Thinking and Being: Heidegger and Wittgenstein on Machination and Lived-Experience

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Heidegger's treatment of 'machination' in the Beiträge zur Philosophie begins the critique of technological thinking that would centrally characterize his later work. Unlike later discussions of technology, the critique of machination in Beiträge connects its arising to the predominance of 'lived-experience' (Erlebnis) as the concealed basis for the possibility of a pre-delineated, rule-based metaphysical understanding of the world. In this essay I explore this connection. The unity of machination and lived-experience becomes intelligible when both are traced to their common root in the primordial Greek attitude of techne, originally a basic attitude of wondering knowledge of nature. But with this common root revealed, the basic connection between machination and lived-experience also emerges as an important development of one of the deepest guiding thoughts of the Western philosophical tradition: the Parmenidean assertion of the sameness of being and thinking. In the Beiträge's analysis of machination and lived-experience, Heidegger hopes to discover a way of thinking that avoids the Western tradition's constant basic assumption of self-identity, an assumption which culminates in the modern picture of the autonomous, self-identical subject aggressively set over against a pre-delineated world of objects in a relationship of mutual confrontation. In the final section, I investigate an important and illuminating parallel to Heidegger's result: the consideration of the relationship between experience and technological ways of thinking that forms the basis of the late Wittgenstein's famous rule-following considerations.

In the singular, complex, and mysterious *Beiträge zur Philosophie (Vom Ereignis)*, written between 1936 and 1938, Heidegger begins to articulate the critique of the technological character of the modern world – a critique that would become a guiding thread of his later thought. As is well known, beginning in the 1940s Heidegger would consistently identify the character of modern times as determined by technological ways of thinking and behaving, ways that, according to Heidegger, manifest the most developed and injurious forms of an abiding forgetfulness or loss that traces almost to the beginning of the Western tradition. The discovery and unveiling of the hidden bases of the technological character of modern thinking and acting thus became an essential and familiar part of Heidegger's narrative interpretation of the history of Western thought from its first beginning with the Greeks to its anticipated, if wholly unforeseeable, future. But in *Beiträge* itself, the Heideggerian critique of technology develops alongside what may be a surprising result even to those familiar with late Heidegger: that the modern



dominance of technology and a technological way of thinking and relating to things – what Heidegger calls, in the *Beiträge*, 'machination' (*Machenschaft*) - is possible only through the conjoint emergence and growth of something that seems at first completely opposed to technology, namely individual, subjective 'lived-experience' or *Erlebnis*.

In this essay, I investigate this surprising connection, arguing that its discovery is essential to the development of Heidegger's views about technology and indeed that understanding it is an important prerequisite to any comprehensive philosophical understanding of technological ways of thinking and operating. I argue that the unity of machination and livedexperience becomes intelligible when both are traced to their common root in the primordial Greek attitude of techne, originally a basic attitude of wondering knowledge of nature. But with this common root revealed, the basic connection between machination and lived-experience also emerges as an important development of one of the deepest guiding thoughts of the Western philosophical tradition: the Parmenidean assertion of the sameness of being and thinking. In the Beiträge's analysis of machination and livedexperience, Heidegger hopes to discover a way of thinking that avoids the Western tradition's constant basic assumption of self-identity, an assumption which culminates in the modern picture of the autonomous, self-identical subject aggressively set over against a pre-delineated world of objects in a relationship of mutual confrontation. In the final section, I investigate an important and illuminating parallel to Heidegger's result: the consideration of the relationship between experience and technological ways of thinking that forms the basis of the late Wittgenstein's famous rule-following considerations. By reading Heidegger and Wittgenstein together, we can better understand how a penetrating analysis of technology and experience can lead us to question some of the deepest assumptions of the Western tradition and orient us towards a fundamentally different kind of thought.

Ι

Reckoning with the Beiträge means reckoning with an enigmatic text, a text whose organization is determined not externally by the usual form of a book, but internally by the uniqueness and singularity of the thinking that Heidegger is trying to enact. Nevertheless, we can begin to understand Heidegger's remarks on the connection between machination and lived-experience by understanding their place in the complex organization of *Beiträge* as a whole. As is indicated by its second, 'essential' or 'proper' (Wesentlich) title, the Beiträge's thematic and performative center is the singular event of Ereignis, the event of 'enowning' through which and as which being appears and comes into its own.2 'Ereignis' is notoriously difficult to define, or even to translate.3

The English-language translators of *Beiträge* render it as 'enowning' in order to reflect the sense of openness and movement present in the German prefix *Er*-, together with the sense of something's coming into its own (*eigen*) or proper domain; but 'event' and 'appropriation' are other common translations that also reflect something of the sense of Heidegger's use of the term. In any case, what is most essential to understand about *Ereignis* is that its occurrence is the fundamental historical occurrence of being itself, its 'opening up' or 'coming into its own', what Heidegger sometimes calls the 'essential swaying of being' [*der Wesung des Seyns*].

The Beiträge articulates the preparation for Ereignis through six richly interlinked sections or 'joinings' [Fügung]. The preparation for the event of Ereignis, Heidegger tells us early in the Beiträge, is necessarily the preparation for a 'crossing' toward 'another beginning' [anderen Anfang] of history. 6 The 'other beginning' can arise only as a fundamentally new stage of Western thinking that escapes the longstanding prejudices and unquestioned foundations of the Western tradition since Plato, now hardened into the increasingly unthinking determination of thinking by technology and calculation. But the preparation for the 'other' beginning is itself only possible through a new understanding of the first beginning, the beginning of Western thinking in the thought of the pre-Socratics. The six 'joinings' that comprise the structure of *Beiträge* exist, therefore, in suspension between two decisive historical moments: the moment of the first beginning, at which the question of being was first formulated by the Pre-Socratic, and then quickly forgotten and covered over in Plato's metaphysical interpretation of the nature of beings, and the never-assured moment of the other beginning, which we can prepare for only by finding a fundamentally new way of asking it.

Heidegger's discussion of the connection between lived-experience and machination unfolds near the beginning of the first of the six joinings, the section entitled 'Echo' or *Anklang*. This 'echo', Heidegger tells us, is the resonance of the 'essential swaying of be-ing' [der Wesung des Seyns] in an age of complete abandonment and loss. The verb Wesung derives from Wesen, the usual word for 'essence', but as the English translators of Beiträge caution, we should avoid thinking of it solely or even primarily in connection with the abstract notion of an essence or type. The 'essential swaying' of being is, rather, be-ing's way of concretely happening, abiding, or enduring. The 'echo', then, is the resonance of be-ing's happening, both at the first beginning and out of the possibility of the 'other beginning', that we can hear today, even when being has almost completely withdrawn.

Indeed, the progress of the Western tradition, Heidegger thinks, has been determined by the ever-increasing withdrawal or forgottenness of being. This withdrawal manifests itself as the prevailing determination of being [das Sein] from the sole perspective of individual beings [die Seienden]. This abandonment culminates in the dominance of technological and calculational

ways of thinking and handling objects. Heidegger refers to the total pattern of these ways of thinking and operating, and the interpretation of beings that facilitates them, as *machination*. From the perspective of machination, all objects become raw material for quantitative measurement, calculation, and manipulation according to the natural-scientific understanding of matter. With its dominance, the making and manipulating of particular objects comes completely to the fore and obscures even the possibility of any question about the essence and nature of being itself. Within the regime of machination, accordingly, we cannot hope to define being, except in the most general and unhelpful terms; all that we can hope to do, given the increasing withdrawal of being, is to recover the possibility of a *question* concerning being, a question whose original formulation and subsequent forgetting is, Heidegger suggests, at the deepest basis of the Western thought.

At the utmost limit of the process, the distress caused by the withdrawal of being and of the question of its possibility is so complete that it manifests itself as a total *lack* of distress, as the impossibility of even raising the question of what has withdrawn and what has been abandoned. But Heidegger nevertheless thinks that it is possible, even in the most advanced forms of abandonment that culminate in the total domination of machination, to detect a faint echo or resonance of the original 'happening' or 'swaying' [Wesung] of being at the time of the first beginning. Perceiving this echo even in the completion of the dominant processes of technological thinking and machination, Heidegger suggests, will simultaneously enable us to gain a first premonition, hint, or intimation of the event of being, as *Ereignis*, in the 'other' beginning, the one for which the thinking of the *Beiträge* aims to prepare. 12

Suspended in this way between these two decisive moments, one long ago and one still to come, Heidegger's discussion of machination necessarily uses (as does much of the Beiträge) two distinct terms to refer to that which has withdrawn from beings in modern times and which may again come into its own. Whereas 'Sein' refers to being as it has been determined within the tradition of Western thought, the tradition that Heidegger calls 'metaphysics', he uses 'Seyn' to refer to being thought outside metaphysics, as it must be thought in the future. 'Sein' is being determined as the 'beingness of beings', nothing more than an abstract, maximally general category or essence of things in general, and conceived in terms of the priority of constant endurance or presence as the highest trait of beings. ¹³ For metaphysical thought, the most perfect kind of being is an eternally present and unchanging being, and any thought about being within metaphysics remains determined by this priority. By contrast, 'Seyn' (which we can write as 'be-ing') means being in its 'other beginning'; it is Seyn which must be thought in order to formulate the question of the truth of Be-ing [der Wahrheit des Seyns] and it is 'Seyn' which is en-owned and sways in *Ereignis*; indeed *Ereignis* is *Seyn* itself, in its

own special happening and 'holding sway'. ¹⁴ The discussion of machination, as an instance of the echo of the first beginning meant to prepare us for the 'other beginning', necessarily exploits the difference between *Sein* and *Seyn*. Thus, though Heidegger tells us that 'machination' means 'a manner of the essential swaying of being' (*eine Art der Wesung des Seins*), at the same time this metaphysical determination of being as beingness 'yields a faint hint of the truth of be-ing itself'. (*Die Machenschaft als Wesung der Seiendheit gibt einen ersten Wink in der Wahrheit des Seyns selbst.*) ¹⁵ The phenomenon of the dominance of machination, though it is determined by the history of being as the history of the traditional interpretation of being as 'beingness', nevertheless provides us, through its distant echoing of the first beginning, with a long-suppressed insight into the possibility of the 'other beginning', the beginning of the thinking of being as *Seyn* and *Ereignis*.

Although machination arises from the abandonment of beings to an understanding that makes the very question of being unformulable, it is to this very abandonment that we must look in order to discern the faint echo of the first beginning. If we can see machination as the abandonment of beings by being – and hence as a process of being, even if only the negative one of its withdrawal – we can begin to see how machination distantly manifests the resonance of the first occurrence of the question of being at the first beginning of the Western tradition. Understanding machination, then, means understanding the withdrawal of being that it manifests as itself an essential mode or aspect of the 'swaying' or happening of being (der Wesung des Seins):

In the context of the being-question, [machination] does not name a human comportment but a manner of the essential swaying of being. Even the disparaging tone should be kept at a distance, even though machination fosters what is not ownmost to being. And even what is not ownmost to being should never be depreciated, because it is essential to what is ownmost to being. ¹⁶

Machination echoes being in an age that has completely forgotten it. Coming to the fore alongside the abandonment of being, machination fosters what is not proper to being (das Unwesen des Seins), what furthers its withdrawal and brings it to completion. But because it does nevertheless echo the essential sway of being, machination can also prepare the way for the event of Ereignis, in which be-ing (Seyn) comes into its own. The character of machination is thus deeply ambiguous; machination comes to the fore as an aspect of the absence and withdrawal of being, but nevertheless does so as an expression or aspect of being itself, and therefore harbors within itself the possibility of giving us a new understanding of it. This notion of the twofold or ambiguous nature of technology is a familiar theme of Heidegger's later writings about technology. In all of these writings, technology retains a fundamental rootedness in being, even though it unfolds in alienation from what is proper to being. Thus, in Die Frage Nach Technik, Heidegger defines

the essence of technology as 'a revealing that conceals'. Technology is, first and foremost, a way that beings and the overall character of beings are revealed. But it is also a way of revealing that hides itself, concealing the interpretation of being that is at its basis. This ambiguity in the essence of technology leads, as well, to a deep ambiguity in its bearing on the future. For though technology is the utmost development of the forgetting and abandonment of being, it is also the site of an utmost danger that conceals the 'saving power', the possibility of a new beginning.

But if we are to hear in machination the distant echo of being and see in its structure the possibility for beginning our preparation for another beginning, more is needed than simply an appreciation of its ambiguous nature. We must also understand the long-suppressed connection between machination and what seems at first most distant from it, lived-experience or Erlebnis. The increasing spread and completion of the dominance of machination leads incessantly, Heidegger says, to the dominance of lived-experience as an 'insipid sentimentality' in which every undertaking and event exists as experience and to be experienced. 18 But behind this banality lies a matter of the utmost importance for the historical project he undertakes. For it is the thought of the hidden connection between machination and lived-experience that will complete the 'basic thrust' of Western history and begin the preparation for the 'other beginning':

If machination and lived-experience are named together, then this points to an essential belongingness of both to each other – a belongingness that is concealed but is also essentially non-simultaneous within the 'time' of the history of be-ing... When thinking-mindfulness (as questioning the truth of be-ing and only as this) attains the knowing awareness of this mutual belongingness, then the basic thrust of the history of the first beginning (history of Western metaphysics) is grasped along with that, in terms of the knowing awareness of the other beginning.

If we can understand what machination and lived-experience have to do with one another, Heidegger suggests, we can understand in the deepest sense how Western metaphysics, arising from the first beginning, has interpreted being and understood the nature of beings, and from this understanding begin to glimpse the futural event of be-ing in the 'other beginning'.

Π

In the context of the development of Heidegger's thought, Beiträge's description of the connection between machination and lived-experience is significant in several ways. First, the connection of machination to 'livedexperience' both illuminates and problematizes Heidegger's inheritance of the phenomenological project of the descriptive analysis of experience. Though Erfahrung rather than Erlebnis is Husserl's usual word for

experience, Heidegger's use of Erlebnis gestures towards the Leben of Husserl's *Lebenswelt* and the temporal primacy of Husserl's 'living present'. With his criticism of 'lived-experience' as conjoint and coeval with machination, Heidegger seems to turn decisively against his teacher's attempt to reduce the abstracted and ramified conceptual network of scientific knowledge to its foundation in actual experience. In The Crisis of European Sciences, Husserl had undertaken the epoche or 'bracketing' of the world of scientific abstraction in order to uncover its foundation in the actually lived world of unabstracted experience. The current crisis of European culture itself, Husserl had complained, arises from a certain overdevelopment or technization in modern science that has led to a forgetfulness of this foundation. The scientific abstraction that Husserl criticizes bears many similarities to Heidegger's 'machination': both arise as a total, all-engulfing framework of conceptualization and calculation; both injuriously neglect the historical origin and basis of this framework. But if, as Heidegger says, machination and lived-experience arise together as what is not ownmost to being, there is no hope for Husserl's revitalizing return to a foundation in lived-experience. The apparent forgottenness of this foundation in the development of the modern scientific outlook is only apparent, the echo of the more fundamental forgottenness of being that inaugurates Western philosophy.

Secondly, and more broadly, Heidegger's identification and critique of the connection between machination and lived-experience mark his most direct rejection of a range of projects in the nineteenth-century philosophy of subjectivity, project that identified subjectivity with 'life' and saw 'livedexperience' as the vital foundation for all aesthetic and cultural productions. Heidegger must certainly have had in mind, for instance, Dilthey's repeated invocation, throughout his 'philosophy of world-views' of the subjective, lived-experience of the individual thinker as the basis for any possible philosophy or artistic creation.²⁰ A decade earlier, in *Being and Time*, Heidegger had already criticized the orientation of Dilthey's investigations toward the problematic of 'life', suggesting that although Dilthey's philosophy contains an 'inexplicit' tendency toward fundamental clarification, this tendency cannot be fulfilled by it, for the philosophical orientation which begins with the life and lived-experience of individual persons (and here. Heidegger identifies not only Dilthey, but also Husserl, Bergson, and Scheler as adherents to this orientation) still cannot raise the question of the being of the person.²¹ As early as Being and Time, therefore, Heidegger begins to develop a critique of Erlebnis that also aims to criticize the prevailing 'anthropologistic' or humanistic philosophy of subjectivity, and indeed the entire subjective/objective contrast that it presupposes. But it is not until the Beiträge that Heidegger develops this critique fully, connecting the rise of lived-experience explicitly to the rise of anthropological thinking in

philosophy, and situating both against the background of the growing dominance of machination and technology.

Heidegger sees no way to surpass the modern idea of subjectivity while remaining within the confines of any existing notion of the 'human'; his critique of subjectivity is therefore simultaneously a critique of every 'anthropologism' and every 'human'-centered way of thinking. In Beiträge, Heidegger finds that the emergence of lived-experience, and its totalization as the universal category of the 'experienceable', 'demands and consolidates the anthropological way of thinking. ²² For in connection with the identification of all kinds of things and happenings as graspable through 'lived-experience', the human being is defined as the animal rationale. The definition begins by defining the human purely biologically, in terms of its animal 'life', and then subsequently adding the determination of rationality, which then can only, Heidegger avers, be understood as a capacity for representing.²³ Livedexperience, then, inaugurates and confirms the prevailing anthropologistic conception of humankind as animal rationale. It does so by restricting 'beings' to a certain limited range, the range of beings that are representable as 'lived through live-experience'. It makes the livability of any being as an experienced representation the criterion of its being altogether, and thereby restricts being to objectivity, understood as set over against subjectivity. The movement of this restriction is that of a pre-delineation, a pre-structuring of the totality of beings to guarantee their representability as objects, their livability in experience, and their comprehensibility to rational man. In the pre-delineation of beings as a whole, lived-experience and experienceability become the univocal standard of their beingness.

With this clarified, a certain aspect of the relationship between machination and lived-experience becomes evident. Machination and lived-experience are internally connected because machination represents the outcome and totalization of the pre-delineation of beings as experienceable. The pre-delineation of beings as experienceable means the pre-delineation of beings as possible objects of experience and representation for subjects; on this basis, man is conceived as the *animal rationale* and the realm of beings as essentially representable and open to his rational knowing. In this sense, the connection between machination and lived-experience underlies and explains Heidegger's entire critique of subjectivity and representation. The connection between machination and lived-experience explains how the totalization of the interpretation of beings as experienceable by man means the totalization of the systematization of objects as definable, calculable, and representable.²⁴

Heidegger goes on to describe the joint arising of machination and lived-experience in terms of three essential 'laws'. First, machination always has the ambiguous character we noted in the last section: 'the more powerfully it unfolds ... the more stubbornly and more machinatingly it hides itself as such ...'. In modern times, machination hides itself, in particular, behind the

priority of *objectivity* as the basic form of actuality. Second, the more machination hides itself in this way, the more it leads to the dominance of what immediately seems directly opposed to it, namely lived-experience. Finally, a third law links draws the epistemological consequence:

The more unconditionally lived-experience becomes the measure for correctness and truth (and thus for 'actuality' and constancy), the less is the prospect of gaining, from this vantage point, a knowledge of machination as such.²⁵

As lived-experience becomes the measure of truth in the modern conception of observation, perception, and experiment, it hides machination, because machination becomes ungraspable from the perceptive of this conception. Machination hides itself, in particular, as objectivity; the determinate character of machination hides behind the indeterminate and neutral appearance of the world of objects ascertainable by observation and experience. Objectivity presents itself as the basic form of actuality, and thereby hides the joint pre-determination of objects by machination and lived-experience. In this way, lived-experience and objectivity are linked in their historical arising; the more that objectivity is developed as a universal system, the more that it demands subjective lived-experience as its criterion and standard.

III

Machination and lived-experience, then, come to prominence together, in modern times, when every event and object comes to be understood as material for the experience of the experiencing subject, and hence subject to the pre-delineation imposed by a framework of possible representation and representability. This pre-delineated framework is what Heidegger would later call Gestell or 'enframing', the essence of technology itself according to the late essay 'The Question Concerning Technology'. Its imposition leads to the interpretation of all beings as measurable and calculable, and to the growth and furtherance of the forms of technological creation and manipulation that this universal measurability and calculability makes possible. But to understand how the spread of machination echoes the first beginning in the *Beiträge*, we must understand not only how it is connected with lived-experience in modern times but also how their joint arising traces to a single origin at that fundamental moment. Heidegger goes on to trace the hidden history of the development of machination through a related concept, the concept of the 'gigantic' [Das Riesenhafte]. The 'gigantic' refers to the enormous, world-distorting forces unleashed by modern technology, but also to the basis of the possibility of these forces in machination itself. At first, the 'gigantic' simply means the unlimited processes of quantification and

assumptions of quantifiability that make possible modern technological means of expression and control. But when understood in a broader historical perspective, the ground of the 'gigantic' is not just the absence of limits on the process of quantification, but a fundamental aspect or feature of quantity itself:

But as soon as machination is in turn grasped being-historically, the gigantic reveals itself as 'something' else. It is no longer the re-presentable objectness of an unlimited quantification but rather quantity as quality. Quality is meant here as the basic character of the quale, of the what, of the ownmost, of be-ing itself.

Along with the arising of machination, the gigantic arises as a totalization of the quantification of beings and their submission to a universal system of calculation. In the gigantic, quality becomes quantity; the basic determination of the nature of beings becomes their calculability and quantifiability. Heidegger's thinking, accordingly, tries to understand the hidden ground for this way of determining the nature of beings. Understanding it means understanding the emergence of the quantitative from the qualitative, the emergence of what is *not* proper to being from what is proper to it, namely quality. Quality remains the hidden core of quantity, and it is only on the basis of the relationship between them that quantity can emerge to completion in the total system of machination and the gigantic. But an essential condition for the emergence of machination and the gigantic is that this relationship remain concealed from the perspective of the objectivity that machination brings forth and totalizes.

The relationship between quantity and quality, then, represents a more primordial and less self-concealed form of the relationship between machination and lived-experience. The obscurity of the former relationship makes possible the conjoint emergence of the terms of the latter relationship; by understanding the relationship between quality and quantity, we begin to see the heretofore hidden condition for the possibility of the emergence and domination of machination, lived-experience, and the pre-delineated framework of representability that they share. This reduction of the link between machination and lived-experience to the primordial connection of quantity and quality invites parallels from elsewhere in the history of twentiethcentury thought. In contemporary analytic philosophy, for instance, the question of the scientific explicability of conscious experience - its explanation, in Heidegger's terms, from the perspective of machination and calculability – is understood as the question of the reality of qualia, or purely qualitative elements of experience. Here machinational explanation appears to be set off against the essence of experience; personal, subjective experience appears to be systematically resistant to scientific and technological modes of explanation. But the identification of what remains resistant to explanation as qualia might well be thought to signal a kind of inexplicit recognition or

remembrance, from within the epistemological dominion of machination, of the distant and still-hidden foundation of calculational and quantitative ways of thinking in an older experience of quality, prior to and not subject to the possibility of calculation.

At first, the universal calculability of machination seems simple and self-evident. From the perspective of modern times, universally determined by the growth of machination, few things seem as obvious as that objects of all kinds can be measured, calculated, and accordingly manipulated. But in the context of Heidegger's historical narrative, this simplicity emerges as an illusion, the result of the 'covering-up' of a basic and fundamental 'lack':

Why does the gigantic not know what is overflowing? Because it arises from the covering-up of a lack and puts this covering-up forth as the illusion of an unbounded openness, of a possession. Because the gigantic never knows what overflows – the inexhaustible unexhausted – therefore what is simple must be refused to it.²⁷

The 'gigantic' can appear as a total boundlessness of the processes of calculation and technology. But it can do so only because it covers up its own ground in the original derivation of quantity and the process of unlimited quantification from quality and the qualitative. Heidegger indicates that we can understand this ground only by comprehending the original, non-quantitative understanding of the nature of beings that reigned at the time of the first beginning. This understanding of nature, not as a particular domain or set of beings, but as the nature of beings themselves, was called 'phusis' by the Greeks.

In the *Beiträge* discussion, Heidegger invokes the original understanding of beings as 'phusis' without explaining it in any detail; for more insight, we must look to his less esoteric published writings. In the course *Basic Questions of Philosophy*, written contemporaneously with *Beiträge*, Heidegger considers the origin of technology as the origin of *techne*, the Greek term for the particular attitude toward beings that culminates in today's advanced calculational processes of technological manipulation and control. He finds, though, that *techne* does not originally arise from calculation or the quantitative at all, but rather from a basic attitude of wonder at beings in the world. *Phusis* itself is the conception of beings that encounters them from within this attitude of wonder. Given this, original *techne* is already, in a certain sense, a proceeding against *phusis*. But it is not yet the totalizing, world-involving process of modern technology.²⁸

Primordially, *techne* is a perceptual knowledge of beings. Though it does not yet involve the systematic ordering of all beings according to principles, *techne* already proceeds 'against' beings, trying to 'grasp beings as emerging out of themselves in the way they show themselves ... and, in accord with this, to care for beings themselves and to let them grow, i.e., to order oneself within beings as a whole through productions and institutions'.²⁹ In this

'against', we can already detect the roots of the interpretation of beings that is evident in the etymology of the German word for 'object': Gegenstand, or, literally, that which stands against. Primordial techne will eventually lead to the determination of beings as objects and the oppositional subject/object relationship that characterizes the dominance of machination. But in primordial techne, Heidegger finds a more basic 'against'; it is the 'against' of perceptual knowledge grounded in wonder as a basic disposition. This perceptual knowledge accords with, rather than opposes, the way that beings can show themselves in truth, what Heidegger elsewhere calls poiesis. Indeed, it implies a procedure 'against beings, but in such a way that these themselves precisely show themselves'. This description of original techne, of course, recalls Being and Time's definition of phenomenology as the procedure of letting 'what shows itself be seen from itself, just as it shows itself from itself'. ³² Originally, *techne* is the respectful looking that perceives the being in its self-showing openness. The relationship of man to beings in original techne is neither the relationship of particular subject to particular object nor the challenging relationship of man to beings in technology. Instead, it is the appearing of phusis, or the self-showing of beings in the resonance and strikingness – the wonder – of their own being.

But although it is itself neither machination nor lived-experience, the primordial seeing of techne originates both machination and lived-experience in their togetherness. For although primordial techne remains a nonconfrontational seeing, the exteriority of techne to phusis already prepares the objectification of beings and of the dominance of lived-experience as the unified standard of all events and happenings. From the basic proceeding of techne 'against' phusis will emerge the mutually challenging relationship in which lived-experience, as a universal standard of experienceability, predelineates beings and prepares them for technological and machinating control. In understanding the phenomenology of originary techne, we understand the showing of being in techne prior to the forgetting and obscurity of being that transforms techne into machination and starts it on the path of total domination of objects. Still, the possibility of this withdrawing of being is already essentially prepared by basic *techne*:

The basic attitude toward *phusis, techne*, as the carrying out of the necessity and need of wonder, is at the same time, however, the ground upon which arises omoiosis, the transformation of aletheia as unconcealedness into correctness. In other words, in carrying out the basic disposition itself there resides the danger of its disturbance and destruction. For in the essence of techne, as required by phusis itself, as the occurrence and establishment of the unconcealedness of beings, there lies the possibility of arbitrariness, of an unbridled positing of goals and thereby the possibility of escape out of the necessity of the primordial need.

The forgetting of being inaugurates machination by covering over the basic need of wonder, the need of the basic attitude that takes beings into respectful consideration and care. Without this basic attunement toward wonder, the prevailing way of revealing beings becomes the correctness of representations rather than their self-showing in original unconcealment, what Heidegger calls *aletheia*. The overall character of beings itself becomes objectivity rather than *phusis*; beings are understood as objects for subjective representation, and the standard of such representation is their universal experienceability in lived-experience.

In the passage, Heidegger also names the origin of this process of forgetting and covering over whereby beings become objects and truth becomes correctness. It is omoiosis, or identity. Identity itself is the origin of the 'disturbance and destruction' that transforms the original attunement toward beings into one of representation and subjectivity. After the onset of this 'disturbance and destruction', identity plays an essential role in determining the nature of beings, leading to the determination of the overall character of beings as objectivity and of truth as representational correctness. At first glance, this claim seems puzzling. How could such a thing as identity, surely among the most abstract and contentless of philosophical concepts, play a fundamental role in determining the prevailing conception of the nature of objects and the everyday ways of thinking and operating that arise from this conception? But as we shall see, Heidegger thinks that the thought of identity, and in particular the tautological principle of the self-identity of objects, itself underlies, at the deepest level, the conjoint arising of machination and livedexperience as a universal standard for beings. To see how, though, we must look elsewhere in Heidegger's corpus.

IV

With the location of the joint origin of lived-experience and machination in original *techne*, the togetherness of these seeming opposites becomes thinkable. In *Beiträge*, Heidegger says also that the thought of the original unity of lived experience and machination 'completes the basic thrust of Western history' and essentially prepares our thinking for *Ereignis*. The preparation for *Ereignis* is intelligible as soon as the true character of machination's echo of the first beginning becomes apparent. This character, in turn, becomes apparent as machination's origin in primordial *techne*, from which machination and lived experience arise jointly under the condition of the forgottenness of being. In *Beiträge*, Heidegger specifies, in a distinct but related way, the connection between machination and being's essential swaying in the first beginning:

Machination and lived-experience are formally [formelhaft] the more originary

version of the formula for the guiding-question of Western thinking: beingness (being) and thinking (as re-presenting com-prehending).³

This formula recalls the fragment of Parmenides that Heidegger investigates in several of his later works, most significantly *Identity and Difference* and What is Called Thinking:

τὸ γὰρ αὐτὸ νοεῖν ἐστίν τε καὶ εἶναι

This fragment, Heidegger says in What is Called Thinking, is usually translated as: 'For it is the same thing to think and to be'. This saying of Parmenides captures, according to Heidegger, 'the basic theme of all of Western-European thinking'. 35 It echoes in Kant's identification of the conditions for the possibility of experience with the conditions for the possibility of the objects of experience, and Hegel's 'Being is Thinking'. But the to auto, or sameness, of the Parmenides fragment is not omoiosis, or identity, even though sameness and identity are treated as interchangeable in the tradition of Western metaphysics.³⁶ One of the most basic foundations of Western thinking, Heidegger suggests, can begin to come to light if we can understand the difference between this sameness and this identity.

In Identity and Difference, Heidegger explores the implications of the principle of identity: A = A. This principle, Heidegger says, is itself a keynote of Western thought. It asserts the sameness of each particular thing with itself. But rather than simply rest with this seemingly self-evident principle, Heidegger proceeds to inquire into its hidden ground:

Sameness implies the relation of 'with', that is, a mediation, a connection, a synthesis: the unification into a unity. This is why throughout the history of Western thought identity appears as unity.

Throughout the history of Western thought, identity has been considered in connection with unity: what is self-identical is unified with itself. But this relationship of the thing with itself becomes more than simple unity as the Western tradition progresses. In the speculative idealism of Fichte, Schelling, and Hegel, Heidegger suggests, self-identity, understood in terms of the selfhood of the subject, becomes articulated as a complex process of selfrelation. What is decisive for the possibility of speculative idealism is the possibility of seeing the self's relationship of self-identity as one that is capable of mediation, and thus one that can exist and develop in a variety of different ways. With this notion of mediated self-identity, the original principle of identity comes to bear a philosophical weight that brings to completion its historical itinerary. If we can think of the 'is' of the proposition 'A is A' not as a purely abstract relation of unity, but as an expression of being itself, Heidegger suggests, we can understand how the principle of identity expresses an ancient and guiding determination of the nature of beings:

For the proposition really says: 'A is A'. What do we hear? With this 'is', the principle

tells us how every being is, namely: it itself is the same with itself. The principle of identity speaks of the Being of beings.

As a law of thought, the principle is valid only insofar as it is a principle of Being that reads: To every being as such there belongs identity, the unity with itself.

What the principle of identity, heard in its fundamental key, states is exactly what the whole of Western European thinking has in mind – and that is: the unity of identity forms a basic characteristic in the Being of beings. Everywhere, wherever and however we are related to beings of every kind, we find identity making its claim on us.³⁸

Western thought speaks repeatedly the unity of identity (die Einheit der Identität). In speaking the unity of identity and the identity of the same, it subjects beings to the basic law that determines the identity of any object. This basic law, in turn, pre-determines the field of possible beings, making possible the pre-delineation of the world accomplished by machination and lived-experience. When the formal identity of 'A is A' is understood as the selfhood of a self, it makes the self-identical self of Hegel and Schelling the center and locus of this pre-delineation. Subjective experience becomes the universal and universalizing standard for the nature of beings. Livedexperience emerges along with machination as the total systematicity enabled by the application of the self-identity of the experiencing subject to the lawbound world of objects.

The Parmenides fragment speaks of the sameness (to auto) of thinking and being. In Western metaphysics, this sameness is understood as identity. What would it mean to think the sameness of thinking and being, without understanding this sameness as the self-identity of the self? For Heidegger, to think the sameness of thinking and being non-metaphysically is to understand the mutual appropriation of being and man, their appropriate and reciprocal belonging together and to each other. Thought this way, the togetherness of being and thinking is nothing like the unity of a philosophical system. Instead, it is the belonging of man to being and being to man. In one form of this belonging, man and being challenge one another: 'The name for the gathering of this challenge which places man and being face to face in such a way that they challenge each other by turns is "the framework" (Gestell)'. 41 In Gestell, the togetherness of man and being spoken by Parmenides becomes a mutual challenging. Lived-experience is erected as a universal standard for beings, and beings, as objects, are subject to the unity of the self-identical and infinitely repeated application of this standard.

In the Beiträge passage, Heidegger calls the relationship between machination and lived-experience the more original form of the original relationship between thinking and being, the relationship that Parmenides puts into words in his ancient saying.⁴² In originary techne, noein is not thinking as representing or calculating, but as the basic attitude of a perceptual knowing grounded in the attunement of wonder and the

understanding of beings as phusis. Under the condition of the forgottenness of being, sameness (to auto) becomes identity (omoiosis) and noein becomes thinking in the sense of Kant and Hegel. In this development, the originary sameness of thinking (as *noein*) and being (estin) becomes the technological challenging-forth of beings and the standard of lived-experience that makes it possible. But the connection of machination and lived-experience continues to pose a form of the 'guiding-question of Western thinking'. For by understanding of the connection of machination and lived-experience, we begin to grasp the meaning of Parmenides' fragment, and thereby to understand the meaning of being at the 'first beginning' of history, from which understanding we can begin to prepare for the 'other beginning' of Ereignis.

V

In 1930, six years before Heidegger began writing his Beiträge, Wittgenstein wrote the following as part of the introduction to his planned *Philosophical* Remarks:

This book is written for such men as are in sympathy with its spirit. This spirit is different from the one which informs the vast stream of European and American civilization in which all of us stand. That spirit expresses itself in an onwards movement, in building ever larger and more complicated structures; the other in striving after clarity and perspicuity in no matter what structure. The first tries to grasp the world by way of its periphery – in its variety; the second at its centre – in its essence. And so the first adds one construction to another, moving on and up, as it were, from one stage to the next, while the other remains where it is and what it tries to grasp is always the same.4

In this section, I show that Wittgenstein's thought, like Heidegger's, explores the relationship between lived-experience and machination in order to issue a deep challenge to the prevalence of the guiding metaphysical idea of the selfidentity of the same. The attitude Wittgenstein criticizes in the *Remarks*, the spirit of onward and upward movement, is the attitude of machination. And Wittgenstein's critique of the metaphysical picture of the rule, as developed in the *Philosophical Investigations*, aims at the essence of what is 'always the same' through an investigation of the same connection of machination and lived-experience that Heidegger discovers in the course of his own thought.

In criticizing the constructional spirit 'which informs the vast stream of European and American civilization', Wittgenstein may well have had in mind the constructional project of Carnap's Der Logische Aufbau der Welt, published just two years previously. In Aufbau, Carnap had outlined an optimistic and utopian project of epistemological 'construction' of the scientific world:

If we allot to the individual in philosophical work as in the special sciences only a partial task, then we can look with more confidence into the future: in slow careful construction insight after insight will be won. Each collaborator contributes only what he can endorse and justify before the whole body of his co-workers. Thus stone will be carefully added to stone and a safe building will be erected at which each following generation can continue to work. ⁴⁴

The constructional project of the *Aufbau* aims to display the epistemological structure of science by revealing the concepts of science as logical constructions from basic, uninferred entities. According to Carnap's conception, science itself is a network of logical relations, a unified field of logically interrelated propositions. The relationality of this total network, Carnap suggests, is the condition for the possibility of objectivity itself:

Now, the fundamental thesis of construction theory ... which we will attempt to demonstrate in the following investigation, asserts that fundamentally there is only one object domain and that each scientific statement is about the objects in this domain. Thus, it becomes unnecessary to indicate for each statement the object domain, and the result is that *each scientific statement can in principle be so transformed that it is nothing but a structure statement*. But this transformation is not only possible, it is imperative. For science wants to speak about what is objective, and whatever does not belong to the structure but to the material (i.e. anything that can be pointed out in a concrete ostensive definition) is, in the final analysis, subjective. ⁴⁵

Carnap's conception of objectivity as the form of relational description of science, in connection with his utopian ambitions for construction theory, manifests the key elements of Heidegger's description of machination. The logical form of objectivity is the pre-delineated field of lawbound relations among objects, explainable in virtue of their submission to this predelineation. As Heidegger suggests, this lawful pre-delineation is itself, according to Carnap, the essential condition for the possibility of objectivity. In the logical field of propositional relations, the totality of beings is subject to explainability and reducibility. Moreover, Carnap's project essentially involves the connection between this machinational pre-delineation and lived-experience as a universal standard. For the epistemologically illuminating reconstruction of a scientific concept reduces it to its basis in immediate experiences, erlebnisse or 'erlebs'. In Carnap's picture, therefore, the correlate of the total field of objectivity is the standard of experienceability by a subject. Objectivity is possible only on the basis of the formalizability of all lived-experiences, their regimentation in a total web of scientific explanation. With this relation, Carnap's picture inherits Kant's identification of the conditions of being (as objectivity) with the conditions of possible experience (as subjectivity); and he situates these conditions explicitly within a total pre-delineated world-picture of unitary explanation.

Wittgenstein's *Philosophical Investigations* criticizes the joint configuration of machinational, technical thinking and subjective lived-experience in

two interrelated movements, the so-called 'rule-following considerations' and the 'private language argument'. As is well known, the argument against private language attempts to show the incoherence of the idea of a subjective language, particular to one person, in virtue of which she could name her essentially private sensations or experiences. It shows the incoherence of this idea by showing that such naming would be in a certain sense idle, empty, or impossible, that it could do nothing to give the name a stable relationship to its bearer. In Heidegger's language, the critique of private language shows that no standard of lived-experience, no criterion of experienceability-by-asubject, can do the work of authorizing the total pre-delineation of a unified field of objectivity and explainability of beings, as it appears to do on Carnap's picture.

In the context of Wittgenstein's project of perspicuously viewing the actual use of our language in order to clear up philosophical perplexities, the concept of the rule emerges as a particular point of confusion. When discussing rules, we are particularly tempted to misinterpret the grammar of our language, giving it an interpretation that it does not bear. For we invoke rules when we are tempted to establish and explain the submission of beings to the possibility of overall explanation and clarification. Thus, explanatory projects like Carnap's project make the rule-based and lawbound character of beings the basis of their total explainability and characterizability as scientific. In reminding us of the actual character of our language of rule-following, Wittgenstein shows the failure of this metaphysical use of rules to establish its own ground. He shows us that the metaphysical interpretation according to which beings are submitted to a unified regime of explanation insofar as they are rule-bound fails to accomplish its goal, because it conceals its own origin in more ordinary uses of the concept of a rule.

Considered in connection with Heidegger's thought, the concept of a rule has a special and basic significance. For the rule, in the basic picture of machination, is the most essential condition under which a subject's experience can act as standard and criterion for the object. Only in virtue of a rule-bound pre-delineation of beings does the self-identical subject guarantee the submission of the range of beings, as objects of representation, to its thinking. In the self-identity of the rule, the self-identity of the subject itself is dispersed and made the standard of the world of objects; for it is the universal applicability of the rule that establishes the possibility of the predelineation of the world as explainable in relational, causal, and lawbound terms. The universality of the rule, then, licenses the projection of the selfidentity of the subject into the assumption of the lawbound unity of the world of objects, guaranteeing the fundamental comprehensibility of all objects by guaranteeing their universal experienceability. It is this universality of the rule, its guarantee of infinite application undisrupted by heterogeneity, difference, and particularity, that Wittgenstein aims to critique.

One specific way that Wittgenstein criticizes the application of the idea of rules in projects like Carnap's is to remind us of the close connection between the use of the concept of the 'rule' and the concept of the 'same':

223. One does not feel that one has always got to wait upon the nod (the whisper) of the rule. On the contrary, we are not on tenterhooks about what it will tell us next, but it always tells us the same, and we do what it tells us.

One might say to the person one was training: 'Look, I always do the same thing: I \dots '.

224. The word 'agreement' and the word 'rule' are related to one another, they are cousins. If I teach anyone the use of the one word, he learns the use of the other with it. 225. The use of the word 'rule' and the use of the word 'same' are interwoven. (As are the use of 'proposition' and the use of 'true'). 46

Under the pressure of the demand to explain what it is to follow a rule, our natural temptation is to explain the rule in terms of the identity of the same. We think of the rule as a self-identical structure that *repeats itself infinitely* by *telling us the same* at every stage. The rule, we are tempted to think, 'always tells us the same, and we do what it tells us'.

To see the philosophical temptation at the root of the line of thought that Wittgenstein is criticizing, consider the following sequence: 2 4 6 8 10 Having given the partial sequence, we might now give the rule of the series: it is 'add two'. The rule itself can be thought of as a finite item. But when we think of the rule as the metaphysical item that generates the series, we think of it repeating itself infinitely. As we apply the rule to generate more of the series, we do the same thing again and again. We can do so because the rule itself remains the same. The rule itself is not affected by the conditions of its application. The *self-identity* of the rule guarantees the *sameness* of each of its infinite applications.

According to the thinking that Wittgenstein criticizes, then, to follow a rule consistently or correctly is to do the same thing, again and again, ignoring or leaving no room for any possible heterogeneity of instances of its possible application and development. The assurance provided by this characterization, however, blinds us to the dependence of our concrete acts of rule-following on their particular contexts. Attempting to explain, rather than describe, what it is to follow a rule, we picture to ourselves the selfidentity of an entity the same with itself in all of its instances. It is this picturing that underlies the misleading picture of the rule that Wittgenstein criticizes, the picture of the rule as a 'rail laid to infinity', a selfsame, stable bearer of regularity whose only application is infinite repetition.⁴⁷ And to advert to the assurance of the rule in explaining our practices of counting and calculating is to advert to the certainty of an idealized process of thought that would be applicable in any situation whatsoever, that would make the subject the self-identical thinker of the same in any circumstance or context. Accordingly, it is to dissimulate in advance any possibility of the

various kinds of difference, found in the openness of the horizon of possible applications of a rule, that could subvert its underlying stability and disrupt the ideal certainty of this ideal subject in encountering diversity and heterogeneity.

The 'rule-following considerations' problematize this metaphysical picture of the rule by posing a paradox. ⁴⁸ The paradox shows that the metaphysical description of the rule – the description according to which the rule repeats the identity of the same – fails to afford us the explanation it seems to. For as long as the rule is thought metaphysically, any application of the rule still needs another explanation. The rule, thought metaphysically, needs an interpretation in order to be applied at all; but then the interpretation itself must be interpreted, and so on. The self-identical rule, meant to guarantee the certainty of the self-identical subject in applying a universal standard of experience to all beings, falls short of this guarantee exactly where it is called upon to interact with the subject. No metaphysical item – no self-identical agent of infinite repetition – can explain what we call 'following a rule' in the particular cases in which we appeal to that notion.

Instead, Wittgenstein's 'reminders' of the grammar of our language as it unfolds in our actual practices and ways of life begin to give us an alternative picture of the cases in which we are tempted to say that a rule has been followed, a purely descriptive picture that does not attempt to reduce or disclaim the variety and complexity of the many types of cases in which we might be tempted to speak of rules and rule-following.⁴⁹ If we resist the temptation to explain these cases in terms of the metaphysical concept of the rule and the infinite application of a self-identical item, we can begin to perceive the actual diversity and variety that is shown by our language in its application to our lives. This paves the way for a picturing or understanding of the world as a whole that does not rely on the underlying metaphysical idea of self-identity to disclaim the possibility of essential heterogeneity or difference in the applications of a rule or in the situations to which it applies. In the new picture, machination and lived-experience no longer dominate the interpretation of beings, for the assurance upon which their dominance depended, the assurance invoked by the metaphysical conception of the rule as a self-identical item capable of infinite application, has been challenged and shaken. No longer can the self-identity of the rule appear to support the application of rulebound and calculational thinking to all kinds of beings, and no longer can it find comfort for this application in the notion of subjective, private lived-experience as the universal standard of experienceability. Instead, with the explanatory pretensions of the metaphysical notion of the rule deflated, our language and practices can begin to show themselves in all of their inherent complexity, diversity, and heterogeneity, evincing or preparing a fundamentally new way of understanding the nature of the beings that we ourselves are.

NOTES

- 1 '... even the attempt ... must avoid all false claim to be a "work" of the style heretofore'. *Contributions to Philosophy (From Enowning)*. Trans. Parvis Emad and Kenneth Maly (Bloomington: Indiana University Press, 1999), p. 3.
- 2 Contributions, section 1.
- 3 Heidegger himself suggested that *Ereignis* is as little translatable as the Greek *logos* or the Chinese *Tao.* (*Identity and Difference*, trans. Joan Stambaugh (New York: Harper and Row, 1969), p. 36; quoted in Translator's Foreword to *Contributions to Philosophy (From Enowning)*, p. xix.)
- 4 'Translators' Foreword' to *Contributions*, pp. xix–xxi. Thomas Sheehan has recently argued that Heidegger does not intend *Ereignis* primarily to mean 'appropriation' or 'enowning', as is suggested by its etymological connection with 'eigen' ('own' or 'proper') but rather to reflect an older etymological root of the term, eraugen/ereugen ('bringing something into view'.) As Sheehan argues, this older etymology implies connotations of 'opening up' and 'appearing' that we should certainly keep in mind, along with the more usual translations, when we consider *Ereignis*. ('A Paradigm Shift in Heidegger Research', *Continental Philosophy Review* 34, pp. 183–202).
- 5 Heidegger's use of this term for the book's sections indicate its overall structure, the structure of a 'fugue' composed of richly interconnected movements (*Contributions*, section 39). For helpful explication of this structure, see, e.g., Walter A. Brogan, 'Da-sein and the Leap of Being' in C. E. Scott et al. (eds), *Companion to Heidegger's Contributions to Philosophy* (Bloomington: Indiana University Press, 2001).
- 6 Contributions, section 1.
- 7 Contributions, sections 50, 51.
- 8 'Translators' Foreword' to Contributions, pp. xxv-xxvi.
- 9 As Heidegger uses it, the term *die Seienden* can be translated 'beings' or 'entities'. Entities are whatever has any kind of existence: things and objects, but also properties, acts, and events
- 10 In colloquial German, *Machenschaft* refers, like the English word 'machination', to calculating and technical ways of making and doing; but we should also keep in mind the etymological connection between *Machenschaft* and *Macht* or power, as well as the corresponding resonances of Heidegger's critique of machination with his critical consideration of Nietzsche's 'will to power' [Wille zur Macht].
- 11 Contributions, section 50.
- 12 But the second beginning is by no means just like the first beginning in its fundamental character and attitude. Whereas the first beginning was 'attuned' towards wonder and the questioning contemplation of beings, the second beginning is attuned toward 'foreboding' and opens the question of the truth of be-ing itself. (*Contributions*, section 6).
- 13 See, e.g., Susan M. Schoenbohm, 'Reading Heidegger's *Contributions to Philosophy*'. In C. E. Scott, et al. (eds), *Companion to Heidegger's Contributions to Philosophy* (Bloomington: Indiana University Press, 2001).
- 14 For a helpful analysis, see Richard Polt, 'The Event of Enthinking the Event'. In C. E. Scott et al. (eds), *Companion to Heidegger's Contributions to Philosophy* (Bloomington: Indiana University Press, 2001).
- 15 Contributions, section 61.
- 16 Contributions, section 61.
- 17 '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 propriative event of revealing and so radically endangers the relation to the essence of truth. On the other hand, enframing propriates for its part in the granting that lets man endure as yet inexperienced, but perhaps more experienced in the future that he may be the one who is needed and used for the safekeeping of the essence of truth. Thus the rising of the saving power appears'. ('The Question Concerning Technology', in D. Ferrell Krell (ed.), *Basic Writings* (San Francisco: Harper, 1993), p. 338.)
- 18 Contributions, section 58.

- 19 Contributions, section 61.
- 20 See, e.g., Dilthey's Philosophy of Existence: Introduction to Weltanschauungslehre, trans. William Kluback and Martin Weinbaum (New York: Bookman, 1957) and Poetry and Experience, edited, with introduction, by Rudolf A. Makkreel and Frithjof Rodi (Princeton: Princeton University Press, 1985).
- 21 Being and Time, trans. J. Stambaugh (Albany, New York: SUNY Press, 1996), p. 44.
- 22 Contributions, section 66.
- 23 Contributions, section 63.
- 24 In a passage that suggestively, and presumably deliberately, echoes Kant's famous definition of 'enlightenment' in Was Ist Aufklärung?, Heidegger explicitly connects the conjoint growth of machination and lived-experience to the arising of the possibility of the universal calculability and scientific explainability of objects:
 - 'Both ["machination" and "lived-experience"] name the history of truth and of beingness as the history of the first beginning.
 - What does machination mean? That which is let loose into its own shackles. [Das in die eigene Fesselung Losgelassene]. Which shackles? The pattern of generally calculable explainability, by which everything draws nearer to everything else equally and becomes completely alien to itself - yes, totally other than just alien. The relation of non-relationality'. (Contributions, section 67).
- 25 Contributions, section 61.
- 26 Contributions, section 70.
- 27 Contributions, section 70.
- 28 Basic Questions of Philosophy: Selected 'Problems' of 'Logic'. Trans. R. Rojcewicz and A. Schuwer. (Bloomington: Indiana University Press, 1994), pp. 153-55.
- 29 Basic Questions, p. 155.
- 30 'There was a time when it was not technology alone that bore the name techne. Once the revealing that brings forth truth into the splendour of radiant appearance was also called techne. There was a time when the bringing-forth of the true into the beautiful was called techne. The poiesis of the fine arts was also called techne'. ('The Question Concerning Technology', p. 339).
- 31 Basic Questions, p. 155.
- 32 Being and Time. Trans. J. Stambaugh. (Albany, NY: SUNY Press, 1996), p. 34.
- 33 Basic Questions, p. 155.
- 34 Contributions, section 61.
- 35 What is Called Thinking? Trans. J. Glenn Gray (New York: Harper, 1968), p. 244.
- 36 What is Called Thinking?, p. 241
- 37 Identity and Difference, p. 25.
- 38 Identity and Difference, pp. 25-26.
- 39 Identity and Difference, p. 31.
- 40 Identity and Difference, p. 29.
- 41 Identity and Difference, p. 35.
- 42 Contributions, section 61 (quoted above).
- 43 Philosophical Remarks. Edited by Rush Rhees and translated by Raymond Hargreaves and Roger White (Chicago: University of Chicago Press, 1975), p. 7.
- 44 The Logical Structure of the World and Pseudoproblems in Philosophy. Translated by Rolf A. George (Berkeley: University of California Press, 1967), pp. xvi-xvii.
- 45 Logical Structure, p. 29.
- 46 Philosophical Investigations, trans. G. E. M. Anscombe (New York: Macmillan, 1953).
- 47 Philosophical Investigations, para. 218.
- 48 Philosophical Investigations, para. 201.
- 49 Philosophical Investigations, para. 126-127, para. 133.

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