The Question Concerning Technology

In what follows we shall be *questioning* concerning technology. Questioning builds a way. We would be advised, therefore, above all to pay heed to the way, and not to fix our attention on isolated sentences and topics. The way is a way of thinking. All ways of thinking, more or less perceptibly, lead through language in a manner that is extraordinary. We shall be questioning concerning *technology*, and in so doing we should like to prepare a free relationship to it. The relationship will be free if it opens our human existence to the essence of technology.[1] When we

1. "Essence" is the traditional translation of the German noun *Wesen*. One of Heidegger's principal aims in this essay is to seek the true meaning of essence through or by way of the "correct" meaning. He will later show that *Wesen* does not simply mean *what* something is, but that it means, further, the way in which something pursues its course, the way in which it remains through time as what it is. Heidegger writes elsewhere that the noun *Wesen* does not mean *quidditas* originally, but rather "enduring as presence" (*das Währen als Gegenwart*). (See *An Introduction to Metaphysics*, trans. Ralph Manheim [New York: Doubleday, 1961], p. 59.) *Wesen* as a noun derives from the verb *wesen*, which is seldom used as such in modern German. The verb survives primarily in inflected forms of the verb *sein* (to be) and in such words as the adjective *anwesend* (present). The old verbal forms from which *wesen* stems meant to tarry or dwell. Heidegger repeatedly identifies *wesen* as "the same as *währen* [to last or endure]." (See p. 30 below and SR 161.) As a verb, *wesen* will usually be translated

can respond to this essence, we shall be able to experience the technological within its own bounds.

Technology is not equivalent to the essence of technology. When we are seeking the essence of "tree," we have to become aware that That which pervades every tree, as tree, is not itself a tree that can be encountered among all the other trees.

Likewise, the essence of technology is by no means anything technological. Thus we shall never experience our relationship to the essence of technology so long as we merely conceive and push forward the technological, put up with it, or evade it. Everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it. But we are delivered over to it in the worst possible way when we regard it as something neutral; for this conception of it,[2] to which today we particularly like to do homage, makes us utterly blind to the essence of technology.

According to ancient doctrine, the essence of a thing is considered to be *what* the thing is. We ask the question concerning technology when we ask what it is. Everyone knows the two statements that answer our question. One says: Technology is a means to an end. The other says: Technology is a human activity. The two definitions of technology belong together. For to posit ends and procure and utilize the means to them is a human activity. The manufacture and utilization of equipment, tools, and machines, the manufactured and used things themselves, and the needs and ends that they serve, all belong to what tech-

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here with "to come to presence," a rendering wherein the meaning "endure" should be strongly heard. Occasionally it will be translated "to essence," and its gerund will be rendered with "essencing." The noun *Wesen* will regularly be translated "essence" until Heidegger's explanatory discussion is reached. Thereafter, in this and the succeeding essays, it will often be translated with "coming to presence." In relation to all these renderings, the reader should bear in mind a point that is of fundamental importance to Heidegger, namely, that the root of *wesen*, with its meaning "to dwell," provides one integral component in the meaning of the verb *sein* (to be). (Cf. *An Introduction to Metaphysics*, p. 59.)

2. "Conception" here translates the noun *Vorstellung*. Elsewhere in this volume, *Vorstellung* will usually be translated by "representation," and its related verb *vorstellen* by "to represent." Both "conception" and "representation" should suggest a placing or setting-up-before. Cf. the discussion of *Vorstellung* in AWP 131–132.

nology is. The whole complex of these contrivances is technology. Technology itself is a contrivance, or, in Latin, an *instrumentum*.[3]

The current conception of technology, according to which it is a means and a human activity, can therefore be called the instrumental and anthropological definition of technology.

Who would ever deny that it is correct? It is in obvious conformity with what we are envisioning when we talk about technology. The instrumental definition of technology is indeed so uncannily correct that it even holds for modern technology, of which, in other respects, we maintain with some justification that it is, in contrast to the older handwork technology, something completely different and therefore new. Even the power plant with its turbines and generators is a man-made means to an end established by man. Even the jet aircraft and the high-frequency apparatus are means to ends. A radar station is of course less simple than a weather vane. To be sure, the construction of a high-frequency apparatus requires the interlocking of various processes of technical-industrial production. And certainly a sawmill in a secluded valley of the Black Forest is a primitive means compared with the hydroelectric plant in the Rhine River.

But this much remains correct: modern technology too is a means to an end. That is why the instrumental conception of technology conditions every attempt to bring man into the right relation to technology. Everything depends on our manipulating technology in the proper manner as a means. We will, as we say, "get" technology "spiritually in hand." We will master it. The will to mastery becomes all the more urgent the more technology threatens to slip from human control.

But suppose now that technology were no mere means, how would it stand with the will to master it? Yet we said, did we

3. *Instrumentum* signifies that which functions to heap or build up or to arrange. Heidegger here equates it with the noun *Einrichtung*, translated "contrivance," which can also mean arrangement, adjustment, furnishing, or equipment. In accordance with his dictum that the true must be sought by way of the correct, Heidegger here anticipates with his identification of technology as an *instrumentum* and an *Einrichtung* his later "true" characterization of technology in terms of setting-in-place, ordering, Enframing, and standing-reserve.

not, that the instrumental definition of technology is correct? To be sure. The correct always fixes upon something pertinent in whatever is under consideration. However, in order to be correct, this fixing by no means needs to uncover the thing in question in its essence. Only at the point where such an uncovering happens does the true come to pass.[4] For that reason the merely correct is not yet the true. Only the true brings us into a free relationship with that which concerns us from out of its essence. Accordingly, the correct instrumental definition of technology still does not show us technology's essence. In order that we may arrive at this, or at least come close to it, we must seek the true by way of the correct. We must ask: What is the instrumental itself? Within what do such things as means and end belong? A means is that whereby something is effected and thus attained. Whatever has an effect as its consequence is called a cause. But not only that by means of which something else is effected is a cause. The end in keeping with which the kind of means to be used is determined is also considered a cause. Wherever ends are pursued and means are employed, wherever instrumentality reigns, there reigns causality.

For centuries philosophy has taught that there are four causes: (1) the *causa materialis*, the material, the matter out of which, for example, a silver chalice is made; (2) the *causa formalis*, the form, the shape into which the material enters; (3) the *causa finalis*, the end, for example, the sacrificial rite in relation to which the chalice required is determined as to its form and matter; (4) the *causa efficiens*, which brings about the effect that is the finished, actual chalice, in this instance, the silversmith. What technology is, when represented as a means, discloses itself when we trace instrumentality back to fourfold causality.

But suppose that causality, for its part, is veiled in darkness with respect to what it is? Certainly for centuries we have acted as though the doctrine of the four causes had fallen from heaven as a truth as clear as daylight. But it might be that the time has come to ask, Why are there just four causes? In relation to the aforementioned four, what does "cause" really mean? From

4. "Come to pass" translates *sich ereignet*. For a discussion of the fuller meaning of the verb *ereignen*, see T 38 n. 4, 45.

whence does it come that the causal *character* of the four causes is so unifiedly determined that they belong together?

So long as we do not allow ourselves to go into these questions, causality, and with it instrumentality, and with the latter the accepted definition of technology, remain obscure and groundless.

For a long time we have been accustomed to representing cause as that which brings something about. In this connection, to bring about means to obtain results, effects. The *causa efficiens*, but one among the four causes, sets the standard for all causality. This goes so far that we no longer even count the *causa finalis*, telic finality, as causality. *Causa, casus*, belongs to the verb *cadere*, "to fall," and means that which brings it about that something falls out as a result in such and such a way. The doctrine of the four causes goes back to Aristotle. But everything that later ages seek in Greek thought under the conception and rubric "causality," in the realm of Greek thought and for Greek thought per se has simply nothing at all to do with bringing about and effecting. What we call cause [*Ursache*] and the Romans call *causa* is called *aition* by the Greeks, that to which something else is indebted [*das, was ein anderes verschuldet*].[5] The four causes are the ways, all belonging at once to each other, of being responsible for something else. An example can clarify this.

Silver is that out of which the silver chalice is made. As this matter (*hyle*), it is co-responsible for the chalice. The chalice is indebted to, i.e., owes thanks to, the silver for that out of which it consists. But the sacrificial vessel is indebted not only to the silver. As a chalice, that which is indebted to the silver appears in the aspect of a chalice and not in that of a brooch or a ring. Thus the sacrificial vessel is at the same time indebted to the aspect (*eidos*) of chaliceness. Both the silver into which the aspect is admitted as chalice and the aspect in which the silver appears are in their respective ways co-responsible for the sacrificial vessel.

5. *Das, was ein anderes verschuldet* is a quite idomatic expression that here would mean to many German readers "that which is the cause of something else." The verb *verschulden* actually has a wide range of meanings—to be indebted, to owe, to be guilty, to be responsible for or to, to cause. Heidegger intends to awaken all these meanings and to have connotations of mutual interdependence sound throughout this passage.

But there remains yet a third that is above all responsible for the sacrificial vessel. It is that which in advance confines the chalice within the realm of consecration and bestowal.[6] Through this the chalice is circumscribed as sacrificial vessel. Circumscribing gives bounds to the thing. With the bounds the thing does not stop; rather from out of them it begins to be what, after production, it will be. That which gives bounds, that which completes, in this sense is called in Greek *telos*, which is all too often translated as "aim" or "purpose," and so misinterpreted. The *telos* is responsible for what as matter and for what as aspect are together co-responsible for the sacrificial vessel.

Finally there is a fourth participant in the responsibility for the finished sacrificial vessel's lying before us ready for use, i.e., the silversmith—but not at all because he, in working, brings about the finished sacrificial chalice as if it were the effect of a making; the silversmith is not a *causa efficiens*.

The Aristotelian doctrine neither knows the cause that is named by this term nor uses a Greek word that would correspond to it.

The silversmith considers carefully and gathers together the three aforementioned ways of being responsible and indebted. To consider carefully [*überlegen*] is in Greek *legein, logos. Legein* is rooted in *apophainesthai*, to bring forward into appearance. The silversmith is co-responsible as that from whence the sacrificial vessel's bringing forth and resting-in-self take and retain their first departure. The three previously mentioned ways of being responsible owe thanks to the pondering of the silversmith for the "that" and the "how" of their coming into appearance and into play for the production of the sacrificial vessel.

Thus four ways of being responsible hold sway in the sacrificial vessel that lies ready before us. They differ from one another, yet they belong together. What unites them from the beginning? In what does this playing in unison of the four ways of being

6. Literally, "confines into"—the German preposition *in* with the accusative. Heidegger often uses this construction in ways that are unusual in German, as they would be in English. It will ordinarily be translated here by "within" so as to distinguish it from "in" used to translate *in* with the dative.

responsible play? What is the source of the unity of the four causes? What, after all, does this owing and being responsible mean, thought as the Greeks thought it?

Today we are too easily inclined either to understand being responsible and being indebted moralistically as a lapse, or else to construe them in terms of effecting. In either case we bar to ourselves the way to the primal meaning of that which is later called causality. So long as this way is not opened up to us we shall also fail to see what instrumentality, which is based on causality, actually is.

In order to guard against such misinterpretations of being responsible and being indebted, let us clarify the four ways of being responsible in terms of that for which they are responsible. According to our example, they are responsible for the silver chalice's lying ready before us as a sacrificial vessel. Lying before and lying ready (*hypokeisthai*) characterize the presencing of something that presences. The four ways of being responsible bring something into appearance. They let it come forth into presencing [*An-wesen*].[7] They set it free to that place and so start it on its way, namely, into its complete arrival. The principal characteristic of being responsible is this starting something on its way into arrival. It is in the sense of such a starting something on its way into arrival that being responsible is an occasioning or an inducing to go forward [*Ver-an-lassen*].[8] On the

7. By writing *An-wesen*, Heidegger stresses the composition of the verb *anwesen*, translated as "to presence." The verb consists of *wesen* (literally, to continue or endure) with the prepositional prefix *an-* (at, to, toward). It is man who must receive presencing, man *to* whom it comes as enduring. Cf. *On Time and Being*, trans. Joan Stambaugh (New York: Harper & Row, 1972), p. 12.

8. *Ver-an-lassen* is Heidegger's writing of the verb *veranlassen* in noun form, now hyphenated to bring out its meaning. *Veranlassen* ordinarily means to occasion, to cause, to bring about, to call forth. Its use here relates back to the use of *anlassen* (to leave [something] on, to let loose, to set going), here translated "to start something on its way." *Anlassen* has just been similarly written as *an-lassen* so as to emphasize its composition from *lassen* (to let or leave) and *an* (to or toward). One of the functions of the German prefix *ver-* is to intensify the force of a verb. André Préau quotes Heidegger as saying: "*Ver-an-lassen* is more active than *an-lassen*. The *ver-*, as it were, pushes the latter toward a doing [*vers un faire*]." Cf. Martin Heidegger, *Essais et Conférences* (Paris: Gallimard, 1958), p. 16 n.

basis of a look at what the Greeks experienced in being responsible, in *aitia*, we now give this verb "to occasion" a more inclusive meaning, so that it now is the name for the essence of causality thought as the Greeks thought it. The common and narrower meaning of "occasion" in contrast is nothing more than striking against and releasing, and means a kind of secondary cause within the whole of causality.

But in what, then, does the playing in unison of the four ways of occasioning play? They let what is not yet present arrive into presencing. Accordingly, they are unifiedly ruled over by a bringing that brings what presences into appearance. Plato tells us what this bringing is in a sentence from the *Symposium* (205b): *hē gar toi ek tou mē onton eis to on ionti hotōioun aitia pasa esti poiēsis.* "Every occasion for whatever passes over and goes forward into presencing from that which is not presencing is *poiēsis*, is bringing-forth [*Her-vor-bringen*]."[9]

It is of utmost importance that we think bringing-forth in its full scope and at the same time in the sense in which the Greeks thought it. Not only handcraft manufacture, not only artistic and poetical bringing into appearance and concrete imagery, is a bringing-forth, *poiēsis. Physis* also, the arising of something from out of itself, is a bringing-forth, *poiēsis. Physis* is indeed *poiēsis* in the highest sense. For what presences by means of *physis* has the bursting open belonging to bringing-forth, e.g., the bursting of a blossom into bloom, in itself (*en heautōi*). In contrast, what is brought forth by the artisan or the artist, e.g.,

9. The full gamut of meaning for the verb *hervorbringen*, here functioning as a noun, includes to bring forth or produce, to generate or beget, to utter, to elicit. Heidegger intends that all of these nuances be heard. He hyphenates the word in order to emphasize its adverbial prefixes, *her-* (here or hither) and *vor-* (forward or forth). Heidegger elsewhere makes specific the meaning resident in *Her-vor-bringen* for him by utilizing those prefixes independently. Thus he says (translating literally), "Bringing-forth-hither brings hither out of concealment, forth into unconcealment" (cf. below, p. 11); and—after identifying working (***wirken***) and *her-vor-bringen*—he says that working must be understood as "bringing *hither*—into unconcealment, *forth*—into presencing" (SR 161). Because of the awkwardness of the English phrase "to bring forth hither," it has not been possible to include in the translation of *her-vor-bringen* the nuance of meaning that *her-* provides.

the silver chalice, has the bursting open belonging to bringing-forth not in itself, but in another (*en allōi*), in the craftsman or artist.

The modes of occasioning, the four causes, are at play, then, within bringing-forth. Through bringing-forth, the growing things of nature as well as whatever is completed through the crafts and the arts come at any given time to their appearance.

But how does bringing-forth happen, be it in nature or in handwork and art? What is the bringing-forth in which the fourfold way of occasioning plays? Occasioning has to do with the presencing [*Anwesen*] of that which at any given time comes to appearance in bringing-forth. Bringing-forth brings hither out of concealment forth into unconcealment. Bringing-forth comes to pass only insofar as something concealed comes into unconcealment. This coming rests and moves freely within what we call revealing [*das Entbergen*].[10] The Greeks have the word

10. The verb *entbergen* (to reveal) and the allied noun *Entbergung* (revealing) are unique to Heidegger. Because of the exigencies of translation, *entbergen* must usually be translated with "revealing," and the presence of *Entbergung*, which is rather infrequently used, has therefore regrettably been obscured for want of an appropriate English noun as alternative that would be sufficiently active in meaning. *Entbergen* and *Entbergung* are formed from the verb *bergen* and the verbal prefix *ent-*. *Bergen* means to rescue, to recover, to secure, to harbor, to conceal. *Ent-* is used in German verbs to connote in one way or another a change from an existing situation. It can mean "forth" or "out" or can connote a change that is the negating of a former condition. *Entbergen* connotes an opening out from protective concealing, a harboring forth. For a presentation of Heidegger's central tenet that it is only as protected and preserved—and that means as enclosed and secure—that anything is set free to endure, to continue as that which it is, i.e., to be, see "Building Dwelling Thinking" in *Poetry, Language, Thought*, trans. Albert Hofstadter (New York: Harper & Row, 1971), p. 149, and cf. p. 25 below.

Entbergen and *Entbergung* join a family of words all formed from *bergen* —*verbergen* (to conceal), *Verborgenheit* (concealment), *das Verborgene* (the concealed), *Unverborgenheit* (unconcealment), das *Unverborgene* (the unconcealed)—of which Heidegger makes frequent use. The lack of viable English words sufficiently numerous to permit a similar use of but one fundamental stem has made it necessary to obscure, through the use of "reveal," the close relationship among all the words just mentioned. None of the English words used—"reveal," "conceal," "unconceal"—evinces with any adequacy the meaning resident in *bergen* itself; yet the reader should be constantly aware that the full range of connotation present in *bergen* sounds for Heidegger within all these, its derivatives.

alētheia for revealing. The Romans translate this with *veritas*. We say "truth" and usually understand it as the correctness of an idea.

But where have we strayed to? We are questioning concerning technology, and we have arrived now at *alētheia*, at revealing. What has the essence of technology to do with revealing? The answer: everything. For every bringing-forth is grounded in revealing. Bringing-forth, indeed, gathers within itself the four modes of occasioning—causality—and rules them throughout. Within its domain belong end and means, belongs instrumentality.[11] Instrumentality is considered to be the fundamental characteristic of technology. If we inquire, step by step, into what technology, represented as means, actually is, then we shall arrive at revealing. The possibility of all productive manufacturing lies in revealing.

Technology is therefore no mere means. Technology is a way of revealing. If we give heed to this, then another whole realm for the essence of technology will open itself up to us. It is the realm of revealing, i.e., of truth.[12]

This prospect strikes us as strange. Indeed, it should do so, should do so as persistently as possible and with so much urgency that we will finally take seriously the simple question of what the name "technology" means. The word stems from the Greek. *Technikon* means that which belongs to *technē*. We must observe

11. Here and elsewhere "belongs within" translates the German *gehört in* with the accusative (literally, belongs into), an unusual usage that Heidegger often employs. The regular German construction is *gehört zu* (belongs to). With the use of "belongs into," Heidegger intends to suggest a relationship involving origin.

12. Heidegger here hyphenates the word *Wahrheit* (truth) so as to expose its stem, *wahr*. He points out elsewhere that words with this stem have a common derivation and underlying meaning (SR 165). Such words often show the connotations of attentive watchfulness and guarding that he there finds in their Greek cognates, *horaō*, *ōra*, e.g., *wahren* (to watch over and keep safe) and *bewahren* (to preserve). Hyphenating *Wahrheit* draws it overtly into this circle of meaning. It points to the fact that in truth, which is unconcealment (*Unverborgenheit*), a safekeeping carries itself out. *Wahrheit* thus offers here a very close parallel to its companion noun *Entbergung* (revealing; literally, harboring forth), built on *bergen* (to rescue, to harbor, to conceal). See n. 10, above. For a further discussion of words built around *wahr*, see T 42, n. 9.

two things with respect to the meaning of this word. One is that *techne* is the name not only for the activities and skills of the craftsman, but also for the arts of the mind and the fine arts. *Technē* belongs to bringing-forth, to *poiēsis*; it is something poietic.

The other point that we should observe with regard to *technē* is even more important. From earliest times until Plato the word *technē* is linked with the word *epistēmē*. Both words are names for knowing in the widest sense. They mean to be entirely at home in something, to understand and be expert in it. Such knowing provides an opening up. As an opening up it is a revealing. Aristotle, in a discussion of special importance (*Nicomachean Ethics*, Bk. VI, chaps. 3 and 4), distinguishes between *epistēmē* and *technē* and indeed with respect to what and how they reveal. *Technē* is a mode of *alētheuein*. It reveals whatever does not bring itself forth and does not yet lie here before us, whatever can look and turn out now one way and now another. Whoever builds a house or a ship or forges a sacrificial chalice reveals what is to be brought forth, according to the perspectives of the four modes of occasioning. This revealing gathers together in advance the aspect and the matter of ship or house, with a view to the finished thing envisioned as completed, and from this gathering determines the manner of its construction. Thus what is decisive in *technē* does not lie at all in making and manipulating nor in the using of means, but rather in the aforementioned revealing. It is as revealing, and not as manufacturing, that *technē* is a bringing-forth.

Thus the clue to what the word *technē* means and to how the Greeks defined it leads us into the same context that opened itself to us when we pursued the question of what instrumentality as such in truth might be.

Technology is a mode of revealing. Technology comes to presence [*West*] in the realm where revealing and unconcealment take place, where *alētheia*, truth, happens.

In opposition to this definition of the essential domain of technology, one can object that it indeed holds for Greek thought and that at best it might apply to the techniques of the handcraftsman, but that it simply does not fit modern machine-powered technology. And it is precisely the latter and

it alone that is the disturbing thing, that moves us to ask the question concerning technology per se. It is said that modern technology is something incomparably different from all earlier technologies because it is based on modern physics as an exact science. Meanwhile we have come to understand more clearly that the reverse holds true as well: Modern physics, as experimental, is dependent upon technical apparatus and upon progress in the building of apparatus. The establishing of this mutual relationship between technology and physics is correct. But it remains a merely historiographical establishing of facts and says nothing about that in which this mutual relationship is grounded. The decisive question still remains: Of what essence is modern technology that it happens to think of putting exact science to use?

What is modern technology? It too is a revealing. Only when we allow our attention to rest on this fundamental characteristic does that which is new in modern technology show itself to us.

And yet the revealing that holds sway throughout modern technology does not unfold into a bringing-forth in the sense of *poiēsis*. The revealing that rules in modern technology is a challenging [*Herausfordern*],[13] which puts to nature the unreasonable demand that it supply energy that can be extracted and stored as such. But does this not hold true for the old windmill as well? No. Its sails do indeed turn in the wind; they are left entirely to the wind's blowing. But the windmill does not unlock energy from the air currents in order to store it.

In contrast, a tract of land is challenged into the putting out of coal and ore. The earth now reveals itself as a coal mining district, the soil as a mineral deposit. The field that the peasant formerly cultivated and set in order [*bestellte*] appears differently than it did when to set in order still meant to take care of and

13. *Herausfordern* means to challenge, to call forth or summon to action, to demand positively, to provoke. It is composed of the verb *fordern* (to demand, to summon, to challenge) and the adverbial prefixes *her-* (hither) and *aus-* (out). The verb might be rendered very literally as "to demand out hither." The structural similarity between *herausfordern* and *her-vor-bringen* (to bring forth hither) is readily apparent. It serves of itself to point up the relation subsisting between the two modes of revealing of which the verbs speak—modes that, in the very distinctive ways peculiar to them, occasion a coming forth into unconcealment and presencing. See below, 29–30.

to maintain. The work of the peasant does not challenge the soil of the field. In the sowing of the grain it places the seed in the keeping of the forces of growth and watches over its increase. But meanwhile even the cultivation of the field has come under the grip of another kind of setting-in-order, which *sets* upon [*stellt*] nature.[14] It sets upon it in the sense of challenging it. Agriculture is now the mechanized food industry. Air is now set upon to yield nitrogen, the earth to yield ore, ore to yield uranium, for example; uranium is set upon to yield atomic energy, which can be released either for destruction or for peaceful use.

This setting-upon that challenges forth the energies of nature is an expediting [*Fördern*], and in two ways. It expedites in that it unlocks and exposes. Yet that expediting is always itself directed from the beginning toward furthering something else, i.e., toward driving on to the maximum yield at the minimum expense. The coal that has been hauled out in some mining district has not been supplied in order that it may simply be present somewhere or other. It is stockpiled; that is, it is on call, ready to deliver the sun's warmth that is stored in it. The sun's warmth is challenged forth for heat, which in turn is ordered to deliver steam whose pressure turns the wheels that keep a factory running.

14. The verb *stellen* (to place or set) has a wide variety of uses. It can mean to put in place, to order, to arrange, to furnish or supply, and, in a military context, to challenge or engage. Here Heidegger sees the connotations of *herausfordern* (to challenge, to call forth, to demand out hither) as fundamentally determinative of the meaning of *stellen*, and this remains true throughout his ensuing discussion. The translation of *stellen* with "to set upon" is intended to carry this meaning. The connotations of setting in place and of supplying that lie within the word *stellen* remain strongly present in Heidegger's repeated use of the verb hereafter, however, since the "setting-upon" of which it speaks is inherently a setting in place so as to supply. Where these latter meanings come decisively to the fore, *stellen* has been translated with "to set" or "to set up," or, rarely, with "to supply."

Stellen embraces the meanings of a whole family of verbs: *bestellen* (to order, command; to set in order), *vorstellen* (to represent), *sicherstellen* (to secure), *nachstellen* (to entrap), *verstellen* (to block or disguise), *herstellen* (to produce, to set here), *darstellen* (to present or exhibit), and so on. In these verbs the various nuances within *stellen* are reinforced and made specific. All these meanings are gathered together in Heidegger's unique use of the word that is pivotal for him, *Ge-stell* (Enframing). Cf. pp. 19 ff. See also the opening paragraph of "The Turning," pp. 36–37.

The hydroelectric plant is set into the current of the Rhine. It sets the Rhine to supplying its hydraulic pressure, which then sets the turbines turning. This turning sets those machines in motion whose thrust sets going the electric current for which the long-distance power station and its network of cables are set up to dispatch electricity.[15] In the context of the interlocking processes pertaining to the orderly disposition of electrical energy, even the Rhine itself appears as something at our command. The hydroelectric plant is not built into the Rhine River as was the old wooden bridge that joined bank with bank for hundreds of years. Rather the river is dammed up into the power plant. What the river is now, namely, a water power supplier, derives from out of the essence of the power station. In order that we may even remotely consider the monstrousness that reigns here, let us ponder for a moment the contrast that speaks out of the two titles, "The Rhine" as dammed up into the *power* works, and "The Rhine" as uttered out of the *art* work, in Hölderlin's hymn by that name. But, it will be replied, the Rhine is still a river in the landscape, is it not? Perhaps. But how? In no other way than as an object on call for inspection by a tour group ordered there by the vacation industry.

The revealing that rules throughout modern technology has the character of a setting-upon, in the sense of a challenging-forth. That challenging happens in that the energy concealed in nature is unlocked, what is unlocked is transformed, what is transformed is stored up, what is stored up is, in turn, distributed, and what is distributed is switched about ever anew. Unlocking, transforming, storing, distributing, and switching about are ways of revealing. But the revealing never simply comes to an end. Neither does it run off into the indeterminate. The revealing reveals to itself its own manifoldly interlocking paths, through regulating their course. This regulating itself is, for its part, everywhere secured. Regulating and securing even become the chief characteristics of the challenging revealing.

15. In these two sentences, in order to show something of the manner in which Heidegger gathers together a family of meanings, a series of *stellen* verbs—*stellen* (three times), *herstellen*, *bestellen*—have been translated with verbal expressions formed around "set." For the usual meanings of these verbs, see n. 14.

What kind of unconcealment is it, then, that is peculiar to that which comes to stand forth through this setting-upon that challenges? Everywhere everything is ordered to stand by, to be immediately at hand, indeed to stand there just so that it may be on call for a further ordering. Whatever is ordered about in this way has its own standing. We call it the standing-reserve [*Bestand*].[16] The word expresses here something more, and something more essential, than mere "stock." The name "standing-reserve" assumes the rank of an inclusive rubric. It designates nothing less than the way in which everything presences that is wrought upon by the challenging revealing. Whatever stands by in the sense of standing-reserve no longer stands over against us as object.

Yet an airliner that stands on the runway is surely an object. Certainly. We can represent the machine so. But then it conceals itself as to what and how it is. Revealed, it stands on the taxi strip only as standing-reserve, inasmuch as it is ordered to ensure the possibility of transportation. For this it must be in its whole structure and in every one of its constituent parts, on call for duty, i.e., ready for takeoff. (Here it would be appropriate to discuss Hegel's definition of the machine as an autonomous tool. When applied to the tools of the craftsman, his characterization is correct. Characterized in this way, however, the machine is not thought at all from out of the essence of technology within which it belongs. Seen in terms of the standing-reserve, the machine is completely unautonomous, for it has its standing only from the ordering of the orderable.)

The fact that now, wherever we try to point to modern technology as the challenging revealing, the words "setting-upon," "ordering," "standing-reserve," obtrude and accumulate in a dry, monotonous, and therefore oppressive way, has its basis in what is now coming to utterance.

16. *Bestand* ordinarily denotes a store or supply as "standing by." It carries the connotation of the verb *bestehen* with its dual meaning of to last and to undergo. Heidegger uses the word to characterize the manner in which everything commanded into place and ordered according to the challenging demand ruling in modern technology presences as revealed. He wishes to stress here not the permanency, but the orderability and substitutability of objects. *Bestand* contrasts with *Gegenstand* (object; that which stands over against). Objects indeed lose their character as objects when they are caught up in the "standing-reserve." Cf. Introduction, p. xxix.

Who accomplishes the challenging setting-upon through which what we call the real is revealed as standing-reserve? Obviously, man. To what extent is man capable of such a revealing? Man can indeed conceive, fashion, and carry through this or that in one way or another. But man does not have control over unconcealment itself, in which at any given time the real shows itself or withdraws. The fact that the real has been showing itself in the light of Ideas ever since the time of Plato, Plato did not bring about. The thinker only responded to what addressed itself to him.

Only to the extent that man for his part is already challenged to exploit the energies of nature can this ordering revealing happen. If man is challenged, ordered, to do this, then does not man himself belong even more originally than nature within the standing-reserve? The current talk about human resources, about the supply of patients for a clinic, gives evidence of this. The forester who, in the wood, measures the felled timber and to all appearances walks the same forest path in the same way as did his grandfather is today commanded by profit-making in the lumber industry, whether he knows it or not. He is made subordinate to the orderability of cellulose, which for its part is challenged forth by the need for paper, which is then delivered to newspapers and illustrated magazines. The latter, in their turn, set public opinion to swallowing what is printed, so that a set configuration of opinion becomes available on demand. Yet precisely because man is challenged more originally than are the energies of nature, i.e., into the process of ordering, he never is transformed into mere standing-reserve. Since man drives technology forward, he takes part in ordering as a way of revealing. But the unconcealment itself, within which ordering unfolds, is never a human handiwork, any more than is the realm through which man is already passing every time he as a subject relates to an object.

Where and how does this revealing happen if it is no mere handiwork of man? We need not look far. We need only apprehend in an unbiased way That which has already claimed man and has done so, so decisively that he can only be man at any given time as the one so claimed. Wherever man opens his eyes and ears, unlocks his heart, and gives himself over to meditating

and striving, shaping and working, entreating and thanking, he finds himself everywhere already brought into the unconcealed. The unconcealment of the unconcealed has already come to pass whenever it calls man forth into the modes of revealing allotted to him. When man, in his way, from within unconcealment reveals that which presences, he merely responds to the call of unconcealment even when he contradicts it. Thus when man, investigating, observing, ensnares nature as an area of his own conceiving, he has already been claimed by a way of revealing that challenges him to approach nature as an object of research, until even the object disappears into the objectlessness of standing-reserve.

Modern technology as an ordering revealing is, then, no merely human doing. Therefore we must take that challenging that sets upon man to order the real as standing-reserve in accordance with the way in which it shows itself. That challenging gathers man into ordering. This gathering concentrates man upon ordering the real as standing-reserve.

That which primordially unfolds the mountains into mountain ranges and courses through them in their folded togetherness is the gathering that we call "*Ge*birg" [mountain chain].

That original gathering from which unfold the ways in which we have feelings of one kind or another we name "*Ge*müt" [disposition].

We now name that challenging claim which gathers man thither to order the self-revealing as standing-reserve: "*Ge-stell*" [Enframing].[17]

We dare to use this word in a sense that has been thoroughly unfamiliar up to now.

17. The translation "Enframing" for *Ge-stell* is intended to suggest, through the use of the prefix "en-," something of the active meaning that Heidegger here gives to the German word. While following the discussion that now ensues, in which Enframing assumes a central role, the reader should be careful not to interpret the word as though it simply meant a framework of some sort. Instead he should constantly remember that Enframing is fundamentally a calling-forth. It is a "challenging claim," a demanding summons, that "gathers" so as to reveal. This claim *enframes* in that it assembles and orders. It puts into a framework or configuration everything that it summons forth, through an ordering for use that it is forever restructuring anew. Cf. Introduction, pp. xxix ff.

According to ordinary usage, the word *Gestell* [frame] means some kind of apparatus, e.g., a bookrack. *Gestell* is also the name for a skeleton. And the employment of the word *Ge-stell* [Enframing] that is now required of us seems equally eerie, not to speak of the arbitrariness with which words of a mature language are thus misused. Can anything be more strange? Surely not. Yet this strangeness is an old usage of thinking. And indeed thinkers accord with this usage precisely at the point where it is a matter of thinking that which is highest. We, late born, are no longer in a position to appreciate the significance of Plato's daring to use the word *eidos* for that which in everything and in each particular thing endures as present. For *eidos,* in the common speech, meant the outward aspect [*Ansicht*] that a visible thing offers to the physical eye. Plato exacts of this word, however, something utterly extraordinary: that it name what precisely is not and never will be perceivable with physical eyes. But even this is by no means the full extent of what is extraordinary here. For *idea* names not only the nonsensuous aspect of what is physically visible.[18] Aspect (*idea*) names and is, also, that which constitutes the essence in the audible, the tasteable, the tactile, in everything that is in any way accessible. Compared with the demands that Plato makes on language and thought in this and other instances, the use of the word *Gestell* as the name for the essence of modern technology, which we now venture here, is almost harmless. Even so, the usage now required remains something exacting and is open to misinterpretation.

Enframing means the gathering together of that setting-upon which sets upon man, i.e., challenges him forth, to reveal the real, in the mode of ordering, as standing-reserve. Enframing means that way of revealing which holds sway in the essence of modern technology and which is itself nothing technological. On the other hand, all those things that are so familiar to us and are standard parts of an assembly, such as rods, pistons, and chassis, belong to the technological. The assembly itself, however, together with the aforementioned stockparts, falls within

18. Where *idea* is italicized it is not the English word but a transliteration of the Greek.

the sphere of technological activity; and this activity always merely responds to the challenge of Enframing, but it never comprises Enframing itself or brings it about.

The word *stellen* [to set upon] in the name *Ge-stell* [Enframing] not only means challenging. At the same time it should preserve the suggestion of another *Stellen* from which it stems, namely, that producing and presenting [*Her- und Dar-stellen*] which, in the sense of *poiēsis,* lets what presences come forth into unconcealment. This producing that brings forth—e.g., the erecting of a statue in the temple precinct—and the challenging ordering now under consideration are indeed fundamentally different, and yet they remain related in their essence. Both are ways of revealing, of *alētheia.* In Enframing, that unconcealment comes to pass in conformity with which the work of modern technology reveals the real as standing-reserve. This work is therefore neither only a human activity nor a mere means within such activity. The merely instrumental, merely anthropological definition of technology is therefore in principle untenable. And it cannot be rounded out by being referred back to some metaphysical or religious explanation that undergirds it.

It remains true, nonetheless, that man in the technological age is, in a particularly striking way, challenged forth into revealing. That revealing concerns nature, above all, as the chief storehouse of the standing energy reserve. Accordingly, man's ordering attitude and behavior display themselves first in the rise of modern physics as an exact science. Modern science's way of representing pursues and entraps nature as a calculable coherence of forces. Modern physics is not experimental physics because it applies apparatus to the questioning of nature. Rather the reverse is true. Because physics, indeed already as pure theory, sets nature up to exhibit itself as a coherence of forces calculable in advance, it therefore orders its experiments precisely for the purpose of asking whether and how nature reports itself when set up in this way.

But after all, mathematical physics arose almost two centuries before technology. How, then, could it have already been set upon by modern technology and placed in its service? The facts testify to the contrary. Surely technology got under way only

when it could be supported by exact physical science. Reckoned chronologically, this is correct. Thought historically, it does not hit upon the truth.

The modern physical theory of nature prepares the way first not simply for technology but for the essence of modern technology. For already in physics the challenging gathering-together into ordering revealing holds sway. But in it that gathering does not yet come expressly to appearance. Modern physics is the herald of Enframing, a herald whose origin is still unknown. The essence of modern technology has for a long time been concealing itself, even where power machinery has been invented, where electrical technology is in full swing, and where atomic technology is well under way.

All coming to presence, not only modern technology, keeps itself everywhere concealed to the last.[19] Nevertheless, it remains, with respect to its holding sway, that which precedes all: the earliest. The Greek thinkers already knew of this when they said: That which is earlier with regard to the arising that holds sway becomes manifest to us men only later. That which is primally early shows itself only ultimately to men.[20] Therefore, in the realm of thinking, a painstaking effort to think through still more primally what was primally thought is not the absurd wish to revive what is past, but rather the sober readiness to be astounded before the coming of what is early.

Chronologically speaking, modern physical science begins in the seventeenth century. In contrast, machine-power technology develops only in the second half of the eighteenth century. But modern technology, which for chronological reckoning is the later, is, from the point of view of the essence holding sway within it, the historically earlier.

19. "Coming to presence" here translates the gerund *Wesende*, a verbal form that appears, in this volume, only in this essay. With the introduction into the discussion of "coming to presence" as an alternate translation of the noun *Wesen* (essence), subsequent to Heidegger's consideration of the meaning of essence below (pp. 30 ff.), occasionally the presence of *das Wesende* is regrettably but unavoidably obscured.

20. "That which is primally early" translates *die anfängliche Frühe.* For a discussion of that which "is to all present and absent beings . . . the earliest and most ancient at once"—i.e., *Ereignen, das Ereignis*—see "The Way to Language" in *On the Way to Language*, trans. Peter D. Hertz (New York: Harper & Row, 1971), p. 127.

If modern physics must resign itself ever increasingly to the fact that its realm of representation remains inscrutable and incapable of being visualized, this resignation is not dictated by any committee of researchers. It is challenged forth by the rule of Enframing, which demands that nature be orderable as standing-reserve. Hence physics, in all its retreating from the representation turned only toward objects that has alone been standard till recently, will never be able to renounce this one thing: that nature reports itself in some way or other that is identifiable through calculation and that it remains orderable as a system of information. This system is determined, then, out of a causality that has changed once again. Causality now displays neither the character of the occasioning that brings forth nor the nature of the *causa efficiens*, let alone that of the *causa formalis*. It seems as though causality is shrinking into a reporting—a reporting challenged forth—of standing-reserves that must be guaranteed either simultaneously or in sequence. To this shrinking would correspond the process of growing resignation that Heisenberg's lecture depicts in so impressive a manner.*

Because the essence of modern technology lies in Enframing, modern technology must employ exact physical science. Through its so doing, the deceptive illusion arises that modern technology is applied physical science. This illusion can maintain itself only so long as neither the essential origin of modern science nor indeed the essence of modern technology is adequately found out through questioning.

We are questioning concerning technology in order to bring to light our relationship to its essence. The essence of modern technology shows itself in what we call Enframing. But simply to point to this is still in no way to answer the question concerning technology, if to answer means to respond, in the sense of correspond, to the essence of what is being asked about.

Where do we find ourselves brought to, if now we think one step further regarding what Enframing itself actually is? It is nothing technological, nothing on the order of a machine. It is the way in which the real reveals itself as standing-reserve.

* W. Heisenberg, "Das Naturbild in der heutigen Physik," in *Die Künste im technischen Zeitalter* (Munich, 1954), pp. 43 ff.

Again we ask: Does this revealing happen somewhere beyond all human doing? No. But neither does it happen exclusively *in* man, or decisively *through* man.

Enframing is the gathering together that belongs to that setting-upon which sets upon man and puts him in position to reveal the real, in the mode of ordering, as standing-reserve. As the one who is challenged forth in this way, man stands within the essential realm of Enframing. He can never take up a relationship to it only subsequently. Thus the question as to how we are to arrive at a relationship to the essence of technology, asked in this way, always comes too late. But never too late comes the question as to whether we actually experience ourselves as the ones whose activities everywhere, public and private, are challenged forth by Enframing. Above all, never too late comes the question as to whether and how we actually admit ourselves into that wherein Enframing itself comes to presence.

The essence of modern technology starts man upon the way of that revealing through which the real everywhere, more or less distinctly, becomes standing-reserve. "To start upon a way" means "to send" in our ordinary language. We shall call that sending-that-gathers [*versammelde Schicken*] which first starts man upon a way of revealing, *destining* [*Geschick*].[21] It is from out of this destining that the essence of all history [*Geschichte*] is determined. History is neither simply the object of written chronicle nor simply the fulfillment of human activity. That activity first becomes history as something destined.* And it is only the destining into objectifying representation that makes the historical accessible as an object for historiography, i.e., for a science, and on this basis makes possible the current equating of the historical with that which is chronicled.

Enframing, as a challenging-forth into ordering, sends into a way of revealing. Enframing is an ordaining of destining, as is

21. For a further presentation of the meaning resident in *Geschick* and the related verb *schicken*, cf. T 38 ff., and Introduction, pp. xxviii ff.

* See *Vom Wesen der Wahrheit*, 1930; 1st ed., 1943, pp. 16 ff. [English translation, "On the Essence of Truth," in *Existence and Being*, ed. Werner Brock (Chicago: Regnery, 1949), pp. 308 ff.]

every way of revealing. Bringing-forth, *poiēsis*, is also a destining in this sense.

Always the unconcealment of that which is[22] goes upon a way of revealing. Always the destining of revealing holds complete sway over man. But that destining is never a fate that compels. For man becomes truly free only insofar as he belongs to the realm of destining and so becomes one who listens and hears [*Hörender*], and not one who is simply constrained to obey [*Höriger*].

The essence of freedom is *originally* not connected with the will or even with the causality of human willing.

Freedom governs the open in the sense of the cleared and lighted up, i.e., of the revealed.[23] It is to the happening of revealing, i.e., of truth, that freedom stands in the closest and most intimate kinship. All revealing belongs within a harboring and a concealing. But that which frees—the mystery—is concealed and always concealing itself. All revealing comes out of the open, goes into the open, and brings into the open. The freedom of the open consists neither in unfettered arbitrariness nor in the constraint of mere laws. Freedom is that which conceals in a way that opens to light, in whose clearing there shimmers that veil that covers what comes to presence of all truth and lets the veil appear as what veils. Freedom is the realm of the destining that at any given time starts a revealing upon its way.

The essence of modern technology lies in Enframing. Enframing belongs within the destining of revealing. These sentences express something different from the talk that we hear more frequently, to the effect that technology is the fate of our age, where "fate" means the inevitableness of an unalterable course.

But when we consider the essence of technology, then we experience Enframing as a destining of revealing. In this way we are already sojourning within the open space of destining, a destining that in no way confines us to a stultified compulsion to push on blindly with technology or, what comes to the same

22. *dessen was ist*. On the peculiar significance of *das was ist* (that which is), see T 44 n. 12.

23. "The open" here translates *das Freie*, cognate with *Freiheit*, freedom. Unfortunately the repetitive stress of the German phrasing cannot be reproduced in English, since the basic meaning of *Freie*—open air, open space—is scarcely heard in the English "free."

thing, to rebel helplessly against it and curse it as the work of the devil. Quite to the contrary, when we once open ourselves expressly to the *essence* of technology, we find ourselves unexpectedly taken into a freeing claim.

The essence of technology lies in Enframing. Its holding sway belongs within destining. Since destining at any given time starts man on a way of revealing, man, thus under way, is continually approaching the brink of the possibility of pursuing and pushing forward nothing but what is revealed in ordering, and of deriving all his standards on this basis. Through this the other possibility is blocked, that man might be admitted more and sooner and ever more primally to the essence of that which is unconcealed and to its unconcealment, in order that he might experience as his essence his needed belonging to revealing.

Placed between these possibilities, man is endangered from out of destining. The destining of revealing is as such, in every one of its modes, and therefore necessarily, *danger*.

In whatever way the destining of revealing may hold sway, the unconcealment in which everything that is shows itself at any given time harbors the danger that man may quail at the unconcealed and may misinterpret it. Thus where everything that presences exhibits itself in the light of a cause-effect coherence, even God can, for representational thinking, lose all that is exalted and holy, the mysteriousness of his distance. In the light of causality, God can sink to the level of a cause, of *causa efficiens*. He then becomes, even in theology, the god of the philosophers, namely, of those who define the unconcealed and the concealed in terms of the causality of making, without ever considering the essential origin of this causality.

In a similar way the unconcealment in accordance with which nature presents itself as a calculable complex of the effects of forces can indeed permit correct determinations; but precisely through these successes the danger can remain that in the midst of all that is correct the true will withdraw.

The destining of revealing is in itself not just any danger, but danger as such.

Yet when destining reigns in the mode of Enframing, it is the supreme danger. This danger attests itself to us in two ways. As soon as what is unconcealed no longer concerns man even as

object, but does so, rather, exclusively as standing-reserve, and man in the midst of objectlessness is nothing but the orderer of the standing-reserve, then he comes to the very brink of a precipitous fall; that is, he comes to the point where he himself will have to be taken as standing-reserve. Meanwhile man, precisely as the one so threatened, exalts himself to the posture of lord of the earth. In this way the impression comes to prevail that everything man encounters exists only insofar as it is his construct. This illusion gives rise in turn to one final delusion: It seems as though man everywhere and always encounters only himself. Heisenberg has with complete correctness pointed out that the real must present itself to contemporary man in this way.* *In truth, however, precisely nowhere does man today any longer encounter himself, i.e., his essence.* Man stands so decisively in attendance on the challenging-forth of Enframing that he does not apprehend Enframing as a claim, that he fails to see himself as the one spoken to, and hence also fails in every way to hear in what respect he ek-sists, from out of his essence, in the realm of an exhortation or address, and thus *can never* encounter only himself.

But Enframing does not simply endanger man in his relationship to himself and to everything that is. As a destining, it banishes man into that kind of revealing which is an ordering. Where this ordering holds sway, it drives out every other possibility of revealing. Above all, Enframing conceals that revealing which, in the sense of *poiēsis*, lets what presences come forth into appearance. As compared with that other revealing, the setting-upon that challenges forth thrusts man into a relation to that which is, that is at once antithetical and rigorously ordered. Where Enframing holds sway, regulating and securing of the standing-reserve mark all revealing. They no longer even let their own fundamental characteristic appear, namely, this revealing as such.

Thus the challenging Enframing not only conceals a former way of revealing, bringing-forth, but it conceals revealing itself and with it That wherein unconcealment, i.e., truth, comes to pass.

* "Das Naturbild," pp. 60 ff.

Enframing blocks the shining-forth and holding-sway of truth. The destining that sends into ordering is consequently the extreme danger. What is dangerous is not technology. There is no demonry of technology, but rather there is the mystery of its essence. The essence of technology, as a destining of revealing, is the danger. The transformed meaning of the word "Enframing" will perhaps become somewhat more familiar to us now if we think Enframing in the sense of destining and danger.

The threat to man does not come in the first instance from the potentially lethal machines and apparatus of technology. The actual threat has already affected man in his essence. The rule of Enframing threatens man with the possibility that it could be denied to him to enter into a more original revealing and hence to experience the call of a more primal truth.

Thus, where Enframing reigns, there is *danger* in the highest sense.

But where danger is, grows
The saving power also.

Let us think carefully about these words of Hölderlin. What does it mean "to save"? Usually we think that it means only to seize hold of a thing threatened by ruin, in order to secure it in its former continuance. But the verb "to save" says more. "To save" is to fetch something home into its essence, in order to bring the essence for the first time into its genuine appearing. If the essence of technology, Enframing, is the extreme danger, and if there is truth in Hölderlin's words, then the rule of Enframing cannot exhaust itself solely in blocking all lighting-up of every revealing, all appearing of truth. Rather, precisely the essence of technology must harbor in itself the growth of the saving power. But in that case, might not an adequate look into what Enframing is as a destining of revealing bring into appearance the saving power in its arising?

In what respect does the saving power grow there also where the danger is? Where something grows, there it takes root, from thence it thrives. Both happen concealedly and quietly and in their own time. But according to the words of the poet we have no right whatsoever to expect that there where the danger is we

should be able to lay hold of the saving power immediately and without preparation. Therefore we must consider now, in advance, in what respect the saving power does most profoundly take root and thence thrive even in that wherein the extreme danger lies, in the holding sway of Enframing. In order to consider this, it is necessary, as a last step upon our way, to look with yet clearer eyes into the danger. Accordingly, we must once more question concerning technology. For we have said that in technology's essence roots and thrives the saving power.

But how shall we behold the saving power in the essence of technology so long as we do not consider in what sense of "essence" it is that Enframing is actually the essence of technology?

Thus far we have understood "essence" in its current meaning. In the academic language of philosophy, "essence" means *what* something is; in Latin, *quid. Quidditas,* whatness, provides the answer to the question concerning essence. For example, what pertains to all kinds of trees—oaks, beeches, birches, firs—is the same "treeness." Under this inclusive genus—the "universal"—fall all real and possible trees. Is then the essence of technology, Enframing, the common genus for everything technological? If that were the case then the steam turbine, the radio transmitter, and the cyclotron would each be an Enframing. But the word "Enframing" does not mean here a tool or any kind of apparatus. Still less does it mean the general concept of such resources. The machines and apparatus are no more cases and kinds of Enframing than are the man at the switchboard and the engineer in the drafting room. Each of these in its own way indeed belongs as stockpart, available resource, or executer, within Enframing; but Enframing is never the essence of technology in the sense of a genus. Enframing is a way of revealing having the character of destining, namely, the way that challenges forth. The revealing that brings forth (*poiēsis*) is also a way that has the character of destining. But these ways are not kinds that, arrayed beside one another, fall under the concept of revealing. Revealing is that destining which, ever suddenly and inexplicably to all thinking, apportions itself into the revealing that brings forth and that also challenges, and which allots itself to man. The challenging reveal-

ing has its origin as a destining in bringing-forth. But at the same time Enframing, in a way characteristic of a destining, blocks *poiēsis.*

Thus Enframing, as a destining of revealing, is indeed the essence of technology, but never in the sense of genus and *essentia.* If we pay heed to this, something astounding strikes us: It is technology itself that makes the demand on us to think in another way what is usually understood by "essence." But in what way?

If we speak of the "essence of a house" and the "essence of a state," we do not mean a generic type; rather we mean the ways in which house and state hold sway, administer themselves, develop and decay—the way in which they "essence" [*Wesen*]. Johann Peter Hebel in a poem, "Ghost on Kanderer Street," for which Goethe had a special fondness, uses the old word *die Weserei.* It means the city hall inasmuch as there the life of the community gathers and village existence is constantly in play, i.e., comes to presence. It is from the verb *wesen* that the noun is derived. *Wesen* understood as a verb is the same as *währen* [to last or endure], not only in terms of meaning, but also in terms of the phonetic formation of the word. Socrates and Plato already think the essence of something as what essences, what comes to presence, in the sense of what endures. But they think what endures as what remains permanently [*das Fortwährende*] (*aei on*). And they find what endures permanently in what, as that which remains, tenaciously persists throughout all that happens. That which remains they discover, in turn, in the aspect [*Aussehen*] (*eidos, idea*), for example, the Idea "house."

The Idea "house" displays what anything is that is fashioned as a house. Particular, real, and possible houses, in contrast, are changing and transitory derivatives of the Idea and thus belong to what does not endure.

But it can never in any way be established that enduring is based solely on what Plato thinks as *idea* and Aristotle thinks as *to ti ēn einai* (that which any particular thing has always been), or what metaphysics in its most varied interpretations thinks as *essentia.*

All essencing endures. But is enduring only permanent enduring? Does the essence of technology endure in the sense of

the permanent enduring of an Idea that hovers over everything technological, thus making it seem that by technology we mean some mythological abstraction? The way in which technology essences lets itself be seen only from out of that permanent enduring in which Enframing comes to pass as a destining of revealing. Goethe once uses the mysterious word *fortgewähren* [to grant permanently] in place of *fortwähren* [to endure permanently].* He hears *währen* [to endure] and *gewähren* [to grant] here in one unarticulated accord.[24] And if we now ponder more carefully than we did before what it is that actually endures and perhaps alone endures, we may venture to say: *Only what is granted endures. That which endures primally out of the earliest beginning is what grants.*[25]

As the essencing of technology, Enframing is that which endures. Does Enframing hold sway at all in the sense of granting? No doubt the question seems a horrendous blunder. For according to everything that has been said, Enframing is, rather, a destining that gathers together into the revealing that challenges forth. Challenging is anything but a granting. So it seems, so long as we do not notice that the challenging-forth into the ordering of the real as standing-reserve still remains a destining that starts man upon a way of revealing. As this destining, the coming to presence of technology gives man entry into That which, of himself, he can neither invent nor in any way make. For there is no such thing as a man who, solely of himself, is only man.

But if this destining, Enframing, is the extreme danger, not only for man's coming to presence, but for all revealing as such, should this destining still be called a granting? Yes, most emphat-

* "Die Wahlverwandtschaften" [Congeniality], pt. II, chap. 10, in the novelette *Die wunderlichen Nachbarskinder* [The strange neighbor's children].

24. The verb *gewähren* is closely allied to the verbs *währen* (to endure) and *wahren* (to watch over, to keep safe, to preserve). *Gewähren* ordinarily means to be surety for, to warrant, to vouchsafe, to grant. In the discussion that follows, the verb will be translated simply with "to grant." But the reader should keep in mind also the connotations of safeguarding and guaranteeing that are present in it as well.

25. *Nur das Gewährte währt. Das anfänglich aus der Frühe Währende ist das Gewährende.* A literal translation of the second sentence would be, "That which endures primally from out of the early. . . ." On the meaning of "the early," see n. 20 above.

ically, if in this destining the saving power is said to grow. Every destining of revealing comes to pass from out of a granting and as such a granting. For it is granting that first conveys to man that share in revealing which the coming-to-pass of revealing needs.[26] As the one so needed and used, man is given to belong to the coming-to-pass of truth. The granting that sends in one way or another into revealing is as such the saving power. For the saving power lets man see and enter into the highest dignity of his essence. This dignity lies in keeping watch over the unconcealment—and with it, from the first, the concealment—of all coming to presence on this earth. It is precisely in Enframing, which threatens to sweep man away into ordering as the supposed single way of revealing, and so thrusts man into the danger of the surrender of his free essence—it is precisely in this extreme danger that the innermost indestructible belongingness of man within granting may come to light, provided that we, for our part, begin to pay heed to the coming to presence of technology.

Thus the coming to presence of technology harbors in itself what we least suspect, the possible arising of the saving power.

Everything, then, depends upon this: that we ponder this arising and that, recollecting, we watch over it. How can this happen? Above all through our catching sight of what comes to presence in technology, instead of merely staring at the technological. So long as we represent technology as an instrument, we remain held fast in the will to master it. We press on past the essence of technology.

When, however, we ask how the instrumental comes to presence as a kind of causality, then we experience this coming to presence as the destining of a revealing.

When we consider, finally, that the coming to presence of the essence of technology comes to pass in the granting that needs and uses man so that he may share in revealing, then the following becomes clear:

26. Here and subsequently in this essay, "coming-to-pass" translates the noun *Ereignis*. Elsewhere, in "The Turning," this word, in accordance with the deeper meaning that Heidegger there finds for it, will be translated with "disclosing that brings into its own." See T 45; see also Introduction, pp. xxxvi–xxxvii.

The essence of technology is in a lofty sense ambiguous. Such ambiguity points to the mystery of all revealing, i.e., of truth.

On the one hand, Enframing challenges forth into the frenziedness of ordering that blocks every view into the coming-to-pass of revealing and so radically endangers the relation to the essence of truth.

On the other hand, Enframing comes to pass for its part in the granting that lets man endure—as yet unexperienced, but perhaps more experienced in the future—that he may be the one who is needed and used for the safekeeping of the coming to presence of truth.[27] Thus does the arising of the saving power appear.

The irresistibility of ordering and the restraint of the saving power draw past each other like the paths of two stars in the course of the heavens. But precisely this, their passing by, is the hidden side of their nearness.

When we look into the ambiguous essence of technology, we behold the constellation, the stellar course of the mystery.

The question concerning technology is the question concerning the constellation in which revealing and concealing, in which the coming to presence of truth, comes to pass.

But what help is it to us to look into the constellation of truth? We look into the danger and see the growth of the saving power.

Through this we are not yet saved. But we are thereupon summoned to hope in the growing light of the saving power. How can this happen? Here and now and in little things, that we may foster the saving power in its increase. This includes holding always before our eyes the extreme danger.

The coming to presence of technology threatens revealing, threatens it with the possibility that all revealing will be consumed in ordering and that everything will present itself only in the unconcealedness of standing-reserve. Human activity can never directly counter this danger. Human achievement alone can never banish it. But human reflection can ponder the fact that

27. "Safekeeping" translates the noun *Wahrnis*, which is unique to Heidegger. *Wahrnis* is closely related to the verb *wahren* (to watch over, to keep safe, to preserve), integrally related to *Wahrheit* (truth), and closely akin to *währen* (to endure) and *gewähren* (to be surety for, to grant). On the meaning of *Wahrnis*, see T 42, n. 9 and n. 12 above.

all saving power must be of a higher essence than what is endangered, though at the same time kindred to it.

But might there not perhaps be a more primally granted revealing that could bring the saving power into its first shining forth in the midst of the danger, a revealing that in the technological age rather conceals than shows itself?

There was a time when it was not technology alone that bore the name *technē*. Once that revealing that brings forth truth into the splendor of radiant appearing also was called *technē*.

Once there was a time when the bringing-forth of the true into the beautiful was called *technē*. And the *poiēsis* of the fine arts also was called *technē*.

In Greece, at the outset of the destining of the West, the arts soared to the supreme height of the revealing granted them. They brought the presence [*Gegenwart*] of the gods, brought the dialogue of divine and human destinings, to radiance. And art was simply called *technē*. It was a single, manifold revealing. It was pious, *promos*, i.e., yielding to the holding-sway and the safekeeping of truth.

The arts were not derived from the artistic. Art works were not enjoyed aesthetically. Art was not a sector of cultural activity.

What, then, was art—perhaps only for that brief but magnificent time? Why did art bear the modest name *technē*? Because it was a revealing that brought forth and hither, and therefore belonged within *poiēsis*. It was finally that revealing which holds complete sway in all the fine arts, in poetry, and in everything poetical that obtained *poiēsis* as its proper name.

The same poet from whom we heard the words

> *But where danger is, grows*
> *The saving power also.*

says to us:

> *. . . poetically dwells man upon this earth.*

The poetical brings the true into the splendor of what Plato in the *Phaedrus* calls *to ekphanestaton*, that which shines forth most purely. The poetical thoroughly pervades every art, every revealing of coming to presence into the beautiful.

Could it be that the fine arts are called to poetic revealing? Could it be that revealing lays claim to the arts most primally, so that they for their part may expressly foster the growth of the saving power, may awaken and found anew our look into that which grants and our trust in it?

Whether art may be granted this highest possibility of its essence in the midst of the extreme danger, no one can tell. Yet we can be astounded. Before what? Before this other possibility: that the frenziedness of technology may entrench itself everywhere to such an extent that someday, throughout everything technological, the essence of technology may come to presence in the coming-to-pass of truth.

Because the essence of technology is nothing technological, essential reflection upon technology and decisive confrontation with it must happen in a realm that is, on the one hand, akin to the essence of technology and, on the other, fundamentally different from it.

Such a realm is art. But certainly only if reflection on art, for its part, does not shut its eyes to the constellation of truth after which we are *questioning.*

Thus questioning, we bear witness to the crisis that in our sheer preoccupation with technology we do not yet experience the coming to presence of technology, that in our sheer aesthetic-mindedness we no longer guard and preserve the coming to presence of art. Yet the more questioningly we ponder the essence of technology, the more mysterious the essence of art becomes.

The closer we come to the danger, the more brightly do the ways into the saving power begin to shine and the more questioning we become. For questioning is the piety of thought.

The Question Concerning Technology

and Other Essays

MARTIN HEIDEGGER

Translated and with an Introduction by
WILLIAM LOVITT

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Preface

The essays in this book were taken with Heidegger's permission from three different volumes of his works: *Die Technik und die Kehre* (Pfullingen: Günther Neske, 1962); *Holzwege* (Frankfurt: Vittorio Klostermann, 1952); and *Vorträge und Aufsätze* (Pfullingen: Günther Neske, 1954). "The Question Concerning Technology" is contained in both *Die Technik und die Kehre* and *Vorträge und Aufsätze.*

In *Die Technik und die Kehre* the following prefatory note appears regarding the two essays, "The Question Concerning Technology" ("Die Frage nach der Technik") and "The Turning" ("Die Kehre"):

> Under the title "Insight into That Which Is," the author gave, on December 1, 1949, in the Club at Bremen, four lectures, which were repeated without alterations in the spring of 1950 (March 25 and 26) at Bühlerhöhe. The titles were "The Thing ["Das Ding"], "Enframing" ["Das Gestell"], "The Danger" ["Die Gefahr"], "The Turning" ["Die Kehre"].*
>
> The first lecture was given in an expanded version on June 6, 1950, before the Bavarian Academy of Fine Arts. (See *Vorträge und Aufsätze,* 1954, pp. 163 ff.)†

* Throughout the translations in this volume parenthetical elements interpolated by me are shown in brackets, while those present in the author's original text are given in parentheses.

† "The Thing" has been published in *Poetry, Language, Thought,* trans. Albert Hofstadter (New York: Harper & Row, 1971), pp. 165–186.

The second lecture was given on November 18, 1955, also in an expanded version, under the title "The Question Concerning Technology," in the series entitled "The Arts in the Technological Age." (See *Vorträge und Aufsätze,* 1954, pp. 13 ff.). The present volume repeats this text unaltered.

The third lecture remains still unpublished.

The fourth lecture, "The Turning," is published here for the first time according to the first unaltered version.

At the end of *Holzwege* Heidegger makes the following observations concerning "The Word of Nietzsche: 'God Is Dead' " ("Nietzsches Wort 'Gott ist tot' ") and "The Age of the World Picture ("Die Zeit des Weltbildes"):

"The Word of Nietzsche: 'God Is Dead' ": The major portions were delivered repeatedly in 1943 for small groups. The content is based upon the Nietzsche lectures that were given between 1936 and 1940 during five semesters at the University of Freiburg im Breisgau. These set themselves the task of understanding Nietzsche's thinking as the consummation of Western metaphysics from out of Being.

"The Age of the World Picture": The lecture was given on June 9, 1938, under the title "The Establishing by Metaphysics of the Modern World Picture," as the last of a series that was arranged by the Society for Aesthetics, Natural Philosophy, and Medicine at Freiburg im Breisgau, and which had as its theme the establishing of the modern world picture. The appendixes were written at the same time but were not delivered.

Of all the essays in *Holzwege* Heidegger remarks:

In the intervening time these pieces have been repeatedly revised and, in some places, clarified. In each case the level of reflection and the structure have remained, and so also, together with these, has the changing use of language.

And at the end of *Vorträge und Aufsätze* Heidegger gives the following notes:

"The Question Concerning Technology" ["Die Frage nach der Technik"]: Lecture held on November 18, 1955, in the main auditorium of the Technische Hochschule, Munich, in the series "The Arts in the Technological Age," arranged by the Bavarian Academy of Fine Arts under the leadership of President Emil Preetorius; published in volume III of the *Yearbook of the Academy* (ed. Clemens Graf Podewils), R. Oldenbourg, Munich, 1954, pp. 70 ff.

"Science and Reflection" ["Wissenschaft und Besinnung"]: Lecture, in its present version given in August, 1954, before a small group, in preparation for the above-mentioned conference in Munich.

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