatore: ‘Quel che è, me invia; Colui che è, dice cosi.' Però quel che altrove è contrario ed opposito, in lui è uno e medesimo, ed ogni cosa in lui è medesima cosi discorsi per le differenze di tempi e durazioni, come per le differenze di attualità e possibilità. Però lui non è cosa antica e non è cosa nuova; per il bene disse il Revelatore: ‘primo e novissimo.’ ” In conformity with the premise that one can speak of potentia absoluta only if one sees it as both ability-to-make and ability-to-become, the Nolan passes without
any comment from the identity of the divine power to the identity—realizing itself in the plurality of worlds through time—of a substratum that, as world material, includes openness to being defined as everything, and, as world soul, vocation for everything’s resistance to the traditional conception of matter follows logically: “Conchiudendo, dunque, vedete quanta sia l’eccellenza della potenza, la quale, se vi piace chiamarla raggione di materia, che non hanno penetrato i filosofi volgari, la possete senza detrare alla divinità trattar più altamente, che Platone nella sua Politica e il Timeo. Costoro, per averno troppo alzata la raggione della materia, sono stati scandalosi ad alcuni teologi” (Dialoghi, p. 286).

42. On Osiander and his role in the dispute about the truth of Copernicanism, see H. Blumenberg, Die Genesis der kopernikanischen Welt (Frankfurt: Suhrkamp, 1975), pp. 841–870.

43. Bruno, La cena de lo cenere III, Dialoghi, p. 89: “Or vedette, che bel portinaio! Considerate quanto bene v’apra la porta per farvi entrar alla participazion di quella enoratissima cognizone, senza la quale il saper computare e misurare e geometricamente non è altro che un passatempo da pazzi ingenuosi. Considerate come fidelmente serve al padron di casa.” Bruno was not the first to use strong language in connection with this affair; as early as two months after Copernicus’s death, Tiedemann Giese, the Bishop of Kulm, described the preface as a shameful treachery in a letter to Joachim Rhettius: “Quis enim non discruciatur ad tantum sub bonae fidei securiitate admissum flagitium?”—Kopernikus Gesamtausgabe ed. F. Kubach (Munich: R. Oldenbourg, 1944–1949), vol. II, p. 454. Thus it is not the case that the preface has “only agitated tempers since the time of Alexander von Humboldt,” as claimed H. Bornkamm, “Kopernikus im Urteil der Reformatoren,” Archiv für Reformationsgeschichte 40 (1943):171–183 (citation from p. 174).

44. Bruno, La cena III, Dialoghi, p. 90: “... dove non solo fa ufficio di matematico che suppone, ma anco de fisico che dimostra il moto de la terra.” See La cena IV, Dialoghi, p. 129: “Ma il suo scopo versa circa la natura e verificazione del soggetto di questi moti.”

45. Bruno, Oratio valedictoria (1588), Opera latina I/1, p. 17: “Copernicum etiam qualem putatis esse nendum mathematicum, sed (quod est mirum obiter) physicum? Plus ille inventur intellectus in duobus capitibus, quam Aristoteles, et omnes Peripatetici in universa eorum naturali contemplatione.”

46. Bruno, De l’infinito universo II, Dialoghi, p. 429: “... fisson de la terra; contra il quale crida tutta la natura, e proclama ogni raggione, e sentenzia ogni regolato e ben informato intellutto al fine.”

47. Bruno, La cena III, Dialoghi, p. 91: “... perché lui lo tiene per altri proprii e più saldi principii, per i quali, non per autoritate ma per vivo senso e raggione, ha cosi certo questo come ogni altra cosa che possa aver per certa.”

48. Bruno, De la causa, principio et una V, Dialoghi, p. 326: “Però, benché un particolare mondo si muova verso e circa l’altro, come la terra al sole e circa il sole, nientedimeno al rispetto dell’universo nulla si muove verso né circa quello, ma in quello.” Bruno’s infinite space remains, according to its implicit definition, the ‘container’ space of Aristotle and is still by no means the absolute space of Newton; the latter implies in principle that the movement of an isolated body could be ascertained by the organ of an absolute knowledge.

49. Bruno, De la causa V, Dialoghi, p. 320: “Alla proporzione, similitudine, unionc e identità de l’infinito non più ti accosti con essere uomo che formica, una stella che un uomo; perché a quello essere non più ti aviciuni con esser sole, luna, che un uomo o una formica; e però nell’infinito queste cose sono indifferenti...”

51. This discussion may now be found in H. Blumenberg, *Die Genesis der kopernikanschen Welt* (Frankfurt: Suhrkamp, 1975), pp. 162-199.

52. Bruno, *Opera latina* 1/1, p. 79: “Grave et leve non dicuntur de corporibus naturalibus, naturaliter constitutis.”

53. Bruno, *Opera latina* 1/1, p. 186: “Longe igitur a naturali contemplatione desipit quod ait Aristoteles, quod si quis transponat terram, ubi nunc est luna, non fertur partium unaquaeque ad ipsam, sed ad suum locum. Immo dicimus partes unius terrae non habere maiores potentiam, ut sint partes alterius, quam partes unius animalis, ut sint alterius animalis partes.” It is significant that Bruno gives up the distinction between the earth and the moon—which for Aristotle was a radical heterogeneity because the moon, as (already) the lowest heavenly body, was considered no longer to be composed of the [four] elements—and speaks of the genus terra, of which there can be arbitrarily many instances, such as are interchanged in the thought experiment. The logic is sharpened still further by this plural of “earth” (which was impossible for Aristotle), because even then something like ‘organic’ individuality continues to be maintained, and all movements have a reintegrative function. But such organic individualization of world bodies again destroys the previously accomplished ‘progress’ in the direction of the postulate of cosmological homogeneity.

54. Bruno, *De l'infinito universo* III, *Dialoghi*, p. 451: “Moto retto non è proprio né naturale a corpo alcuno principale; perché non si vede se non nelle parti che sono quasi escrementi che hanno efflusso da corpi mondani, o pur, altronde, hanno influsso alle congeneri sfera e continenti....”

55. Bruno, *Opera latina* 1/1, p. 186: “Nihil ergo naturam est ferri a medio, quod et ad medium ferri non sit (natura illud imperante) naturam, quia particulae telluris non plus quiescere comperimur, quam cuiusque animalis particulae.”

56. Bruno, *De l'infinito universo* IV, *Dialoghi*, p. 484: “... il principio intrinseco impulsivo non procede dalla relazione ch’abbia a loco determinato, certo punto e propria sfera, ma da l’appulso naturale di cercar ove meglio e più prontamente ha da mantenersi e conservarsi nell’esser presente; il quale, quantunque ignobil sia, tutte le cose naturalmente desiderano....”


60. Bruno, *Articuli* 38, *Opera latina* 1/1, pp. 143-146: “Tempus, quod est menaura motus, non est in coelo, sed in astris, et primus ille motus, quem concipimus, non est alibi, quam in terra subjective... si quippe motus ille, quo omnia velocissimo raptu circa terram exagitari videuntur, in terra subjective re vera compleverat, rot sane erunt in universo tempora, quot sunt et astra. Neque enim potest esse tale unum in universo, ut omnium motuum mensura existat... Regula igitur motus diurni, sive a sole captur solo, sive a terrae tantum motu, sive ab utroque, sive ab his, sive’ab aliis circuitibus, nulla est proorsus, neque esse potest geometria... ubi enim est ista temporalis mensura? ubi est illud sibi aequalium, quod aliorum aequalitatem et inaequalitatem judicet? Quia primus motus Aristotelis habeatur omnium regulisissimus, utpote cui motus octvae sphaeræ hic singularis esset primus, iDeo ex ipso capit est ratio temporis...
et mensurae durationis omnium: at quid nunc dicaret, si alios motus comperiret, diurnique motus mensuram millegeminis irregulatique commodonibus turbare videre?"


62. Bruno, Articuli 40 (cited in note 61): "Nihilominus tempus esse dicimus, si omnia quieverint. Propterca non tempus sed temporis cognitionem motui alligare debuit Aristoteles... Sed nullo existente motu, nulla durationis eius erit mensura... et ideo non accipit (sc. Aristoteles) durationis speciem absolute, sed secundum esse ad quandam motus speciem contractum. Si nusquam igitur fuisset motus, diversas non essent durationis species, sed una, et sine nomine (quod a differentia originem habet) aeternitas... si omnia quieverint, non propterca desinet tempus esse durationis mensura, quia una erit omnium duratio, una ques."


64. Bruno, Articuli 39 (cited in note 63): "Et veluti sub uno infinito spatio, continuo, communi infinita particularium loca, propriae spatia intelligantur, quae singulius quibusque quadrans: ita sub communi una omnium duratione, diversae diversae durationes atque temporae appro- priantur." See De la causa V, Dialoghi, p. 320: "... e però ne l'infinita durazione non differisce la ora dal giorno, il giorno da l'anno, l'anno dal secolo, il secolo dal momento; perché non son più gli momenti e le ore che gli secoli, e non hanno minor proporzione quelli che questi a la eternità."

65. Bruno, Articuli de natura si mondo 40, Opera latina 1/1, p. 150: "... tempus, quod aequalis et catholica mensura motus est, non potest aliter percipi, fingive, quam per motum, sive naturaliter a circuitione solis, vel lunae, vel alterius astri, sive artificialiter a fluxu aquae, vel pulveris, vel conversione punctorum, de quibus nollum non sensibiliter ab alio et a alia commoditi... et pro satis comperto habemus, nusquam motus quantitati et figurae geometricae aequalis, physice aequalem motum, molem, atque figuram respondere."

66. Bruno, La cena de le ceneri III, Dialoghi, p. 109: "E non sono altri motori estrinseci, che col movere fantastiche sfera vengano a trasportar questi corpi come inchiodati in quelle: il che se fusse vero, il moto sarebbe violento fuor de la natura del mobile, il motore più imperfetto, il moto ed il motore solleciti e laboriosi; e altri molti inconvenienti s'aggiongerebbero.... Tutto avviene dal sufficiente principio interiore per il quale naturalmente viene ad esigitarne, e non da principio esterio, come veggiamo sempre accadere a quelle cose, che son mosse o contra o extra la propria natura."


68. Bruno, La cena V, Dialoghi, p. 147: "Segno ed indizio, dico, perché il vedere queste cose con certe disposizioni della luna, ed altre cose contrarie e diverse con contrarie e diverse disposizioni, procede da l'ordine e corrispondenza delle cose, e le leggi d'una mutazione che son conformi e corrispondenti alle leggi de l'altra."

69. Bruno, La cena V, Dialoghi, p. 151: "Ogni cosa dunque, che è naturale, è facilissima: ogni loco e moto naturale è convenientissimo. Con quella facilità, con la quale le cose che naturalmente non si muovono persistono fisse nel suo loco, le altre cose che naturalmente si muovono, marciano per gli lor spacci."

70. Bruno, Articuli de natura et mondo 61, Opera latina 1/1, p. 75: "Ubi non est motus circularis in natura, est eius vel similitudo, vel appetitus, vel inquisitione, et adpulsus ad ipsum." Further,
on article 58 (p. 172): “Nullam sphaerarum motu recto agitari videmus, quia certe nulla gravis est aut levis ... quare omnes motus naturales, naturaliumque motuum species, circulares sunt vel circularem motum quaerunt et initiunt.”


72. Bruno, De l'infinito mondo I, Dialoghi, p. 876: “Tanto più che, se è ragione che sia un buono finito, un perfetto terminato; improporzionalmente è ragione che sia un buono infinito; perché, dove il finito bene è per convenienza e ragione, l'infinito è per absoluta necessità.”

73. Bruno, De la causa IV, Dialoghi, p. 307: “... la materia non è quel prope nihil, quella potenza pura, nuda, senza atto, senza virtù et perfezione.”

74. Bruno, De la causa IV, Dialoghi, p. 316: “... per il contrario le ha in odio ... più potentemente abomina che appete ... che ella ha in fastidio ...”

75. Bruno, La cena IV, Dialoghi, p. 154: “Perché, essendo la materia e sustanza delle cose incorrotte e, doendo quella secondo tutte le parti esser soggetto di tutte forme, a fin che secondo tutte le parti, per quanto è capace, si fa tutto, sia tutto, se non in un medesimo tempo ed instante d'eternità, al meno in diversi tempi, in vari instanti d'eternità successiva e vicissitudinalmente.”

76. Bruno, De la causa IV, Dialoghi, p. 297: “Come dunque ti piace, che le altre forme abbiano ceduto a questa, cosi è in volontà de la natura, che ordina l'universo, che tutte le forme cedano a tutte. Lascio che è maggior dignità di questa nostra sustanza di farsi ogni cosa, ricevendo tutte le forme, che, ritenendone una sola, essere parziale. Così, al suo possibile, ha la similitudine di chi è tutto in tutto.”

77. Bruno, De la causa III, Dialoghi, pp. 262-274.

78. Bruno, La cena V, Dialoghi, p. 156: “... il moto locale è stato stimato principio d'ogni altra mutazione e forma ...”

79. Bruno, La cena V, Dialoghi, p. 163: “... il fatto de tutte le parti de la terra, che successivamente devono participar tutti gli aspetti e relazioni del sole, facendosi soggetto di tutte complessioni ed abiti ... ciascuna parte venghi ad aver ogni risguardo, che hanno tutte l'altrle parti al sole; a fin che ogni parte venghi a participar ogni vita, ogni generazione, ogni felicità.”

80. Bruno, Spazio III 1, Dialoghi, p. 733: “Onde sempre piú et piú per le sollecite ed urgenti occupazioni allontanandosi dall' esser bestiale, piú altamente s'approssimano a l’esser divino.”

81. Nicholas of Cusa, De coniecturis II 14: “Intra enim humanitatis potentiam omnia suo existunt modo.”

82. Bruno, La cena I, Dialoghi, p. 23; Oratio Valedictoria, Opera latina 1/1, p. 22.


84. Bruno, Cabala del Cavallo Pegaseo I, Dialoghi, p. 878.

85. The original meaning deposited in phrases such as personam agere, and then personam induere, personam ferre, or personam mutare.
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