

2 The Age of the World Picture*

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In metaphysics reflection is accomplished concerning the essence of what is and a decision takes place regarding the essence of truth.¹ Metaphysics grounds an age, in that through a specific interpretation of what is and through a specific comprehension of truth it gives to that age the basis upon which it is essentially formed.² This basis holds complete dominion over all the phenomena that distinguish the age. Conversely, in order that there may be an adequate reflection upon these phenomena themselves, the metaphysical basis for them must itself be apprehended in them. Reflection is the courage to make the truth of our own presuppositions and the realm of our own goals into the things that most deserve to be called in question.³

One of the essential phenomena of the modern age is its science. A phenomenon of no less importance is machine technology. We must not, however, misinterpret that technology as the mere application of modern mathematical physical science to praxis. Machine technology is itself an autonomous transformation of praxis, a type of transformation wherein praxis first demands the employment of mathematical physical science. Machine technology remains up to now the most visible outgrowth of the essence of modern technology, which is identical with the essence of modern metaphysics.

A third equally essential phenomenon of the modern period lies in the event of art's moving into the purview of aesthetics. That means that the art work becomes the object of mere subjective experience, and that consequently art is considered to be an expression of human life.⁴

A fourth modern phenomenon manifests itself in the fact that human activity is conceived and consummated as culture. Thus culture is the realization of the highest values, through the nurture and cultivation of the highest goods of man. It lies in the essence of culture, as

* From *The Question Concerning Technology and Other Essays*, trans. W. Lovitt (New York: Harper & Row, 1977), pp. 115–136.

such nurturing, to nurture itself in its turn and thus to become the politics of culture.

A fifth phenomenon of the modern age is the loss of the gods.⁵ This expression does not mean the mere doing away with the gods, gross atheism. The loss of the gods is a twofold process. On the one hand, the world picture is Christianized in as much as the cause of the world is posited as infinite, unconditional, absolute. On the other hand, Christendom transforms Christian doctrine into a world view (the Christian world view), and in that way makes itself modern and up to date. The loss of the gods is the situation of indecision regarding God and the gods. Christendom has the greatest share in bringing it about. But the loss of the gods is so far from excluding religiosity that rather only through that loss is the relation to the gods changed into mere "religious experience." When this occurs, then the gods have fled. The resultant void is compensated for by means of historiographical and psychological investigation of myth.

What understanding of what is, what interpretation of truth, lies at the foundation of these phenomena?

We shall limit the question to the phenomenon mentioned first, to science [*Wissenschaft*].

In what does the essence of modern science lie?

What understanding of what is and of truth provides the basis for that essence? If we succeed in reaching the metaphysical ground that provides the foundation for science as a modern phenomenon, then the entire essence of the modern age will have to let itself be apprehended from out of that ground.

When we use the word "science" today, it means something essentially different from the *doctrina* and *scientia* of the Middle Ages, and also from the Greek *epistēmē*. Greek science was never exact, precisely because, in keeping with its essence, it could not be exact and did not need to be exact. Hence it makes no sense whatever to suppose that modern science is more exact than that of antiquity. Neither can we say that the Galilean doctrine of freely falling bodies is true and that Aristotle's teaching, that light bodies strive upward, is false; for the Greek understanding of the essence of body and place and of the relation between the two rests upon a different interpretation of beings and hence conditions a correspondingly different kind of seeing and questioning of natural events. No one would presume to maintain that Shakespeare's poetry is more advanced than that of Aeschylus. It is still more impossible to say that the modern understanding of whatever is, is more correct than that of the Greeks. Therefore, if we want to grasp

the essence of modern science, we must first free ourselves from the habit of comparing the new science with the old solely in terms of degree, from the point of view of progress.

The essence of what we today call science is research. In what does the essence of research consist?

In the fact that knowing [*das Erkennen*] establishes itself as a procedure within some realm of what is, in nature or in history. Procedure does not mean here merely method or methodology. For every procedure already requires an open sphere in which it moves. And it is precisely the opening up of such a sphere that is the fundamental event in research. This is accomplished through the projection within some realm of what is – in nature, for example – of a fixed ground plan⁶ of natural events. The projection sketches out in advance the manner in which the knowing procedure must bind itself and adhere to the sphere opened up. This binding adherence is the rigor of research.⁷ Through the projecting of the ground plan and the prescribing of rigor, procedure makes secure for itself its sphere of objects within the realm of Being. A look at that earliest science, which is at the same time the normative one in the modern age, namely, mathematical physics, will make clear what we mean. Inasmuch as modern atomic physics still remains physics, what is essential – and only the essential is aimed at here – will hold for it also.

Modern physics is called mathematical because, in a remarkable way, it makes use of a quite specific mathematics. But it can proceed mathematically in this way only because, in a deeper sense, it is already itself mathematical. *Ta mathēmata* means for the Greeks that which man knows in advance in his observation of whatever is and in his intercourse with things: the corporeality of bodies, the vegetable character of plants, the animality of animals, the humanness of man. Alongside these, belonging also to that which is already-known, i.e., to the mathematical, are numbers. If we come upon three apples on the table, we recognize that there are three of them. But the number three, threeness, we already know. This means that number is something mathematical. Only because numbers represent, as it were, the most striking of always-already-knowns, and thus offer the most familiar instance of the mathematical, is “mathematical” promptly reserved as a name for the numerical. In no way, however, is the essence of the mathematical defined by numberness. Physics is, in general, the knowledge of nature, and, in particular, the knowledge of material corporeality in its motion; for that corporeality manifests itself immediately and universally in everything natural, even if in a variety of ways. If physics

takes shape explicitly, then, as something mathematical, this means that, in an especially pronounced way, through it and for it something is stipulated in advance as what is already-known. That stipulating has to do with nothing less than the plan or projection of that which must henceforth, for the knowing of nature that is sought after, *be* nature: the self-contained system of motion of units of mass related spatiotemporally. Into this ground plan of nature, as supplied in keeping with its prior stipulation, the following definitions among others have been incorporated: Motion means change of place. No motion or direction of motion is superior to any other. Every place is equal to every other. No point in time has preference over any other. Every force is defined according to – i.e., *is* only – its consequences in motion, and that means in magnitude of change of place in the unity of time. Every event must be seen so as to be fitted into this ground plan of nature. Only within the perspective of this ground plan does an event in nature become visible as such an event. This projected plan of nature finds its guarantee in the fact that physical research, in every one of its questioning steps, is bound in advance to adhere to it. This binding adherence, the rigor of research, has its own character at any given time in keeping with the projected plan. The rigor of mathematical physical science is exactitude. Here all events, if they are to enter at all into representation as events of nature, must be defined beforehand as spatiotemporal magnitudes of motion. Such defining is accomplished through measuring, with the help of number and calculation. But mathematical research into nature is not exact because it calculates with precision; rather it must calculate in this way because its adherence to its object-sphere has the character of exactitude. The humanistic sciences, in contrast, indeed all the sciences concerned with life, must necessarily be inexact just in order to remain rigorous. A living thing can indeed also be grasped as spatiotemporal magnitude of motion, but then it is no longer apprehended as living. The inexactitude of the historical humanistic sciences is not a deficiency, but is only the fulfillment of a demand essential to this type of research. It is true, also, that the projecting and securing of the object-sphere of the historical sciences is not only of another kind, but is much more difficult of execution than is the achieving of rigor in the exact sciences.

Science becomes research through the projected plan and through the securing of that plan in the rigor of procedure. Projection and rigor, however, first develop into what they are in methodology. The latter constitutes the second essential characteristic of research. If the sphere that is projected is to become objective, then it is a matter of bringing

it to encounter us in the complete diversity of its levels and interweavings. Therefore procedure must be free to view the changeableness in whatever encounters it. Only within the horizon of the incessant-otherness of change does the plenitude of particularity – of facts – show itself. But the facts must become objective [*gegenständlich*]. Hence procedure must represent [*vorstellen*] the changeable in its changing,⁸ must bring it to a stand and let the motion be a motion nevertheless. The fixedness of facts and the constantness of their change as such is “rule.” The constancy of change in the necessity of its course is “law.” It is only within the purview of rule and law that facts become clear as the facts that they are. Research into facts in the realm of nature is intrinsically the establishing and verifying of rule and law. Methodology, through which a sphere of objects comes into representation, has the character of clarifying on the basis of what is clear – of explanation. Explanation is always twofold. It accounts for an unknown by means of a known, and at the same time it verifies that known by means of that unknown. Explanation takes place in investigation. In the physical sciences investigation takes place by means of experiment, always according to the kind of field of investigation and according to the type of explanation aimed at. But physical science does not first become research through experiment; rather, on the contrary, experiment first becomes possible where and only where the knowledge of nature has been transformed into research. Only because modern physics is a physics that is essentially mathematical can it be experimental. Because neither medieval *doctrina* nor Greek *epistēmē* is science in the sense of research, for these it is never a question of experiment. To be sure, it was Aristotle who first understood what *empeiria* (*experientia*) means; the observation of things themselves, their qualities and modifications under changing conditions, and consequently the knowledge of the way in which things as a rule behave. But an observation that aims at such knowledge, the *experimentum*, remains essentially different from the observation that belongs to science as research, from the research experiment; it remains essentially different even when ancient and medieval observation also works with number and measure, and even when that observation makes use of specific apparatus and instruments. For in all this, that which is decisive about the experiment is completely missing. Experiment begins with the laying down of a law as a basis. To set up an experiment means to represent or conceive [*vorstellen*] the conditions under which a specific series of motions can be made susceptible of being followed in its necessary progression, i.e., of being controlled in advance by calculation. But the establishing of a

law is accomplished with reference to the ground plan of the object-sphere. That ground plan furnishes a criterion and constrains the anticipatory representing of the conditions. Such representing in and through which the experiment begins is no random imagining. That is why Newton said, *hypothesis non fingo*, "the bases that are laid down are not arbitrarily invented." They are developed out of the ground plan of nature and are sketched into it. Experiment is that methodology which, in its planning and execution, is supported and guided on the basis of the fundamental law laid down, in order to adduce the facts that either verify and confirm the law or deny it confirmation. The more exactly the ground plan of nature is projected, the more exact becomes the possibility of experiment. Hence the much-cited medieval Schoolman Roger Bacon can never be the forerunner of the modern experimental research scientist; rather he remains merely a successor of Aristotle. For in the meantime, the real locus of truth has been transferred by Christendom to faith – to the infallibility of the written word and to the doctrine of the Church. The highest knowledge and teaching is theology as the interpretation of the divine word of revelation, which is set down in Scripture and proclaimed by the Church. Here, to know is not to search out; rather it is to understand rightly the authoritative Word and the authorities proclaiming it. Therefore, the discussion of the words and doctrinal opinions of the various authorities takes precedence in the acquiring of knowledge in the Middle Ages. The *componere scripta et sermones*, the *argumentum ex verbo*,⁹ is decisive and at the same time is the reason why the accepted Platonic and Aristotelian philosophy that had been taken over had to be transformed into scholastic dialectic. If, now, Roger Bacon demands the *experimentum* – and he does demand it – he does not mean the experiment of science as research; rather he wants the *argumentum ex re* instead of the *argumentum ex verbo*, the careful observing of things themselves, i.e., Aristotelian *empeiria*, instead of the discussion of doctrines.

The modern research experiment, however, is not only an observation more precise in degree and scope, but is a methodology essentially different in kind, related to the verification of law in the framework, and at the service, of an exact plan of nature. Source criticism in the historical humanistic sciences corresponds to experiment in physical research. Here the name "source criticism" designates the whole gamut of the discovery, examination, verification, evaluation, preservation, and interpretation of sources. Historiographical explanation, which is based on source criticism, does not, it is true, trace facts back to laws

and rules. But neither does it confine itself to the mere reporting of facts. In the historical sciences, just as in the natural sciences, the methodology aims at representing what is fixed and stable and at making history an object. History can become objective only when it is past. What is stable in what is past, that on the basis of which historiographical explanation reckons up the solitary and the diverse in history, is the always-has-been-once-already, the comparable. Through the constant comparing of everything with everything, what is intelligible is found by calculation and is certified and established as the ground plan of history. The sphere of historiographical research extends only so far as historiographical explanation reaches. The unique, the rare, the simple – in short, the great – in history is never self-evident and hence remains inexplicable. It is not that historical research denies what is great in history; rather it explains it as the exception. In this explaining, the great is measured against the ordinary and the average. And there is no other historiographical explanation so long as explaining means reduction to what is intelligible and so long as historiography remains research, i.e., an explaining. Because historiography as research projects and objectifies the past in the sense of an explicable and surveyable nexus of actions and consequences, it requires source criticism as its instrument of objectification. The standards of this criticism alter to the degree that historiography approaches journalism.

Every science is, as research, grounded upon the projection of a circumscribed object-sphere and is therefore necessarily a science of individualized character. Every individualized science must, moreover, in the development of its projected plan by means of its methodology, particularize itself into specific fields of investigation. This particularizing (specialization) is, however, by no means simply an irksome concomitant of the increasing unsurveyability of the results of research. It is not a necessary evil, but is rather an essential necessity of science as research. Specialization is not the consequence but the foundation of the progress of all research. Research does not, through its methodology, become dispersed into random investigations, so as to lose itself in them; for modern science is determined by a third fundamental event: ongoing activity.¹⁰

By this is to be understood first of all the phenomenon that a science today, whether physical or humanistic, attains to the respect due a science only when it has become capable of being institutionalized. However, research is not ongoing activity because its work is accomplished in institutions, but rather institutions are necessary because science, intrinsically as research, has the character of ongoing activity.

The methodology through which individual object-spheres are conquered does not simply amass results. Rather, with the help of its results it adapts [*richtet sich . . . ein*] itself for a new procedure. Within the complex of machinery that is necessary to physics in order to carry out the smashing of the atom lies hidden the whole of physics up to now. Correspondingly, in historiographical research, funds of source materials become usable for explanation only if those sources are themselves guaranteed on the basis of historiographical explanation. In the course of these processes, the methodology of the science becomes circumscribed by means of its results. More and more the methodology adapts itself to the possibilities of procedure opened up through itself. This having-to-adapt-itself to its own results as the ways and means of an advancing methodology is the essence of research's character as ongoing activity. And it is that character that is the intrinsic basis for the necessity of the institutional nature of research.

In ongoing activity the plan of an object-sphere is, for the first time, built into whatever is. All adjustments that facilitate a plannable conjoining of types of methodology, that further the reciprocal checking and communication of results, and that regulate the exchange of talents are measures that are by no means only the external consequences of the fact that research work is expanding and proliferating. Rather, research work becomes the distant sign, still far from being understood, that modern science is beginning to enter upon the decisive phase of its history. Only now is it beginning to take possession of its own complete essence.

What is taking place in this extending and consolidating of the institutional character of the sciences? Nothing less than the making secure of the precedence of methodology over whatever is (nature and history), which at any given time becomes objective in research. On the foundation of their character as ongoing activity, the sciences are creating for themselves the solidarity and unity appropriate to them. Therefore historiographical or archeological research that is carried forward in an institutionalized way is essentially closer to research in physics that is similarly organized than it is to a discipline belonging to its own faculty in the humanistic sciences that still remains mired in mere erudition. Hence the decisive development of the modern character of science as ongoing activity also forms men of a different stamp. The scholar disappears. He is succeeded by the research man who is engaged in research projects. These, rather than the cultivating of erudition, lend to his work its atmosphere of incisiveness. The research man no longer needs a library at home. Moreover, he is constantly on the

move. He negotiates at meetings and collects information at congresses. He contracts for commissions with publishers. The latter now determine along with him which books must be written.

The research worker necessarily presses forward of himself into the sphere characteristic of the technologist in the essential sense. Only in this way is he capable of acting effectively, and only thus, after the manner of his age, is he real. Alongside him, the increasingly thin and empty Romanticism of scholarship and the university will still be able to persist for some time in a few places. However, the effective unity characteristic of the university, and hence the latter's reality, does not lie in some intellectual power belonging to an original unification of the sciences and emanating from the university because nourished by it and preserved in it. The university is real as an orderly establishment that, in a form still unique because it is administratively self-contained, makes possible and visible the striving apart of the sciences into the particularization and peculiar unity that belong to ongoing activity. Because the forces intrinsic to the essence of modern science come immediately and unequivocally to effective working in ongoing activity, therefore, also, it is only the spontaneous ongoing activities of research that can sketch out and establish the internal unity with other like activities that is commensurate with themselves.

The real system of science consists in a solidarity of procedure and attitude with respect to the objectification of whatever is – a solidarity that is brought about appropriately at any given time on the basis of planning. The excellence demanded of this system is not some contrived and rigid unity of the relationships among object-spheres, having to do with content, but is rather the greatest possible free, though regulated, flexibility in the shifting about and introducing of research apropos of the leading tasks at any given time. The more exclusively science individualizes itself with a view to the total carrying on and mastering of its work process, and the more realistically these ongoing activities are shifted into separate research institutes and professional schools, the more irresistibly do the sciences achieve the consummation of their modern essence. But the more unconditionally science and the man of research take seriously the modern form of their essence, the more unequivocally and the more immediately will they be able to offer themselves for the common good, and the more unreservedly too will they have to return to the public anonymity of all work useful to society.

Modern science simultaneously establishes itself and differentiates itself in its projections of specific object-spheres. These projection-plans are developed by means of a corresponding methodology, which is

made secure through rigor. Methodology adapts and establishes itself at any given time in ongoing activity. Projection and rigor, methodology and ongoing activity, mutually requiring one another, constitute the essence of modern science, transform science into research.

We are reflecting on the essence of modern science in order that we may apprehend in it its metaphysical ground. What understanding of what is and what concept of truth provide the basis for the fact that science is being transformed into research?

Knowing, as research, calls whatever is to account with regard to the way in which and the extent to which it lets itself be put at the disposal of representation. Research has disposal over anything that is when it can either calculate it in its future course in advance or verify a calculation about it as past. Nature, in being calculated in advance, and history, in being historiographically verified as past, become, as it were, "set in place" [*gestellt*].¹¹ Nature and history become the objects of a representing that explains. Such representing counts on nature and takes account of history. Only that which becomes object in this way *is* – is considered to be in being. We first arrive at science as research when the Being of whatever is, is sought in such objectiveness.

This objectifying of whatever is, is accomplished in a setting-before, a representing, that aims at bringing each particular being before it in such a way that man who calculates can be sure, and that means be certain, of that being. We first arrive at science as research when and only when truth has been transformed into the certainty of representation. What it is to be is for the first time defined as the objectiveness of representing, and truth is first defined as the certainty of representing, in the metaphysics of Descartes. The title of Descartes's principal work reads: *Meditationes de prima philosophia* [*Meditations on First Philosophy*]. *Prōtē philosophia* is the designation coined by Aristotle for what is later called metaphysics. The whole of modern metaphysics taken together, Nietzsche included, maintains itself within the interpretation of what it is to be and of truth that was prepared by Descartes.

Now if science as research is an essential phenomenon of the modern age, it must be that that which constitutes the metaphysical ground of research determines first and long beforehand the essence of that age generally. The essence of the modern age can be seen in the fact that man frees himself from the bonds of the Middle Ages in freeing himself to himself. But this correct characterization remains, nevertheless, superficial. It leads to those errors that prevent us from comprehending the essential foundation of the modern age and, from there, judging the scope of the age's essence. Certainly the modern age has,

as a consequence of the liberation of man, introduced subjectivism and individualism. But it remains just as certain that no age before this one has produced a comparable objectivism and that in no age before this has the non-individual, in the form of the collective, come to acceptance as having worth. Essential here is the necessary interplay between subjectivism and objectivism. It is precisely this reciprocal conditioning of one by the other that points back to events more profound.

What is decisive is not that man frees himself to himself from previous obligations, but that the very essence of man itself changes, in that man becomes subject. We must understand this word *subiectum*, however, as the translation of the Greek *hypokeimenon*. The word names that-which-lies-before, which, as ground, gathers everything onto itself. This metaphysical meaning of the concept of subject has first of all no special relationship to man and none at all to the I.

However, when man becomes the primary and only real *subiectum*, that means: Man becomes that being upon which all that is, is grounded as regards the manner of its Being and its truth. Man becomes the relational center of that which is as such. But this is possible only when the comprehension of what is as a whole changes. In what does this change manifest itself? What, in keeping with it, is the essence of the modern age?

When we reflect on the modern age, we are questioning concerning the modern world picture [*Weltbild*].¹² We characterize the latter by throwing it into relief over against the medieval and the ancient world pictures. But why do we ask concerning a world picture in our interpreting of a historical age? Does every period of history have its world picture, and indeed in such a way as to concern itself from time to time about that world picture? Or is this, after all, only a modern kind of representing, this asking concerning a world picture?

What is a world picture? Obviously a picture of the world. But what does "world" mean here? What does "picture" mean? "World" serves here as a name for what is, in its entirety. The name is not limited to the cosmos, to nature. History also belongs to the world. Yet even nature and history, and both interpenetrating in their underlying and transcending of one another, do not exhaust the world. In this designation the ground of the world is meant also, no matter how its relation to the world is thought.

With the word "picture" we think first of all of a copy of something. Accordingly, the world picture would be a painting, so to speak, of what is as a whole. But "world picture" means more than this. We mean

by it the world itself, the world as such, what is, in its entirety, just as it is normative and binding for us. "Picture" here does not mean some imitation, but rather what sounds forth in the colloquial expression, "We get the picture" [literally, we are in the picture] concerning something. This means the matter stands before us exactly as it stands with it for us. "To get into the picture" [literally, to put oneself into the picture] with respect to something means to set whatever is, itself, in place before oneself just in the way that it stands with it, and to have it fixedly before oneself as set up in this way. But a decisive determinant in the essence of the picture is still missing. "We get the picture" concerning something does not mean only that what is, is set before us, is represented to us, in general, but that what is stands before us – in all that belongs to it and all that stands together in it – as a system. "To get the picture" throbs with being acquainted with something, with being equipped and prepared for it. Where the world becomes picture, what is, in its entirety, is juxtaposed as that for which man is prepared and which, correspondingly, he therefore intends to bring before himself and have before himself, and consequently intends in a decisive sense to set in place before himself. Hence world picture, when understood essentially, does not mean a picture of the world but the world conceived and grasped as picture. What is, in its entirety, is now taken in such a way that it first is in being and only is in being to the extent that it is set up by man, who represents and sets forth.¹³ Wherever we have the world picture, an essential decision takes place regarding what is, in its entirety. The Being of whatever is, is sought and found in the representedness of the latter.

However, everywhere that whatever is, is *not* interpreted in this way, the world also cannot enter into a picture; there can be no world picture. The fact that whatever is comes into being in and through representedness transforms the age in which this occurs into a new age in contrast with the preceding one. The expressions "world picture of the modern age" and "modern world picture" both mean the same thing and both assume something that never could have been before, namely, a medieval and an ancient world picture. The world picture does not change from an earlier medieval one into a modern one, but rather the fact that the world becomes picture at all is what distinguishes the essence of the modern age [*der Neuzeit*].¹⁴ For the Middle Ages, in contrast, that which is, is the *ens creatum*, that which is created by the personal Creator-God as the highest cause. Here, to be in being means to belong within a specific rank of the order of what has been created – a rank appointed from the beginning – and as thus caused, to

correspond to the cause of creation (*analogia entis*). But never does the Being of that which is consist here in the fact that it is brought before man as the objective, in the fact that it is placed in the realm of man's knowing and of his having disposal, and that it is in being only in this way.

The modern interpretation of that which is, is even further from the interpretation characteristic of the Greeks. One of the oldest pronouncements of Greek thinking regarding the Being of that which is runs: *To gar auto noein estin te kai einai*.¹⁵ This sentence of Parmenides means: The apprehending of whatever is belongs to Being because it is demanded and determined by Being. That which is, is that which arises and opens itself, which, as what presences, comes upon man as the one who presences, i.e., comes upon the one who himself opens himself to what presences in that he apprehends it. That which is does not come into being at all through the fact that man first looks upon it, in the sense of a representing that has the character of subjective perception. Rather, man is the one who is looked upon by that which is; he is the one who is – in company with itself – gathered toward presencing, by that which opens itself. To be beheld by what is, to be included and maintained within its openness and in that way to be borne along by it, to be driven about by its oppositions and marked by its discord – that is the essence of man in the great age of the Greeks. Therefore, in order to fulfill his essence, Greek man must gather (*legein*) and save (*sōzein*), catch up and preserve,¹⁶ what opens itself in its openness, and he must remain exposed (*alētheuein*) to all its sundering confusions. Greek man is as the one who apprehends [*der Vernehmer*] that which is,¹⁷ and this is why in the age of the Greeks the world cannot become picture. Yet, on the other hand, that the beingness of whatever is, is defined for Plato as *eidōs* [aspect, view] is the presupposition, destined far in advance and long ruling indirectly in concealment, for the world's having to become picture.

In distinction from Greek apprehending, modern representing, whose meaning the word *repraesentatio* first brings to its earliest expression, intends something quite different. Here to represent [*vorstellen*] means to bring what is present at hand [*das Vorhandene*] before oneself as something standing over against, to relate it to oneself, to the one representing it, and to force it back into this relationship to oneself as the normative realm. Wherever this happens, man "gets into the picture" in precedence over whatever is. But in that man puts himself into the picture in this way, he puts himself into the scene, i.e., into the open sphere of that which is generally and publicly represented. Therewith man sets himself up as the setting in which whatever is must henceforth set itself forth, must present itself [*sich . . . präsentieren*], i.e.,

be picture. Man becomes the representative [*der Repräsentant*] of that which is, in the sense of that which has the character of object.

But the newness in this event by no means consists in the fact that now the position of man in the midst of what is, is an entirely different one in contrast to that of medieval and ancient man. What is decisive is that man himself expressly takes up this position as one constituted by himself, that he intentionally maintains it as that taken up by himself, and that he makes it secure as the solid footing for a possible development of humanity. Now for the first time is there any such thing as a 'position' of man. Man makes depend upon himself the way in which he must take his stand in relation to whatever is as the objective. There begins that way of being human which mans the realm of human capability as a domain given over to measuring and executing, for the purpose of gaining mastery over that which is as a whole. The age that is determined from out of this event is, when viewed in retrospect, not only a new one in contrast with the one that is past, but it settles itself firmly in place expressly as the new. To be new is peculiar to the world that has become picture.

When, accordingly, the picture character of the world is made clear as the representedness of that which is, then in order fully to grasp the modern essence of representedness we must track out and expose the original naming power of the worn-out word and concept "to represent" [*vorstellen*]: to set out before oneself and to set forth in relation to oneself. Through this, whatever is comes to a stand as object and in that way alone receives the seal of Being. That the world becomes picture is one and the same event with the event of man's becoming *subiectum* in the midst of that which is.

Only because and insofar as man actually and essentially has become subject is it necessary for him, as a consequence, to confront the explicit question: Is it as an "I" confined to its own preferences and freed into its own arbitrary choosing or as the "we" of society; is it as an individual or as a community; is it as a personality within the community or as a mere group member in the corporate body; is it as a state and nation and as a people or as the common humanity of modern man, that man will and ought to be the subject that in his modern essence he *already is*? Only where man is essentially already subject does there exist the possibility of his slipping into the aberration of subjectivism in the sense of individualism. But also, only where man *remains* subject does the positive struggle against individualism and for the community as the sphere of those goals that govern all achievement and usefulness have any meaning.

The interweaving of these two events, which for the modern age is decisive – that the world is transformed into picture and man into *subiectum* – throws light at the same time on the grounding event of modern history, an event that at first glance seems almost absurd. Namely, the more extensively and the more effectually the world stands at man's disposal as conquered, and the more objectively the object appears, all the more subjectively, i.e., the more importunately, does the *subiectum* rise up, and all the more impetuously, too, do observation of and teaching about the world change into a doctrine of man, into anthropology. It is no wonder that humanism first arises where the world becomes picture. It would have been just as impossible for a humanism to have gained currency in the great age of the Greeks as it would have been impossible to have had anything like a world picture in that age. Humanism, therefore, in the more strict historiographical sense, is nothing but a moral-aesthetic anthropology. The name "anthropology" as used here does not mean just some investigation of man by a natural science. Nor does it mean the doctrine established within Christian theology of man created, fallen, and redeemed. It designates that philosophical interpretation of man which explains and evaluates whatever is, in its entirety, from the standpoint of man and in relation to man.

The increasingly exclusive rooting of the interpretation of the world in anthropology, which has set in since the end of the eighteenth century, finds its expression in the fact that the fundamental stance of man in relation to what is, in its entirety, is defined as a world view (*Weltanschauung*). Since that time this word has been admitted into common usage. As soon as the world becomes picture, the position of man is conceived as a world view. To be sure, the phrase "world view" is open to misunderstanding, as though it were merely a matter here of a passive contemplation of the world. For this reason, already in the nineteenth century it was emphasized with justification that 'world view' also meant and even meant primarily 'view of life.' The fact that, despite this, the phrase 'world view' asserts itself as the name for the position of man in the midst of all that is, is proof of how decisively the world became picture as soon as man brought his life as *subiectum* into precedence over other centers of relationship. This means: whatever is, is considered to be in being only to the degree and to the extent that it is taken into and referred back to this life, i.e., is lived out, and becomes life-experience. Just as unsuited to the Greek spirit as every humanism had to be, just so impossible was a medieval world view, and just as absurd is a Catholic world view. Just as necessarily and legitimately as everything must change into life-experience for modern

man the more unlimitedly he takes charge of the shaping of his essence, just so certainly could the Greeks at the Olympian festivals never have had life-experiences.

The fundamental event of the modern age is the conquest of the world as picture. The word "picture" [*Bild*] now means the structured image [*Gebild*] that is the creature of man's producing which represents and sets before.¹⁸ In such producing, man contends for the position in which he can be that particular being who gives the measure and draws up the guidelines for everything that is. Because this position secures, organizes, and articulates itself as a world view, the modern relationship to that which is, is one that becomes, in its decisive unfolding, a confrontation of world views; and indeed not of random world views, but only of those that have already taken up the fundamental position of man that is most extreme, and have done so with the utmost resoluteness. For the sake of this struggle of world views and in keeping with its meaning, man brings into play his unlimited power for the calculating, planning, and molding of all things. Science as research is an absolutely necessary form of this establishing of self in the world; it is one of the pathways upon which the modern age rages toward fulfillment of its essence, with a velocity unknown to the participants. With this struggle of world views the modern age first enters into the part of its history that is the most decisive and probably the most capable of enduring.

A sign of this event is that everywhere and in the most varied forms and disguises the gigantic is making its appearance. In so doing, it evidences itself simultaneously in the tendency toward the increasingly small. We have only to think of numbers in atomic physics. The gigantic presses forward in a form that actually seems to make it disappear – in the annihilation of great distances by the airplane, in the setting before us of foreign and remote worlds in their everydayness, which is produced at random through radio by a flick of the hand. Yet we think too superficially if we suppose that the gigantic is only the endlessly extended emptiness of the purely quantitative. We think too little if we find that the gigantic, in the form of continual not-ever-having-been-here-yet, originates only in a blind mania for exaggerating and excelling. We do not think at all if we believe we have explained this phenomenon of the gigantic with the catchword "Americanism".

The gigantic is rather that through which the quantitative becomes a special quality and thus a remarkable kind of greatness. Each historical age is not only great in a distinctive way in contrast to others; it also has, in each instance, its own concept of greatness. But as soon as the gigantic in planning and calculating and adjusting and making secure

shifts over out of the quantitative and becomes a special quality, then what is gigantic, and what can seemingly always be calculated completely, becomes, precisely through this, incalculable. This becoming incalculable remains the invisible shadow that is cast around all things everywhere when man has been transformed into *subiectum* and the world into picture.

By means of this shadow the modern world extends itself out into a space withdrawn from representation, and so lends to the incalculable the determinateness peculiar to it, as well as a historical uniqueness. This shadow, however, points to something else, which it is denied to us of today to know. But man will never be able to experience and ponder this that is denied so long as he dawdles about in the mere negating of the age. The flight into tradition, out of a combination of humility and presumption, can bring about nothing in itself other than self-deception and blindness in relation to the historical moment.

Man will know, i.e., carefully safeguard into its truth,¹⁹ that which is incalculable, only in creative questioning and shaping out of the power of genuine reflection. Reflection transports the man of the future into that "between" in which he belongs to Being and yet remains a stranger amid that which is. Hölderlin knew of this. His poem, which bears the superscription "To the Germans," closes:

How narrowly bounded is our lifetime,
We see and count the number of our years.
But have the years of nations
Been seen by mortal eye?

If your soul throbs in longing
Over its own time, mourning, then
You linger on the cold shore
Among your own and never know them.²⁰

NOTES BY WILLIAM LOVITT

1. "Reflection" translates *Besinnung*. "Essence" will be the translation of the noun *Wesen* in most instances of its occurrence in this essay. Occasionally the translation "coming to presence" will be used. *Wesen* must always be understood to allude, for Heidegger, not to any mere "whatness," but to the manner in which anything, *as* what it is, takes its course and "holds sway" in its ongoing presence, i.e., the manner in which it endures in its presenc-

ing. 'What is' renders the present participle *seiend* used as a noun, *das Seiende*.

2. *der Grund seines Wesensgestalt*. Heidegger exemplifies the statement that he makes here in his discussion of the metaphysics of Descartes as providing the necessary interpretive ground for the manner in which, in the subjectness of man as self-conscious subject, being and all that is and man – in their immediate and indissoluble relation – come to presence in the modern age.
3. Heidegger's explanatory appendixes have not been included.
4. *Erlebnis*, translated here as "subjective experience" and later as "life-experience," is a term much used by life philosophers such as Dilthey and generally connotes adventure and event. It is employed somewhat pejoratively here. The term *Erfahrung*, which is regularly translated as "experience," connotes discovery and learning, and also suffering and undergoing. Here and subsequently (i.e., "mere religious experience"), "mere" is inserted to maintain the distinction between *Erlebnis* and *Erfahrung*.
5. *Entgötterung*, here inadequately rendered as "loss of the gods," actually means something more like "degodization."
6. *Grundriss*. The verb *reißen* means to tear, to rend, to sketch, to design, and the noun *Riss* means tear, gap, outline. Hence the noun *Grundriss*, first sketch, ground plan, design, connotes a fundamental sketching out that is an opening up as well.
7. "Binding adherence" here translates the noun *Bindung*. The noun could also be rendered "obligation." It could thus be said that rigor is the obligation to remain within the realm opened up.
8. Throughout this essay the literal meaning of *vorstellen*, which is usually translated with "to represent," is constantly in the foreground, so that the verb suggests specifically a setting-in-place-before that is an objectifying, i.e., a bringing to a stand as object. Heidegger frequently hyphenates *vorstellen* in this essay and its appendixes so as to stress the meaning that he intends.
9. "The comparing of the writings with the sayings, the argument from the word." *Argumentum ex re*, which follows shortly, means "argument from the thing."
10. "Ongoing activity" is the rendering of *Betrieb*, which is difficult to translate adequately. It means the act of driving on, or industry, activity, as well as undertaking, pursuit, business. It can also mean management, or workshop or factory.
11. The verb *stellen*, with the meanings to set in place, to set upon (i.e., to challenge forth), and to supply, is invariably fundamental in Heidegger's understanding of the modern age.
12. The conventional translation of *Weltbild* would be "conception of the world" or "philosophy of life." The more literal translation, "world picture," is needed for the following of Heidegger's discussion; but it is worth noting that "conception of the world" bears a close relation to Heidegger's theme of man's representing of the world as picture.
13. *durch den vorstellenden-herstellenden Menschen gestellt ist*.
14. *Die Neuzeit* is more literally "the new age." Having repeatedly used this word in this discussion, Heidegger will soon elucidate the meaning of the "newness" of which it speaks.

15. The accepted English translation of this fragment is, "For thought and being are the same thing"
16. "Preserve" translates *bewahren*. The verb speaks of a preserving that as such frees and allows to be manifest.
17. The noun *Vernehmer* is related to the verb *vernehmen* (to hear, to perceive, to understand). *Vernehmen* speaks of an immediate receiving, in contrast to the setting-before (*vor-stellen*) that arrests and objectifies.
18. *Gebild* is Heidegger's own word. The noun *Gebilde* means thing formed, creation, structure, image. *Gebild* is here taken to be close to it in meaning, and it is assumed – with the use of "structured" – that Heidegger intends the force of the prefix *ge-*, which connotes a gathering, to be found in the word. "Man's producing which represents and sets before" translates *des vorstellenden Herstellens*.
19. *Wissen, d.h., in seine Wahrheit verwahren, wird der Mensch . . .* Here the verb *wissen* (to know), strongly emphasized by its placement in the sentence, is surely intended to remind of science (*Wissenschaft*) with whose characterization this essay began. On such knowing – an attentive beholding that watches over and makes manifest – as essential to the characterizing of science as such.
20. Wohl ist enge begrenzt unsere Lebenszeit,
 Unserer Jahre Zahl sehen und zählen wir,
 Doch die Jahre der Völker,
 Sah ein sterbliches Auge sie?

 Wenn die Seele dir auch über die eigene Zeit
 Sich die sehrende schwingt, trauernd verweilst du
 Dann am kalten Gestade
 Bei den Deinen und kennst sie nie.