The Sense of Finitude and the Time of Sense

(Chapter 6 of Draft MS: The Logic of Being: Heidegger, Truth, and Time)

In part I of this book, we considered the relationship of sense to truth as indicated under a twofold structural condition: that of the "logical" analysis of linguistic truth as well as that of the "ontological" analysis of *disclosive* truth as the condition for the unconcealment of entities. In each case, the question of the basis of truth in the structure of thinkable sense was pursued on both ontological and metaformal grounds, up to the point at which this structure was itself seen to have an ultimate determining basis in the problematic of the relation of thought to being as such. This relation, as I argued in chapter 5, is variously schematized according to the relational figures of totality, reflexivity and the infinite unfolded in the four distinct orientations of thought. These four orientations propose just as many figures of the implications of the structure of the *infinite* for the availability within thought of the real structure of sense, or the conditions under which beings can present themselves there. Nevertheless, the orientations differ according to their ability to capture the implications of the radical paradoxes that emerge, under contemporary conditions, in the formal thought of the relationship of reflexivity to (infinite) totality itself. In particular, only the two "post-Cantorian" orientations - the 'generic' and the 'paradoxico-critical' -- overcome the characteristic figure of closure in which metaphysical thought promulgates the oblivion of the ontological difference: namely that of a totality of thinkable beings that is simultaneously complete in itself and ultimately self-consistent. This combination of totality and consistency with respect to beings can, as we saw, no longer be maintained under the condition of the metalogical duality between consistent incompleteness and inconsistent completeness, which relates to the ontological difference as its meta-formal articulation and structural explication. This basis for the "metaphysical" assumption of the combination of completeness and consistency is thus, in the Heideggerian jargon, nothing other than the oblivion of the structural and historical-epochal determination of the intelligibility of beings on the basis of the event of their truth, the historical withdrawal of being itself. But the development and radicalization of the thought of the difference allows, as I argued, for the ontological and formal figures of this determination of truth and sense once more to be brought into view on a metaformal and ontological basis.

As we have seen, the question of the basis and structure of sense raises a fundamental problem about the relationship of the finite and the infinite. How does a constitutively finite being "gain access" to the properly infinite dimension of sense as the basis for the intelligible presence of entities and the truth-functional meaning of sentences? The question is sharpened with the rejection of the "metaphysical" orientations of onto-theology and constructivism. For this rejection is sufficient radically to pose the question of the prior *ontological* basis of the *constitution* or *genesis* of sense, the ontological constitution of what is thought in both "metaphysical" orientations as its specific *a priori*. If both onto-theology and constructivism are indeed here rejected, in particular, this constitution can no longer be thought simply in terms of either the presupposed existence of a realm of eternal ideal contents or the constitutive activities of an intra-temporal subject. Rather, the question of constitution can be seen instead in the light of its ultimate metaformal determination, whereby the reflective forms which make

available an interpretation of being in facticity themselves serve as a basis for the structural indication of the forms of genesis and givenness. But as Heidegger himself often points out, what comes to the fore here with the question of the ontological basis of what is traditionally thought as the priority of the *a priori* is thus also a specifically *temporal* question. It is nothing other than the question of the possibility that a being situated in time bears the capacity to think and comprehend temporal being (including centrally the phenomena of motion, change, and becoming) as such. This is, though, again nothing other than the problem that Plato's Eleatic Visitor poses originally in the *Sophist* (chapter 1, above) that of the contact or relationship of thinking with being whereby temporal determination is thinkable (as it must indeed be) of "what is" as such and in general.

One way in which the "finite" resources of a temporally and spatially limited subject have been thought to allow the attainment "infinite" capacities is on the basis of an internalized symbolic *representation* of finitely representable *rules*. On this picture, the internalization of such a representation in learning or its previous presence as 'hard wired' in neural architecture provides the basis for an underlying linguistic or cognitive 'competence' which then accounts for an actor's actual performance. This conception finds expression in projects of explaining and analyzing natural-linguistic grammar and meaning such as Chomsky's and (on one interpretation) Davidson's, wherein it is finally overcome (as we shall see) by jointly meta-logical and ontological considerations: first, by the ultimate *undecidability* of semantic meaning and second by the aporia of "application", raised by the late Wittgenstein, which appears to require that every interpretation of a symbolic rule itself presuppose another one. With this overcoming, the symbolic-recursive picture of linguistic competence gives way to a broader problematic of the constitutive role of the infinite dimension of sense in the form of a 'human' life.

But in fact the problem of the relationship of finitude to the infinite that makes possible the logical and temporal forms in which entities in general can be thought by a representing subject is already essentially posed by Kant, as Heidegger suggests in his penetrating and decisive 1929 reading of the structure of time in the *Critique of Pure Reason, Kant and the Problem of Metaphysics*. There, Heidegger locates an essential aporia of the givenness of time in Kant's understanding of it as at once the most general form of intuition and also as inherently involved in the more general structure of cognition which allows empirical objects to be represented in the general synthetic form of the "I think." A consequence of this aporia is, according to Heidegger, that time, for Kant, must ultimately be thought in the paradoxical reflexive form of a self-givenness in which the thereby constituting and constituted subject must simultaneously be both active in the giving to self and passive in the receiving as if from another.

Here, though, the irresolvability of this aporia in classical terms is already sufficient positively to indicate a "post-metaphysical" and rigorously realist structural basis for the twofold character of given time. That time is "given" (in the sense in which I use the term here) means that it is always "available" in an irreducibly twofold way: both as its the dynamical moment-to-moment unfolding "in presence" and as determinable or thinkable *in general*. This twofold givenness means that time is always, and irreducibly, 'there', both as "experienced" and as "thought," present or lived in the presence of an irreducibly situated lived experience and capturable or representable in thought independently of the temporal situation of the thinker of the thought (and thereby also as "countable" or calculable as such and *in*

general). What Heidegger calls "metaphysics" characteristically thinks this twofold condition of givenness as the duality of the sensible and the intelligible, of the finite forms of sensory experience on one hand and the infinite condition of the thinkable, on the other. However, if Kant's attempt to coordinate the two by means of the power of the imagination in the schematism is developed to its own aporeatic conclusion, it is no longer possible, as Heidegger suggests, to conceive of this "unity" of intuitive experience and spontaneous cognition without encountering the temporal paradox of a self-constituting subjectivity, one that must thereby be both inside and outside time itself. Thereby, the metaphysical duality of the temporal finitude of the sensory and the eternity of the intelligible cedes to the deeper metaformal and ontological structure of originally given time indicated on the formal basis of this aporeatic structure of reflexive self-givenness itself.

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In *Being and Time*, Heidegger notoriously argues that Dasein is essentially structured by the possibility that is most ultimate and unavoidable for it, namely that of death. As our "ownmost, non-relational possibility... not to be outstripped [unüberholbar]," the "indefinite" certainty of death includes and encompasses all other possibilities for the individual Dasein, including the possibility of becoming certain, Heidegger says, of the *totality* of one's own potentiality-for-being [*eines eigentlichen Ganzseinkönnens*].¹ In particular, in "anticipation" or "authentic being-toward-death," Dasein achieves an individualizing freedom in which it comes "face to face," in the attunement or mood of anxiety, with the "possible impossibility" of its own existence. It thereby can liberate itself from an ordinary or "inauthentic" mode of fleeing into a "lostness" and neglect wherein possibilities are pre-determined by the claims of the "they" [*Das Man*] which have always already decided the appropriate "tasks, rules and standards" for one's actions and motivations.²

By contrast with the "inauthentic" temporality determined as an infinitely continuing sequence of homogenous "now" moments, the finitude of Dasein in relation to death constitutes a "primordial" and "authentic" temporality. This temporality is primarily directed toward the future in its creation and engagement of possibilities.³ This primacy of the futural relation to one's own possibilities, as well as the "Being-already in..." which characterizes authentic Dasein's present and the "being-already-in" in which Dasein has the possibility of "taking over" its own "having been" together articulate the unified structure of temporality as "ecstatic," or as "the primordial 'outside-of-itself' in and for itself."⁴ Though temporality is thus separated into the three interlinked "ecstases" of the past, present and future, the future in the sense of the "anticipatory resoluteness" of Dasein in relation to death retains a priority which allows it to unify the three.⁵ This unity is not the unity of an extant thing or an entity which would thus "emerge from itself"; rather, its unity is that of a "process of temporalizing [*Zeitigung*] in the unity of the ecstases" (329). Through this temporalizing of temporality, it is possible that there arises as a secondary structure the "'time' which is accessible to the ordinary understanding" and in which the basic ecstatic character of primordial time is "levelled off," namely that of the "pure sequence of 'nows',

¹ GA 2, p. 264; p. 266.

² GA 2, p. 268.

³ GA 2, pp. 330-331.

⁴ GA 2, pp. 325-26; p. 329.

⁵ GA 2, p. 306, p. 329.

without beginning and without end."⁶ On this conception, the 'infinite' time about which it is always possible to say (for instance) "time goes on" or "time keeps passing away" is "derived" ["abgeleitete"] from the more basic structure of essentially *finite* "primordial" time insofar as it "temporalizes itself" in a certain way.⁷

In particular, through the possibility of counting and measuring time, which is itself grounded more basically in Dasein's primordial temporality, it becomes possible that a kind of time that is understood as "public" on the basis of the countable availability of the "now" gains the character of a "world-time."⁸ This "world time" is knowable as the time "'wherein' entities within-the-world are encountered ["worinnen" innerweltliches Seiendes begegnet]."⁹ Nevertheless, because of its underlying "ecstatico-horizonal" constitution, this world-time basically retains "the same transcendence" as that of the "world" itself; as transcendent in this way, it is both " 'more Objective' than any possible Object" and "'more subjective' than any possible subject."¹⁰ As, in this way, the "earlier" condition of possibility for anything either objective or subjective, time itself is thus neither, since it itself constitutes, Heidegger says, this "earlier" itself.¹¹

In these passages, though he emphasizes the way in which the "ordinary" way of interpreting time as the publically available, "levelled-off" sequence of present "nows" obscures its actual "origin in the temporality of the individual Dasein," nothing Heidegger says appears to exclude the possibility and relevance of an alternative development of the specifically infinite structure of world-time.¹² For even if the infinity of world-time is seen, as Heidegger suggests, only as the negative and merely potential infinity of the un-limited – and thus as derived from the originally finite time under the privative condition that its definitive limit is forgotten or obscured – there still arises the question of the positive basis for this "unlimited" capable of its continuation, its character of always "going on" and containing an unlimited number of things in the future, even despite my own "no-longer existing" (des *Nicthmehrdaseins meiner selbst*) then.¹³ Heidegger does not deny these phenomena of unlimitedness. Indeed, he says that they must be affirmed, although they cannot imply objections to the idea of the finitude of primordial temporality because they no longer 'deal with it' at all [sie nicht mehr von dieser handeln].¹⁴ How, then, is the infinity of world-time as always going on, as never giving out, or as allowing for the unlimited *possibility* of events and possibilities "to come," both beyond and without me, itself positively constituted? The question is sharpened if one considers the specific relationship of the infinite structure of world time to linguistic sense and truth. For it must be the case that a truth, once captured in a linguistic proposition, is available in general and continuously for all those who speak the language and have actual access to it. And it must be the case that the senses of terms and claims in a shared language, once they themselves are available, are temporally continuous and iterable as long as

⁶ GA 2, p. 329.

⁷ GA 2, pp. 330-31. "Nur weil die ursprüngliche Zeit *endlich* ist, kann sich die "abgeleitete" als *un-endliche* zeitigen."

⁸ GA 2, pp. 417-19.

⁹ GA 2, p. 419.

¹⁰ GA 2, p. 419.

¹¹ GA 2, p. 419.

¹² GA 2, p. 425.

¹³ GA 2, p. 330.

¹⁴ GA 2, p. 330.

that language is itself spoken and "alive". This is not to say, of course, that linguistic truths or senses should or can be conceived as *eternal* existents. It is just to say that the structure of linguistic truth itself points to an essentially infinite possibility of repetition of them beyond the boundaries of an individual or the temporal limit of her death. The problem of the temporal structure which makes this repetition possible, and which thereby also bears the whole structure of the givenness of time itself as "never giving out," is thus one which will ultimately have to be handled by the existential analysis of world-time, even if the structural priority of Dasein as the ontico-ontological 'place' of all disclosure is not thereby denied.¹⁵

II

As we have seen (chapter 2 above), sense is, on Heidegger's conception, essentially projective. In particular, as the basic structure underlying the intelligibility and meaningfulness of entities, it is always involves the capacity of Dasein to project possibilities of meaning into a potentially infinite domain of objects and circumstances, the world as such. There thus arises, as we have seen, the question of the structure of this capacity, the ability of an essentially finite intellect to deploy or access the essentially infinite dimension of meaning, and the specific problem of the relationship of the finite and the infinite that it involves. Another twentieth-century conception of sense that poses and answers substantially the same problem is (what I shall call) the 'structural-recursive' one proposed in characteristic projects of the 'analytic' investigation of linguistic meaning. On this conception, linguistic meaning arises from the rule-governed application of signs within indefinitely varying contexts of use. The underlying basis of this unlimited possibility of application in the individual language user is her knowledge of the systematic structure of a natural language, and this knowledge must be capable of being learned in a finite amount of time and symbolically represented in a finite amount of space. Here, the (implicit or tacit) 'knowledge' of a language is thus related to its actual use as competence is related to performance, and the consideration that such competence must be attainable by beings that are spatially and temporally finite plays an important role in constraining the possible form and structure of theories of meaning.

The structural-recursive picture characteristically applies to the consideration of natural languages the lessons learned through the study of formalism and formalized languages. In particular, one principal conceptual and historical source for it can be located in David Hilbert's conception of formal, axiomatic systems for proof in mathematics. This conception arises in part in response to concerns about the role of the infinite in mathematics, concerns that were given special urgency by Georg Cantor's set-theoretical development of the mathematics of the transfinite. How is it possible for an essentially finite being to have rigorous, demonstrable mathematical knowledge about the existence and nature of actually infinite totalities? In the 1925 article "On the Infinite" (Hilbert 1925), Hilbert emphasized that,

¹⁵ There are some indications that Heidegger himself sees the problem here: "Has ['time'] then any 'Being'? And if not, is it then a mere phantom, or is it something that is 'more being' [seiender] than any possible entity? Any investigation which goes further in the direction of questions such as these, will come up against the same 'boundary' which has already set itself up to our provisional discussion of the connection between truth and Being. In whatever way these questions may be answered in what follows – or in whatever way they may first of all get primordially formulated – we must first understand that temporality, as ecstatico-horizonal, temporalizes something like *world*-time, which constitutes a within-time-ness of the ready-to-hand and the present-at-hand." (419-420) (transl. slightly modified).

while mathematicians should steadfastly refuse to be driven from "the paradise that Cantor created for us" by skeptical doubts about the accessibility of the actual-infinite or concerns arising from settheoretical paradoxes, it is still necessary to account for the possibility of knowledge about the infinite by explaining how it is possible on the basis of *finite* processes of reasoning.¹⁶ The key to the conception that Hilbert proposes is the insight that the possibility of performing logical inferences at all depends on there being "something … already given to our faculty of representation [*in der Vorstellung*];" in particular, "certain extralogical concrete objects" that are "intuitively present as immediate experience prior to all thought" and their properties and possibilities of combination must be completely surveyable and "immediately given intuitively."¹⁷ For the formalist, these extralogical objects are, however, nothing other than the *concrete signs themselves* with which proof and inference are conducted.

With this conception, mathematics becomes "an inventory of formulas that are formed from mathematical and logical signs and follow each other according to definite rules."¹⁸ In particular, inference about the infinite is possible insofar as, and only in that, it can be carried out by means of finitely long proofs in a finitely specifiable axiomatic system. Mathematical inference is thus divided into two parts. First, there is a "finitary" and "contentful" portion dealing only with finite quantities and relations. Second, though, there is an "ideal" part capable of handling the infinite and transfinite which nevertheless depends wholly on the completely finitary relationships of signs within a particular axiomatic formal system. The "ideal" extension into the infinite is always justified, as long as it can be proven that it does not lead to any possible contradiction, and Hilbert further speculates that it may be possible to find in the formalist project a methodical basis for the confidence that every mathematical problem can, in principle, be solved.¹⁹ In this way, Hilbert's formalist conception aims to provide a rigorous basis for a confidence in the methodical and procedural solvability of all mathematical problems on the principle that "the right to operate with the infinite can be secured only by means of the finite."²⁰ Specifically, the intuitive representability of finite signs and rules is held to be the necessary and sufficient basis for the solubility of problems concerning the finite and the infinite alike.

This conception of the methodical basis of mathematical reasoning led Hilbert to propose what came to be called the *decision* problem, the problem of whether there exists an *effective procedure* for answering every well-defined mathematical "yes or no" question. The question was answered, in the negative, independently by Alonzo Church and Alan Turing in 1936 and 1937 (see chapter 5 above). Just as significant as the negative answer, however, was the formalization of the idea of an effective procedure which was necessary in order to formulate the problem with sufficient clarity to give it a determinate answer. Church and Turing independently provided alternative formalizations of the notions of effectivity which turned out to be exactly equivalent; but Turing's formulation, in terms of the structure of automatic computing machines (what later came to be called "Turing machines") would prove decisive in that it also provided the first general description of the abstract architecture shared by all programmable digital computers.

¹⁶ Hilbert 1925, p. 376.

¹⁷ Hilbert 1925, p. 376.

¹⁸ Hilbert 1925, p. 381.

¹⁹ Hilbert 1925, pp. 383-84.

²⁰ Hilbert 1925, p. 384.

In formulating this architecture and the rigorous concept of computability defined in terms of it in his 1936 paper "On Computable Numbers, with an Application to the Entscheidungsproblem," Turing also provides rigorous criteria for formally identifying those (real) numbers, and solutions to problems, which would naturally be regarded as computable by means of a finite procedure in an intuitive sense. Turing's definition of computability in terms of machines thus arguably formalizes the intuitive notion of effective computability by means of a completely specified procedure, and so captures the *general* form of all procedures that are open to essentially finite reasoners given finite time.²¹

The definition of computability thus captures in detail the specific idea of a "finite" capacity capable of (certain kinds of) "infinite" work, and thereby formulates a rigorously motivated position on the underlying nature of the limitation of "finitude" itself. In arguing for the specific architecture of the computing machines that formalize it, Turing in fact appeals at several points to considerations of the essential finitude of "humanly" achievable reasoning. For example, since "human memory is necessarily limited," it is impossible to suppose that a computational process requires of its agent that the agent be able at any point to hold in memory infinitely many pieces of information at once if we are to retain fidelity to the intuitive idea of computability.²² Similarly, for reasons similar to Hilbert's, we must assume that the agent or machine has the ability to survey only finitely many types of signs, and that it itself must be, at any time, in one of only finitely many possible internal states (pp. 75-76).²³ But the most important restriction on Turing's rigorous notion of effective computability arises from considerations of the essential finitude of the basis of computational power. Specifically, that a procedure for the determination of the answer to a "yes or no" mathematical question must, if it is to be considered effective, always be able to reach the correct answer, on the basis of a finitely stated procedure or algorithm, in a *finite* number of steps. In particular, if it can be shown, for a specific problem of this form, that there is no possible finitely specifiable procedure which will always reach a correct answer in finitely many steps, then the problem is said to be undecidable. The major consequence of Turing's argument in the 1936 paper is that there is in fact *no* effective procedure, in this sense, for deciding whether or not a particular sentence follows as a theorem from the axioms of a well-defined formal system. Applied to the formal systems capable of capturing the basic operations of arithmetic and thus intended to axiomatize mathematical reasoning in Hilbert's sense, this yields a negative answer to the decision problem for arithmetic. Another consequence, as Turing points out, is the existence of a (vastly) infinite number of real numbers that are *uncomputable* in the sense that there is no finitely stated algorithm capable of determining the totality of their (infinite) decimal expansions.

If the informal notion of effective computability that is formalized by Turing's definition of Turing machines thus corresponds to a pre-theoretical conception of the epistemic or procedural capabilities of an agent constrained by the limitations of finite representation and finite time, the rigorous notion of computability formalizes this notion by providing definite criteria for what can and cannot be said to be achievable by means of any regular procedure that can be carried out by an agent so constrained. The idea of the finitude of such an agent, both in the sense of the finitude of its capacity to represent procedural rules and in the sense of the finitude of the time available to it in which to reach an answer,

²¹ The claim that it does in fact capture this intuitive notion accurately and completely is what is sometimes called the "Church-Turing thesis".

²² Turing (1936), p. 59.

²³ Turing (1936), pp. 75-76.

plays, as we have seen, a constitutive role in this formalization of this idea of an effective procedure. But this idea is not to be contrasted with some other idea of regular, finitely specifiable procedures that are *not* 'effective' in this sense. Rather, in a direct way, the idea of a constitutive finitude, such as Turing appeals to it in his argument, arguably determines the *very idea* of a (regular) procedure itself. It is, in particular, not obvious what could be meant by the description of a decision procedure as one that can only be defined by more than finitely many symbolic expressions, or one that necessarily would take a greater than finite amount of time to reach an answer.²⁴ For this reason, although Turing appeals explicitly to the necessary limitations of an (indifferently human or mechanical) agent, , it is not necessary to suppose that Turing's limitative result turns on any specific limitation of human beings as finite knowers in relation to an idealized conception of possible procedural knowledge not limited in the ways that we are.

Nevertheless, the specific structural conception of the rule-governed relationship between finite signs and their application which is suggested by Hilbert's formalism and developed in Turing's formalization of computability soon found wide and decisive application, in the early stages of the "analytic" tradition, to the study of both formal and natural languages. One decisive early positive yield of the picture was Tarski's development of a general structure for the definition of *truth predicates* for formal languages in terms of the primitive notion of "satisfaction." On Tarski's conception (see chapter 2 above), truth for a particular formal language is to be defined recursively by specifying the satisfaction-conditions of primitive terms and predicates and applying the structures of quantification and truth-functionality to 'build up' the truth conditions of complex sentences in accordance with the disquotational form of Convention T. In application to a particular formal language distinct from the language for which the definition is carried out in a 'stronger' metalanguage distinct from the language for which the definition is given itself. It is by means of this device, in particular, that Tarski proposes to overcome the inherent paradoxicality introduced into natural languages by their inclusion of their own truth-predicates, and in particular by the phenomena of the "Liar" type to which this leads.

In thus characterizing the conditions for a possibly illuminating definition of truth, Tarski's project turns on considerations of essential finitude in at least two important ways. First, as Tarski recognizes, it is necessary in order to apply the method without contradiction that it be applied to an essentially "closed" language from a metalanguage position outside the object language itself. Thus, such a language must be thought of as having a surveyable structure and determinate limits capturable from the stronger meta-language position. As a direct result, it is not possible to envision giving, in strict accordance with Tarski's method, a *general* definition of truth for arbitrary languages. What is possible is only the structural-recursive definition of specific truth predicates for individual languages whose structure is well-understood and surveyable from an external position. Second, though, and just as importantly, the applicability of the recursive method itself depends on their being at most *finitely many* primitive predicates in the language and on their structural relations themselves being *finitely characterizable* by means of determinate rules. Only by means of such a structure, where a finite axiomatization captures the essential bases and rules for an infinite capacity to produce meaningful (and potentially true) sentences, is the general possibility of a structural truth definition in accordance with the T-schema secured, and the problems of quotational reference and intensionality that accompany a straightforward application of the schema avoided.

Donald Davidson's influential program applies the structure of Tarski's approach to the analysis of the semantics of natural languages rather than the definition of truth for formal ones. Despite this difference, though, considerations of essential finitude remain very much to the fore, especially in Davidson's first discussions of the project's essential methodological constraints. Familiarly, a Davidsonian "theory of meaning" for a language is a finitely axiomatized theory sufficient to correlate each of the language's sentences with a statement of its truth-condition in accordance with Tarski's convention T. Such a theory, Davidson often suggests, amounts to an *explicit* description of what is known implicitly or on the level of competence by a speaker of the language. In particular, it yields a systematic, recursive description of the structure of the language which must, Davidson argues, be capable of a *finite* axiomatization. For, as Davidson argues in the 1970 paper "Semantics for Natural Languages," since the number of meaningful expressions of a language is unlimited, any reasonable theory of their production must be able to explain this productivity on the basis of a finite number of underlying features.²⁵ It is just such an explanation, Davidson goes on to argue, that a semantic meaning theory, with the structure of a Tarskian truth-theory can provide. In particular, Davidson urges, linguists and philosophers should appreciate the ability of such a theory to yield "a precise, profound, and testable answer to the question how finite resources suffice to explain the infinite semantic capacities of language..."26

While this conception of constitutive finitude thus makes possible, according to Davidson, a systematic theory of the structure of a language, the considerations that support it also provide important limitations on the form that semantical theory can reasonably take. In the early (1965) article "Theories of Meaning and Learnable Languages," Davidson considers several existing theories of semantical phenomena and argues that each is inadequate in that it conflicts with the requirement that a language must be learnable in a finite time and on a basis of at most finitely much information. In particular, as Davidson argues, a theory that does not do so will fail to account for the fact that language is learnable at all:

When we can regard the meaning of each sentence as a function of a finite number of features of the sentence, we have an insight not only into what there is to be learned; we also understand how an infinite aptitude can be encompassed by finite accomplishments. For suppose that a language lacks this feature; then no matter how many sentences a would-be speaker learns to produce and understand, there will remain others whose meanings are not given by the rules already mastered. It is natural to say such a language is *unlearnable*. This argument depends, of course, on a number of empirical assumptions: for example, that we do not at some point suddenly acquire an ability to intuit the meanings of sentences on no rule at all; that each new item of vocabulary, or new grammatical rule, takes some finite time to be learned; that man is mortal.²⁷

²⁵ Davidson (1970), p. 55.

²⁶ Davidson (1970), p. 55.

²⁷ Davidson (1965), pp. 8-9.

Davidson goes on to consider four examples of theories of aspects of semantic structure that threaten to render language unlearnable in this sense by requiring, within its structure, infinitely many expressions taken as semantically primitive and thus not explicable on a finite regular basis. The first is the theory of the meaning of quotations given by Quine and Church. The second, third, and fourth examples all concern theories of intensional meaning or indirect discourse. Scheffler's "inscriptional" theory of indirect discourse, Quine's account of the structure and meaning of belief sentences, and Church's account (following Frege) of possibility of referring to senses in indirect discourse all threaten, in invoking the existence of infinitely many expressions with primitive meaning, to run afoul of the essentially finite structure of actually learnable languages. The provision of a systematic theory of meaning what each sentence means by giving its truth conditions, suffices to account for the "skill or ability of a person who has learned to speak a language."²⁸ Such a theory is thus certainly to be preferred, and is at any rate sufficient, in systematically providing truth conditions, to underwrite a structural account capable of accounting fully for the sentential meaning without conflicting with the requirement of finite learnability.

Davidson's program for the development of meaning theories bears close connections, both motivational and thematic, with Chomsky's linguistic project of describing underlying structural features of the grammar of natural languages. These connections extend as well to the conception of the finitude of the basis of linguistic capacities to which Davidson appeals, and which similarly underlies Chomsky's central distinction between linguistic competence and performance, as it is specified, for instance, in *Topics in the Theory of Generative Grammar* (1966):

A distinction must be made between what the speaker of a language knows implicitly (what we may call his *competence*) and what he does (his *performance*). A grammar, in the traditional sense, is an account of competence. It describes and attempts to account for the ability of a speaker to understand an arbitrary sentence of his language and to produce an appropriate sentence on a given occasion ... The competence of the speaker-hearer can, ideally, be expressed as a system of rules that relate signals to semantic interpretations of these signals. The problem for the grammarian is to discover this system of rules; the problem for linguistic theory is to discover general properties of any system of rules that may serve as the basis for a human language...²⁹

As for Davidson, both the necessary learnability of a language and its unlimited generativity are here essential features that constrain in a decisive way the form that a systematic theory of the structure of language must take.

On the other hand, as Davidson in fact points out in "Truth and Meaning," Chomsky's syntactic approach to grammar stops short of accounting in structural terms for the *semantics* of language, which comes

²⁸ Davidson (1965), pp. 7-8.

²⁹ Chomsky (1966), pp 10-11 Compare also Miller and Chomsky (1963), p. 271: "A native speaker of a language has the ability to comprehend an immense number of sentences that he has never previously heard and to produce ... novel utterances that are similarly understandable to other native speakers"..."What... is the precise nature of this ability?"

into view, as Davidson argues, only with the specific connection to a (Tarski-style) theory of *truth*. (In "Topics in the Theory of Generative Grammar" for instance, as Davidson notes, though Chomsky suggests that transformational grammars may be preferred to phase-structure ones for their greater ability to deal with semantic structure, he also comments that semantics remains in a "primitive state" and has so far resisted "any deep analysis."³⁰ In particular, whereas a transformational grammar of the sort Chomsky suggests suffices to account for the *grammaticality* or *meaningfulness* of sentences, the addition of considerations of truth-conditional semantics motivates the "analogous" task of a systematic semantics capable of yielding a recursive truth-theory for a language that accords with Tarski's convention T.

In 1972, Davidson and Gilbert Harman, the editors of the massive anthology Semantics for Natural Languages (drawing on talks given at a conference in 1969), put the program in a clearly formulated statement at the beginning of the introduction:

The success of linguistics in treating natural languages as formal syntactic systems has aroused the interest of a number of linguists in a parallel or related development of semantics. For the most part quite independently, many philosophers and logicians have recently been applying formal semantic methods to structures increasingly like natural languages. While differences in training, method and vocabulary tend to veil the fact, philosophers and linguists are coverging, it seems, on a common set of interrelated problems.

The problems to which Davidson and Harman refer are none other than those of a systematic rulegoverned account of the meaning of a language, insofar as a human learner and speaker is capable of understanding and applying it. This is the question, in other words, of the infinite application of meaning as the possible outcome of the constitutive capacities of a human speaker of language, understood as essentially finite in time and space. The structural-recursive picture, in each of its various forms, answers the question by referring to a capacity for *applying* meaning to an essential unlimited number of contexts by means of the recursive generative structure of an 'internalized' language itself. Here, the structure which must thus be 'internal' (in some sense) in order to explain the infinite possibility of linguistic generation that shows up in behavior is just that of the semantics of "theory of meaning" for the language, which must be finitely axiomatized and thus capable of being learned, schematized, and stored in finite space.

As Quine himself pointed out in his contribution to the 1972 volume edited by Davidson and Harman, though, the conception, thus understood, already involves a significant ambiguity with respect to the explanatory force of the underlying structure of rules itself. For the rules which are to become explicit by working out the basis of semantics are seen as, on one hand, *explicative* of performance but also, on the other, as actually causally *guiding* behavior on an unconscious and generally inexplicit level. It is thus possible to ask, as Quine does, whether there might be *several* possible systematic reconstructions of the identical verbal behavior, and if so, whether there is any significant basis for identifying just *one* of these reconstructions as the correct one. More penetratingly, and outside the ambit of the typically

³⁰ Davidson (1967), p. 22.

behaviorist setting of Quine's appeals to linguistic evidence, it is possible and trenchant to consider the implications for the picture of the radical line of questioning posed by Wittgenstein, in the *Philosophical Investigations*, about rules, rule-following, and their role in the practice of language. At the beginning of the skein of passages typically described as the "rule-following considerations," Wittgenstein stages, in an interlocutory voice, the conception of a rule of a series according to which the infinite application of the rule is known in general by knowing or understanding the (finitely expressed) rule itself:

147. "...When I say I understand the rule of a series, I'm surely not saying so on the basis of the *experience* [auf Grund der *Erfahrung*] of having applied the algebraic formula in such-and-such a way! In my own case at any rate, I surely know [Ich weiβ doch von mir selbst jedenfalls] that I mean such-and-such a series, no matter how far I've actually developed it." –

So you mean that you know the application of the rule of the series quite apart from remembering actual applications to particular numbers. And you'll perhaps say: "Of course! For the series is infinite, and the bit of it that I could develop [das ich entwickeln konnte] finite."

This conception of what is involved in knowing the infinite application of a finite rule invites the question, which Wittgenstein immediately poses, of the nature of this knowledge, and of whether it is something known constantly, or perhaps only when one is in a certain state of consciousness or carrying out a certain mental process. One idea, in particular, to which a defender of the conception may appeal is that of an underlying apparatus or mechanism, perhaps located in the actual hardware of the brain.

As Wittgenstein immediately objects, however, this suggestion equivocates crucially between *criteria for the ascription* of the specific structure of the apparatus *to* someone on the basis of their performance, and criteria for this structure *itself*:

149. If one says that knowing the ABC is a state of the mind [ein Zustand der Seele], one is thinking of a state of an apparatus of the mind [den Zustand eines Seelenapparats] (perhaps a state of the brain) by means of which we explain the *manifestations* of that knowledge. Such a state is called a disposition. But it is not unobjectionable to speak of a state of the mind here, inasmuch as there would then have to be two different criteria for this: finding out the structure of the apparatus, as distinct from its effects [ein Erkennen der Konstruktion des Apparates, abgesehen von seinen Wirkungen]. (Nothing would be more confusing here than to use the words 'conscious' and 'unconscious' for the contrast between a state of consciousness and a disposition. For this pair of terms covers up a grammatical difference.)

This consideration and related ones lead Wittgenstein to argue that, though the *grammar* of the word "know" is "evidently closely related to the grammar of the words 'can', 'is able to,'…", coming to know how to go on with the indefinite development of a series (and hence in attaining the "mastery" of a technique) cannot consist simply in coming to know *any* finite item.³¹ For *any* such item may, of course, be variously applied or interpreted. Given such a conception, it then seems as if any application of the

³¹ Wittgenstein (1953), §150.

rule to a specific case would require the specification or presence to mind of another image or symbolic expression, which would itself have to be interpreted, and so forth.³²

At the same time, the conception on which a rule is something like a rail laid to infinity, and thus capable of determining all of its infinite application in such a way that "all the steps are really already taken", is only a "mythological description" of its use.³³ It is thus incoherent to suppose that any finite, symbolic expression of a rule, or any set thereof, can suffice for the explanation of the unlimited application of the use of a word in practice. For each such expression can be variously interpreted in any new case of application, and if a new rule is needed for each case of application we will be left with an infinite regress. In order to answer to the apparent paradox, according to Wittgenstein, it is necessary to conclude that "there is a way of grasping a rule which is *not* an interpretation, but which, from case to case of application, is exhibited in what we call 'following the rule' and 'going against it.'"³⁴

If it is, then, ultimately incoherent to portray the unlimited application of a word in new sentences and situations as simply the pre-determined outcome of a finitely represented rule, how *can* we understand the relationship between the finite learning of words and their infinite possibilities of meaningful use? The partial sketch of an answer is provided, in the course of a detailed reading of Wittgenstein's "vision of language," by Stanley Cavell in *The Claim of Reason*. Here, Cavell examines what can be meant by saying both that "a word is learned in certain contexts" and that, so learned, it allows of "appropriate projections into further contexts."³⁵

If what can be said in a language is not everywhere determined by rules, nor its understanding anywhere secured through universals, and if there are always new contexts to be met, new needs, new relationships, new objects, new perceptions to be recorded and shared, then perhaps it is as true of a master of a language as of his apprentice that though 'in a sense' we learn the meaning of words and what objects are, the learning is never over, and we keep finding new potencies in words and new ways in which objects are disclosed.³⁶

But as Cavell emphasizes, to say that the projection of words into new contexts remains always in a way "open," or that it does not proceed wholly in a pre-determined way according to definite rules, is not to deny that the possibilities of projection are at the same time deeply, and essentially, *controlled* by what we can call their grammar. And this structure of controlled variance, or rather the specific way in which control and variance interact, is itself essential, Cavell suggests, to our being able to do what we can do with language, to its irreducible role in what Wittgenstein calls "this complicated form of life:"

I am trying to bring out, and keep in balance, two fundamental facts about human forms of life, and about the concepts formed in those forms: that any form of life and every concept integral to it has an indefinite number of instances and directions of projection; and that this variation is not arbitrary. *Both* the "outer" variance and the "inner" constancy are necessary if a concept is

³² Wittgenstein (1953), § 201.

³³ Wittgenstein (1953), §§ 218-19, 221.

³⁴ Wittgenstein (1953), §201.

³⁵ Cavell (1979), p. 180.

³⁶ Cavell (1979), p. 180.

to accomplish its tasks – of meaning, understanding, communicating, etc., and in general guiding us through the world, and relating thought and action and feeling to the world...³⁷

Thus, if the projection of words into new contexts is characterized by the structure of "outer variance" and "inner constancy" that Cavell describes, what happens at the moment of the new application of a word is not simply the mechanical iteration of a pre-determined and always determinate rule, but is nevertheless essentially constrained by *our* "grasp" of its sense, as we have learned it in the way that we ordinarily do. This way of learning is as much a matter of coming into a world, Cavell suggests, as it is of learning to master a system. But that our "human" initiation into a shared world and its manifold dimensions of sense and significance is both structural *and* substantive is part of what Wittgenstein suggests by saying that "*Essence* is expressed by grammar" and by meaning this, not as a *repudiation* of the concept of essence, but rather as a *development* of it in explicitly linguistic terms.³⁸

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For Heidegger in *Being and Time*, as we have seen, sense in its projective character is structurally dependent on both the finitude of Dasein's individual life – in that the projection of possibilities always goes toward the "highest ownmost" one of death – and to that of the world as a whole, in that projective understanding always relates ultimately to this whole, sketching out in advance the particular structure and relations that entities within the world are taken to have.³⁹ In *Kant and the Problem of Metaphysics*, published in 1929 but drawing centrally on the interpretation of Kant already worked out in the "Logic: The Question of Truth" lecture course of 1925/26, Heidegger specifies another way in which a constitutive conception of "human" finitude may provide the foundation for an overall understanding of the nature and structure of entities in the world. On Heidegger's reading, Kant's program in laying out the grounding for any possible metaphysics in the *Critique of Pure Reason* depends, at its core, on a conception of human pure reason as *essentially* finite, in the sense that for Kant, human knowledge primarily takes the form of *intuition*, the specific form of representation

³⁷ Cavell (1979), pp. 185-86.

³⁸ Wittgenstein (1953), §186. In *The Claim of Reason*, Cavell further develops this conception of sense and essence by considering the characteristic method of "ordinary language philosophy," as practiced in particular by Wittgenstein and J.L Austin, and in particular its signature method of asking "what we should say" in a variety of contexts. According to Cavell the claim to establish results on this basis involves appealing to what he calls the "projective imagination." The term, Cavell emphasizes, does not stand for some special faculty or tutored skill, but rather for "a family of the most common of human capacities," that of imagining what we would say, were suchand-such to happen. The reflective knowledge gained by the explicit use of this method is not a species of empirical or quasi-empirical knowledge of possible linguistic behavior, but rather, Cavell emphasizes, a species of self-knowledge whereby the possibilities that I can project onto the world are also shown in the variation of situations into which they can be projected by me. With its appeals to "projection," "imagination," and selfknowledge, the methodology bears clear parallels to the Kantian account of the projection of sense by means of the power of the faculty of the imagination in schematism which Heidegger considers in the Kant book (next section). Nevertheless, Cavell's own setting of the methodology in the context of a kind of reflection that is also explicitly intersubjective in considering (or "convening") the implications of the criteria of my culture and thereby invoking the "necessity" of our practices may also point in some ways toward the basis of a substantial overcoming of the (individualist) Kantian picture on the basis of a renewed appeal to essence; for more discussion, see section IV below.

whereby knowledge is related directly to an individual object.⁴⁰ Its essential finitude, thus understood, is illustrated by the contrast between this knowledge and the possible knowledge of a divine or absolute intellect, which would be capable, according to Kant, of an intellectual kind of intuition that would actually *create* the intuited object. By contrast with this, for Kant as Heidegger reads him, although human knowledge is always a synthesis of intuition and conceptual understanding, it is characteristically *finite* in that it stands under the necessity of *representing* objects which it cannot produce by itself and which therefore must be given to it from elsewhere.⁴¹ For a divine intellect which did not stand under this necessity, it would also not be necessary to think (but only to intuit) in order to have all of its objects adequately. But since human cognition is thus constrained, even in thought, its characteristic finitude does not only apply to the "faculty" of intuition but also to conceptual thinking by means of what Kant characterizes as the understanding and indeed, in a more basic sense, to the unity of the two.⁴²

The basis of this unity for Kant becomes more clearly visible, according to Heidegger, in considering the way in which this conception of essential finitude determines the Kantian idea of the *transcendental*. In particular, Kant characterizes objects of knowledge in a twofold sense, both as *appearances* [*Erscheinungen*], insofar as they are knowable to us, but also as what the appearances are appearances of, i.e. unknowable things in themselves. Since appearances, by contrast with things in themselves, stand under the specific limitative conditions of the forms of intuition, their nature as appearances is determined by the essential finitude of human intuition.⁴³ This is again to be contrasted with the infinite knowing that would be capable of knowing its objects as things in themselves. This contrast is, Heidegger suggests, the actual meaning of Kant's claim that things in themselves lie "behind" appearances: the point here is not that there are two types of possible objects of finite intuition, one lying behind the other, but rather that knowledge of beings *as* they are in themselves is essentially closed to human beings as essentially finite knowers.⁴⁴

For the same reason, according to Heidegger, it is necessary that human knowledge always involves an element of receptivity and that this element be *sensory* in that it operates through organs of sensation that allow the essentially finite Dasein to be affected by particular external objects.⁴⁵ Nevertheless, genuine knowledge is not simply knowledge that immediately represents what is; rather it must also be able to make what is revealed "as revealed accessible with respect to both what and how it is for everyone at all times" [*offenbares fur jedermann und jederzeit in dem, was und wie es ist, zuganglich machen konnen*].⁴⁶ In this sense, "the intuited is only a known being if everyone can make it understandable to oneself and to others and can thereby communicate it."⁴⁷ Kant understands this requirement of "representing in general" as fulfilled insofar as knowledge involves not only intuition but "representation in concepts."⁴⁸ This determinative representing of something is, however, itself an

- ⁴⁴ GA 3, p. 38.
- ⁴⁵ GA 3, p. 32.

⁴⁷ GA 3, p. 33.

⁴⁰ GA 3, p. 28.

⁴¹ GA 3, pp. 31-32.

⁴² GA 3, p. 31.

⁴³ GA 3, pp. 37-39.

⁴⁶ GA 3, p. 33.

⁴⁸ GA 3, p. 34; cf. Kant (1787), A68-69/B93-94.

"assertion of something about something [*ein Aussagen von etwas uber etwas*]" or a predication.⁴⁹ The basis of this possibility of determinative representing, however, is itself the "faculty of judging" [*Vermögen zu urteilen*], or what Kant terms the "understanding". In the actual act of determinative judgment, the faculties of intuition and understanding are united in a synthesis and thereby "mediately" related to the determined object.⁵⁰ This synthesis "accomplishes" the making-evident [*Offenbarmachen*] of this particular entity as an object.⁵¹ Through this particular kind of synthesis and its particular structure, the object itself becomes available or actually available "in truth".⁵²

This raises the question of the nature of the nature of the specific kind of synthesis between intuition and understanding that must occur for judgment in general to be possible. The problem of the basis of this synthesis is in fact, Heidegger suggests, the deepest problem of the whole project of the *Critique of Pure Reason* in its attempt to lay a critical ground for any possible systematic metaphysics. His attempt to solve it leads Kant to envision a mediating "common root" in the soul for both intuition and thinking; Kant characterizes this "common root" as a "power of pure imagination" which operates as a "blind though indispensable function of the soul."⁵³ This power is actually at the basis, Kant says, of all synthesis whatsoever and thus acts as the general function underlying all possible representation.⁵⁴ This includes what Kant describes in the "Transcendental Deduction" as the necessary condition for all possible objective representation, the transcendental unity of apperception, which has the form of a standing capability to unify intuition and the understanding.⁵⁵ But this capability itself remains dependent upon the deeper "productive" synthesis of the imagination:

The representing of unity, as pure thinking, necessarily has the character of the 'I think.' The pure concept, as consciousness of unity in general, is necessarily pure self-consciousness. This pure consciousness of unity is not just occasionally and factically carried out, but rather it must always be possible. It is essentially an 'I am able.'... Only as the constant, free "I can" does the "I think" have the power to allow the Being-in-opposition of the unity to stand against itself [*vermag das 'ich denke' sich das Dawider der Einheit entgegenstehen zu lassen*], if in fact linking remains possible only with reference to an essentially free comporting. The pure understanding, in its original holding of unity before itself, acts as Transcendental Apperception.

Now what is represented in the unity which is held before itself in this way [*der durch sie vorgehaltenen Einheit*]? Perhaps it is simultaneously the universe of all beings [*das All des Seienden*], in the sense of the *totum simul*, which the *intuitus originarius* intuits? But this pure thinking is certainly finite, and as such it cannot from itself, through its representing, set the being in opposition to itself [*das Seiende sich gegenübersetzen*], not to mention simultaneously setting everything in its unity [*geschweige den alles zumal in seiner Einheit*]. The represented

⁴⁹ GA 3, p. 34.

⁵⁰ GA 3, p. 34.

⁵¹ GA 3, p. 34.

⁵² GA 3, p. 34.

⁵³"Die Synthesis überhaupt ist, wie wir künftig sehen werden, die bloβe Wirkung der Einbildungskraft, einer blinden, obgleich unentbehrlichen Funktion der Seele, ohne die wir überall gar keine Erkenntis haben würden, der wir uns aber selten nur einmal bewußt sind." (A78/B103).

⁵⁴ A 78/B 103.

⁵⁵ Cf. A 106-107.

unity first awaits the encountered being [*das begegnende Seiende*]; and as such awaiting, it makes possible the encountering of objects which show themselves with one another. As non-ontic, this unity bears [*trägt als nicht-ontische*] the essential tendency of a unifying of that which is not yet unified in itself. That is why, following the clarification of Transcendental Apperception, Kant says of the unity which is represented in it: it "presupposes a synthesis however, or includes one."⁵⁶

This deeper, presupposed synthesis is the "pure synthesis of the imagination," which is, according to Kant, the "ground of the possibility of all cognition [*Erkenntnis*]" as its necessary *a priori* condition.⁵⁷

According to Heidegger, though, this conception of the productive power of the imagination as the basic *a priori* condition for the possibility of any synthetic unification itself presupposes the givenness to intuition of *time*. As the unitary form of both inner and outer sense, time in its givenness as a form of ordering also conditions, according to Kant, all "modifications of the mind."⁵⁸ In particular, as Kant explains in the "Schematism" chapter, the pure power of the imagination is the capacity to link intuition and the understanding by forming an image or schema which is the image of a horizon within which particular objects can be encountered and experienced.⁵⁹ As such a "forming" of the horizon which also gives rise to the possibility of its being seen in a unified "look," the schematism also makes visible, according to Heidegger, "the ground for the possibility of transcendence"; but since "transcendence is, as it were, finitude itself" this is also a "making-sensible" of the basic structure by means of which a finite creature can intuit anything at all.⁶⁰

According to Kant, the schema for a concept is, in particular, a "representation of a general procedure of the imagination for providing a concept with its image."⁶¹ Such a representation is necessary in general in order to account for the possible subsumption of an object under a concept, and is particularly so when the object of an empirical intuition subsumed under a pure concept of the understanding. For pure concepts or categories such as that of causality, unlike empirical concepts such as that of a *plate* or pure geometric concepts like that of a *circle*, are in no obvious way "homogenous" to what is subsumed under them. Whereas, for example, the roundness that is thought in the concept of the circle can be intuited in an actual plate, what is thought in the categories cannot be sensibly intuited at all. It is therefore necessary to explain how concepts in general, and pure concepts in particular, can apply to appearances.⁶² Kant's answer to this question is the invocation of the "transcendental schema" as a "third thing," or "mediating representation," between the category and the appearance which is homogenous to both; such a "third thing" will be simultaneously intellectual and sensible.⁶³ Thus understood, the schema is the "formal and pure condition of the sensibility, to which the use of the

⁶² A 137/B 176.

⁵⁶ GA 3, p. 77; cf. *KRV*, A 118.

⁵⁷ A 118.

⁵⁸ GA 3, p. 79; cf. *KRV*, A 98-99.

⁵⁹ GA 3, p. 86.

⁶⁰ GA 3, p. 87.

⁶¹ GA 3, p. 92. "Dise Vorstellung nun, von einem allgemeinen Verfahren der Einbildungskraft, einem Begriff sein Bild zu verschaffen, nenne ich das Schema zu diesem Begriffe" (A 140/B 179-180).

⁶³ A 138/B 177.

concept of the understanding is restricted."⁶⁴ At the same time, the schema of a particular concept as the "representation of a general procedure" for giving it an image is what allows the concept, which is itself a rule, concretely to be applied to its various instances.⁶⁵ For instance, in the case in which I think a "number in general" for which I do not provide a direct image, my thought is not itself an image or directly related to one but is rather the "representation of a method for representing a multitude [i.e., one having that number] in an image in accordance with" the concept in question (A 140/B 179-180). In the case of empirical or mathematical concepts, the schema thus operates as "a rule for the determination of our intuition" in accordance with which an image is provided for a concept. (A 141/B 180). By contrast with this, in the case of *pure* concepts or categories, there is and can be no such image or (accordingly) any "method" for providing one; here, the schema is thus simply "the pure synthesis, in accord with a rule of unity according to concepts in general, which the category expresses..."⁶⁶ (A 141-142/B 180-181). In either case, however, the schema is, as Heidegger glosses it, a "representing of the rule" that the concept is which in a certain way "bring[s] the rule into the sphere of possible intuitibility".⁶⁷

In this way, the schemata allow for the possibility of the basic connection between the intuition and the understanding by presenting or representing concepts in such a way that they become intuitable. Such presentation itself manifests the basic structure of transcendence which consists in the finitude whereby human thought and intuition are jointly conditioned by the necessity of representing something exterior to themselves. But the schemata of pure concepts are in fact themselves nothing other than pure, *a priori* and transcendental determinations of time.⁶⁸ Heidegger suggests, in particular, that the schema of the category of *substance*, as the category which signifies that which provides the ultimate ground of all persistence, is, for Kant, the most basic "pure image of time" [*Ihr Schema muß die Vorstellung des Zugrundeliegens sein, sofern es sich im reinen Bilde der Zeit darstellt.*]⁶⁹

According to Kant, specifically: "The schema of substance is the persistence of the real in time, i.e., the representation of the real as a substratum of empirical time-determination in general, which therefore endures while everything else changes."⁷⁰ As Heidegger interprets it, this is the image of a constantly successive sequence of "nows" which is also *permanent* and eternally *persisting* in the sense of never running out. In this "pure sequence of nows" that "now time" [Jetztfolge] represents, time is always

⁶⁷ GA 3, pp. 93-94.

⁶⁴ A 140/B 179.

⁶⁵ A 140/B 179.

⁶⁶ A 142/B 181.

⁶⁸ GA 3, p. 99; cf *KRV* A 145/B 184 and A 138/B 177.

⁶⁹ GA 3, p. 101. Cf. KRV A 143-44/B183. This despite the fact that, as Heidegger recognizes (GA 3, p. 97) Kant says very clearly, a page or two earlier, that the schemata of *pure* concepts of the understanding, such as substance, "can never be brought into any image whatsoever:" "Dagegen ist das Schema eines reinen Verstandsbegriffs etwas, was in gar kein Bild gebracht warden kann, sondern ist nur die reine Synthesis gemäß einer Regel der Einheit nach Begriffen überhaupt, der die Kategorie ausdrückt, und ist ein transzendentales Produkt der Einbildungskraft, welches die Bestimmung des inneren Sinnes uberhaupt nach Bedingungen seiner Form (der Zeit) in Ansehung aller Vorstellungen betrifft, sofern diese der Einheit der Apperzeption gemäß *a priori* in einem Begriff zussamenhängen sollen." (A 143-44/B 183)

⁷⁰ [Das Schema der Substanz ist die Beharrlichkeit des Realen in der Zeit, d. i. die Vorstellung desselben als eines Substratum der empirischen Zeitbestimmung uberhaupt, welches also bleibt, indem alles andre wechselt.]

"now" [*Nun ist die Zeit als reine Jetztfolge jederzeit jetzt.*]⁷¹ As the constant substrate of this constantly "flowing" sequence, time as schematized in the schema of substance is that which endures, giving "the pure look of something like lasting in general."⁷² In this way, through the schematism that thus renders the "pure image of persistence" visible, "a being which as such is unalterable in the change can show itself for experience." [*so da6...für die Erfahrung ein im Wechsel unveränderliches Seiendes also solches zeigen kann*].⁷³ This schematization of time as such thus functions, according to Heidegger, as "the ground for the inner possibility of ontological knowledge."⁷⁴ It does so by giving to experience a "preliminary enclosedness to the horizon of transcendence."⁷⁵ In this *a priori* giving of time as a "unique, pure, universal image," it thus gives an image to the "single and pure ontological horizon" which is the condition for the possibility that any "begin given within it can have this or that particular, revealed, indeed ontic horizon."⁷⁶ As such a "pure self-giving" it makes visible to a finite creature the very structure of its own finite transcendence.

Given the structure of this finite transcendence, it is necessary for a subject thus constituted that it can be affected by something outside itself, but also in such a way that it "bears and makes possible in general the pure concept (the understanding) that stands in essential service to intuition."⁷⁷ This possibility of affection from without in such a way as to facilitate the understanding characterizes what Kant treats as the temporal form of both inner and outer sense. Because it is a general possibility, this possibility of being affected from without but in such a way as to facilitate the concept must also characterize, according to Kant, the "formal conditions" of the way in which we represent all temporal relations of succession, coexistence, and endurance. For Kant, however, these "formal conditions," being purely relational, do not and cannot represent any thing in itself but must instead represent things only insofar as they are "posited in the mind".⁷⁸ This is what leads Kant to consider the basic temporal form of inner sense as "nothing other than the way in which the mind is affected by its own activity. namely this positing of its representation..." or, as Heidegger puts it, as the mind's "pure selfaffection".⁷⁹ As Kant further suggests, this self-affection itself conditions the possibility of the apperceptive consciousness of self, whereby the self appears to itself as it is affected by itself.⁸⁰ Thus the ultimate significance of human finitude for Kant, according to Heidegger, lies not simply in the fact that the finite intellect is necessarily affected from without, in sensation, by something other than it, but indeed that this possibility of affection from without is itself dependent upon a pure self-affection which, in yielding the form of time, pre-constitutes the apperceptive unity of the self to begin with.⁸¹

- ⁷¹ GA 3, p. 101.
- ⁷² GA 3, p. 101.
- ⁷³ GA 3, p. 102.
- ⁷⁴ GA 3, p. 102.
- ⁷⁵ GA 3, p. 102.
- ⁷⁶ GA 3, p. 102.
- ⁷⁷ GA 3, p. 172.
- ⁷⁸ GA 3, p. 172; B 67.
- ⁷⁹ GA 3, p. 172; B 67-68.
- ⁸⁰ B 68-69.

⁸¹ "In pure taking-in-stride [*im reinen Hinnehmen*] the inner affection must come forth from out of the pure self [*aus dem reinen Selbst*], i.e., it must be formed in the essence of selfhood [*Wesen der Selbstheit*] as such, and therefore it must constitute [*ausmachen*] this [*diese selbst*] in the first place. Pure self-affection provides the transcendental, primal structure of the finite self as such. Thus it is absolutely not the case that a mind exists

But although Kant thus sees the way in which the givenness of time as a kind of universal self-givenness conditions all possibility of representation and thus of objects of experience, he nevertheless understands this givenness itself in a way that is ultimately paradoxical or contradictory. This is because he understands this givenness *both* as the result of an *active* and "productive" capacity of synthesis *and* as shaped by a formal condition with respect to which it is *passive* and receptive. As the agency ultimately capable of uniting the faculties of the intuition and the understanding, the transcendental power of imagination must unite receptivity and spontaneity in an original and non-composite way.⁸² Accordingly, since the transcendental imagination is, according to Heidegger, the ultimate basis for the givenness of time, time itself must be given, in a paradoxical original duality of spontaneity and spontaneously "from without" and spontaneously "from within". This characteristic and paradoxical original duality of spontaneity and receptivity is also characteristic, according to Heidegger, of Kant's practical philosophy, insofar as within it reason is grounded in respect for a law which I give myself.⁸³ In this respect, I submit myself to the law; but in so doing, I also submit myself to myself as pure reason. In this dual structure of self-submission, Heidegger again sees the paradoxical originally receptive/spontaneous structure of the power of imagination at the basis of the possibility of action:

The self-submitting, immediate, surrender to [*sich unterwerfende unmittelbare Hingabe an*]... is pure receptivity; the free, self-affecting of the law [*freie Sich-vorgeben des Gestzes*], however, is pure spontaneity. In themselves, both are originally one. And again, only this origin of practical reason in the transcendental power of the imagination allows us to understand the extent to which, in respect, the law as much as the acting self is not to be apprehended objectively. Rather, both are manifest precisely in a more original, unobjective, and unthematic way as duty and action, and they form [*bilden*] the unreflected, acting Being of the self [*Selbst-sein*].⁸⁴

In this original receptive/spontaneous structure of pure self-affection is thus, according to Heidegger, to be found the ultimate basis for the constitution of the finite self to begin with. Indeed, insofar as both operate as subsistent and perduring conditions for all possible representation, Heidegger suggests, time and the "I think" of transcendental operation are, for Kant, ultimately the same.⁸⁵ But if the "I" of the "I think" gives itself time through the original structure of a pure self-affection that is irreducibly both spontaneous and receptive, this means that it is also first constituted by this very giving. It thereby becomes possible, according to Heidegger, to challenge Kant's official view, according to which neither the "I" nor time itself are in fact "in time". Indeed, without simply denying this official view, it here becomes possible to ask whether Kant's attribution of permanence to both might in fact point to a deeper way in which both are temporal, indeed to the possibility that the "I", far from being simply atemporal, is "so 'temporal' that it is time itself, and that only becomes possible, according to its ownmost essence, as time itself"⁸⁶

among others which, for it, are also something related to it, and that it practices self-positing. Rather this 'fromout-of-itself-toward... and back-to-itself' ['Von-sich-aus-hin-zu ... und Zurück-auf-sich'] first constitutes the mental character of the mind as a finite self." (GA 3, p. 173).

⁸² GA 3, p. 140.

⁸³ GA 3, pp. 143-46.

⁸⁴ GA 3, p. 146.

⁸⁵_{oc} GA 3, p. 173.

⁸⁶ GA 3, pp. 174-75.

If the "I" of transcendental apperception which forms the basic unity of thought must be thus be placed in an essential relation to the pure self-affection that is also the basic form of time, it is also necessary, according to Heidegger, to rethink in this way the temporal status of the constitutive forms and rules of pure thought itself. This is so, according to Heidegger, even with respect to what Kant sees as the "highest principle of all analytical judgments", namely the principle of non-contradiction. As Heidegger notes, in introducing the principle, just after the schematism chapter, as the basic principle underlying all analytic knowledge and a sine qua non of all knowledge whatsoever (whether analytic or synthetic), Kant emphasizes that the principle, as a "merely logical one", must not be understood as limiting its claims to those involving relationships of time.⁸⁷ Thus, it is necessary, according to Kant, to replace what he cites as the traditional formulation of the principle, namely "It is impossible for something to be and not to be at the same time" with an alternative formulation making no mention of time at all. Whereas a thing (A) which is some way (B) may very well be not-B at a later time, to build the determination of time into the principle of non-contradiction itself violates what Kant sees as the basic atemporality that should rightly characterize all genuine principles.⁸⁸ Accordingly, he suggests replacing it with a version that does not treat the opposed predicates (B and not-B) as separable from the thing itself (A), but rather as involved in the very concept of the thing. If, for example, one says, in accordance with the principle that a person who is unlearned is not learned, it is necessary to add the condition "at the same time"; but if one says simply that no unlearned person is learned, the claim is immediately analytical with no reference to time at all. The later formulation, rather than the former, actually shows, according to Kant, the real character of the principle of noncontradiction as the highest and most general condition for all thought.⁸⁹

If, however, as Heidegger suggests, the basic structure of the "I think" of apperception must be reconsidered in its relationship to the underlying structure of self-affection at the basis of time, then even Kant's attempt to interpret the principle of noncontradiction as extra-temporal in this sense must also be rethought on this basis. Kant, remaining "oriented toward the nonoriginal essence of time" which does not yet have clearly in view the original unified basis of time and thought in self-affection, must deny that the principle of noncontradiction has a temporal character.⁹⁰ He can legitimately argue, in fact, that the inclusion of the reference to time would mean that the principle was limited in its scope to "empirical, accessible beings within time", whereas as a logical principle governing *all* thought – analytic as well as synthetic -- it should not be so limited, and therefore that it is in itself not subject to any temporal form or determination.⁹¹ More generally, given that Kant considers temporality only in terms of the question of what is "within" or "outside" time in the non-original, secondary sense, it would indeed be "illogical", as Heidegger agrees, for him to understand the "I" in general as "within time"; for – given that time is also the general form of inner as well as outer sense, for Kant -- to do so would be to "determine what time itself is originally with the help of a product derived from it."⁹² Kant thus denies "with full justification" [mit vollem Recht] the attribution of any kind of "temporal form" to

⁸⁷ GA 3, p. 167; A 152/B 192.

⁸⁸ A 152-153/B 191-193

⁸⁹ A 153/B 192-193.

⁹⁰ GA 3, p. 177.

⁹¹ GA 3, p. 176.

⁹² GA 3, p. 177.

the I of apperception and to pure reason itself, a denial which he then with equal justice extends to the deletion of the "at the same time" in the initial formulation of the principle of noncontradiction.⁹³

The issue is, as Heidegger notes, essentially connected to the question of the basis of any possible recognition of an object; for as Kant suggests, whereas the principle on its first (uncorrected) formulation apparently presupposes the possibility of re-identifying a given object (A) over time as the same despite its varying (and even contradictory properties), the second, corrected version of the principle, by determining objects only in terms of their "concept", does not. In the first edition version of the "Transcendental Deduction," Kant considers, in addition to the mode of synthesis of "apprehension in intuition" and that of "reproduction in imagination," a third and more basic synthesis of "recognition" which grounds all concepts of objects in general.⁹⁴ Although the synthesis of recognition is explicitly linked to the transcendental unity of apperception, its own characteristic relation to temporality remains, as Heidegger notes, obscure.⁹⁵ Insofar as it is possible to maintain that the "I think" of transcendental apperception remains simply outside time, it is also possible for Kant to find in it the underlying principle of unity and persistence that allows for the principle of noncontradiction to appear capable of applying to *all* objects as such, insofar as they are thinkable at all, without bringing them into any specific relation to time.

Within the scope of Kant's assumption of the secondary, derived conception which places both the "I" and its thought outside the realm of the "within-time", the correction which consists in deleting the "at the same time" is thus justified. Nevertheless, by bringing into view the more original link between time and the basis of thought in the basic structure of self-affection, it is possible, Heidegger suggests, to interpret this "at the same time" in a wholly different way. Here, in particular, though it is no longer simply a matter of the co-presence of beings within time, it may nevertheless be seen as involved in the actually *temporal* character of thought and the self in a more basic and original sense:

And yet – just as certainly as it is that the "at the same time" ["*zugleich*"] is a determination of time, so little does it have to mean the "within-time-ness" of beings ["*Innerzeitigkeit" von Seiendem*]. Rather, the "at the same time" expresses that temporal character which, as preliminary "recognition" ("*pre-paration*") ["*Vor-bildung*"], originally belongs to all identification as such. However, this lies solidly at the ground of both the possibility and the impossibility of contradiction.⁹⁶

Thought in this way, the possibility of recognition at the basis of any possible judgment of identity does not depend on the ontic co-presence of beings in the "at the same time" of a present moment; accordingly, the formulation of the principle of noncontradiction does not have to exclude it. Rather, it points back to the "belonging together" of thought and intuition, or of spontaneity and receptivity, in the "unity of the same essence," one which is predicated on the original constitutive structure of temporal self-affection that is also the original form of the givenness of time.⁹⁷

⁹³ GA 3, p. 176.

⁹⁴ A103-110

⁹⁵GA 3, p. 167.

⁹⁶ GA 3, p. 177.

⁹⁷ GA 3, p. 177.

As we saw above, Wittgenstein's critical consideration of rule-following bears against the structuralrecursive picture of the production or use of language as based in the rule-governed capacities of an individual, demonstrating that this picture cannot itself ultimately account for the projective phenomena of meaning that it attempts to explain. One result of Wittgenstein's critique that has often been noted is that it establishes *negatively* that the ultimate constitutive basis for linguistic meaning or sense cannot be seen as resting in the activity or consciousness of an individual subject. What may be less immediately obvious, though, but what we will show here, is that it also has direct *positive* consequences for the original structure of given time.

Kant's idea of the transcendental Schematism is, as we have seen, the idea of a *power* of the representing subject that unites the faculties of the understanding and the intuition, and is thereby the common root of the spontaneity characteristic of the former and the receptivity characteristic of the latter. The power is, specifically, that of applying a concept or category (once attained) to the indefinite or infinite number of appearances that can be subsumed under it. What accomplishes this power, in the subject, is explicitly, for Kant, the "representation of a rule" which connects the concept, as representation, to this indefinite number of appearances. In the case of the schematism of substance – wherein, as we have seen, Heidegger locates Kant's most general account of the form of the subjective givenness of time – this representation is that of a pure rule of indefinite persistence which must apparently be presupposed as underlying the unified temporal form of inner as well as outer sense.

To see how Wittgenstein's critique of rule-following itself points to the deeper paradoxical structure underlying Kant's account, it is helpful to consider the relationship between the idea of a rule which he most directly criticizes – that of a "rail laid to infinity" – and the constitutive idea of the self-identity of a rule as its *infinite* repetition of the same. At PI 213, an interlocutory voice considers the possibility that the ability to continue a series indefinitely beyond its initial segment consists in having chosen *one* interpretation of it. In view of the "paradox" of interpretation of PI 201, *this* suggestion is untenable: the explanation in terms of the initial adoption of *one* interpretation capable of eliminating all doubt is here neither necessary (since the possibility of doubt to which it responds in fact *need* not arise) nor sufficient (since the provision of an interpretation in this sense *cannot* "fix" the infinite number of cases uniquely, all by itself). This leads the interlocutory voice to the suggestion that "intuition" is needed to remove the (possible) doubt in each case:

Only intuition [Intuition] could have removed this doubt? -- If intuition is an inner voice – how do I know *how* I am to follow it? And how do I know that it doesn't mislead me? For if it can guide me right, it can also guide me wrong.

((Intuition an unnecessary evasion.))

214. If an intuition is necessary for continuing the series 1 2 3 4 ..., then also for continuing the series 2 2 2 2 2 ...

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The conception that underlies the thought that the continuation of a series, if it cannot be determined once and for all by a single "interpretation" in advance, requires a new intuition at each instance would also, if tenable, also have to apply to the seemingly most basic kind of rule, the one that involves only the repetition of the same *ad infinitum*. And if intuition *here* were to function as a kind of inner voice, then it would apparently be possible here too that it might mislead. To block this conclusion, the interlocutor now envisages a kind of absolute givenness of identity in the form of the self-identity of the same (*gleich*) in its indefinite repetition:

215. But isn't at least the same the same [Aber ist nicht wenigstens gleich: gleich]?

For identity we seem to have an infallible paradigm: namely, in the identity of a thing with itself [Für die Gleichheit scheinen wire in unfehlbares Paradigma zu haben in der Gleichheit eines Dinges mit sich selbst]. I feel like saying: "Here at any rate there can't be different interpretations. If someone sees a thing, he sees identity too [Wenn er ein Ding vor sich sieht, so sieht er auch Gleichheit]."

Wittgenstein's critical response comes swiftly:

Then are two things the same when they are what *one* thing is [Also sind zwei Dinge gleich, wenn sie so sind, wie *ein* Ding]? And how am I to apply what the one thing shows me to the case of two things?

216. "A thing is identical with itself [Ein Ding ist mit sich selbst identisch]." -- There is no finer example of a useless sentence, which nevertheless is connected with a certain play of the imagination [der aber doch mit einem Spiel der Vorstellung verbunden ist]. It is as if in our imagination we put a thing into its own shape and saw that it fitted.

If the idea of a things self-identity is empty in this way, then it cannot be used positively to undergird the conception of the underlying possibility of the repetition of a rule according to which this repetition is itself that of a self-similar item *ad infinitum*. Neither can, for the same reason, the assumption of the iterated intuition of a directive, or indeed, and again for the same reason, of a "decision" made anew in each case.⁹⁸ In the Kantian jargon, neither the receptivity of a subject in the pure intuition that it gives to itself in submitting itself to the rule, nor its spontaneity in the "decision" that would consist in each case, in the self-giving, can ultimately account for what it is to be "able" follow the rule "correctly" or to know, grasp, or understand it. For neither the spontaneous self-giving of the rule in finite form at each step, nor one's receptive relation to it (assumed as given) can succeed in overcoming the radical aporia

⁹⁸ Cf. PI 186: "What you are saying, then, comes to this: a new insight – intuition – is needed at every step to carry out the order '+n' correctly." -- To carry it out correctly! How is it decided what is the right step to take at any particular point? -- "The right step is the one that is in accordance with the order – as it was *meant*." -- So when you gave the order '+2', you meant that he was to write 1002 after 1000 – and did you then also mean that he should write 1868 after 100036 after 100034, and so on – an infinite number of such sentences? -- "No; what I meant was, that he should write the next but one number after *every* number that he wrote; and from this, stage by stage, all those sentences follow." -- But that is just what is in question: what, at any stage, does follow from that sentence. Or, again, what at any stage we are to call "being in accordance" with it (and with how you then *meant* it—whatever your meaning might have consisted in). It would almost be more correct say, not that an intuition was needed at every point, but that a new decision was needed at every point."

of finitude and infinitude that stands at the center of the very conception of rules as regular structures of the infinite repetition of the same. Failing in the attempt to account for the development of the rule in either of these ways, the conception finally attempts to base itself in the idea of an "infallible" and absolute paradigm or criterion for this infinite repetition in self-identity. Here it is indeed tempting to seek a ground for the purported substance of this criterion in an operation of the imagination, the "play" by which it doubles the (single) object and finds it once more "identical with itself". But this final attempt, too, fails in that the self-identity of the same does not and cannot provide a paradigm for anything; all it can do is serve to indicate a more original question about the basis of identity itself.

If, then, any account of the actual basis of the "infinite" understanding of how to go on in terms of the provision to consciousness (whether from within or without) of a symbolic expression of a rule or any finite item must fail (on pain of Wittgenstein's paradox at PI 201), then Kant's schematism as the representation of a rule for subsumption must apparently fail for the same reason. For if it is the finite representation of the rule that is supposed to account for how a concept can be applied in an indefinite number of cases, then there inevitably arises the question, which Wittgenstein pushes, whether this rule itself needs to be interpreted (by a further rule) in order to be applied correctly in each case. Of course, Kant does not raise the question of whether the schematism of a concept can be *mis*applied, or applied in a misleading or incorrect way. But it is the effect of his way of considering the possibility of subsumption to be given to the subject by means of the provision of the "representation of the rule" that the schematism is that this question is unavoidable. Once we pose it, along with Wittgenstein, it is no longer possible simply to assume the guaranteed correspondence of the "I can" of subjective schematization with the order of things as they are (even if this be, explicitly, the order of things as appearances and not things in themselves).

The problem is already there in the case of the empirical concept, where the task of the schematism is to provide an "image" for the concept that is sufficiently "homogenous" with the appearance for it to be placed under it. Already here, as Wittgenstein's argument suggests, the supposed visual or pictorial "homogeneity" would also, given the picture, stand in need of further criteria of resemblance, similarity or identity that no image by itself can yield. But the difficulty is sharpened, and its underlying form is more clearly in view, in the case of what Kant already sees as the general transcendental form of time, the transcendental schema of the pure concept, which explicitly can have no image and can "never be encountered in any intuition."⁹⁹ For here, the representation of the rule which amounts to the "transcendental time-determination" is sufficiently "homogenous with the category" as to be universal and resting on an *a priori* rule [auf einer Regel *a priori* beruht]. But it is also just as much "homogenous with appearance" in that it is contained in "every empirical representation of the manifold" as the form of inner sense. This is what leads Kant to propose that the transcendental schematism of the category must be simultaneously both intellectual and sensible, and to propose further that in occupying this paradoxical position it gives an ultimate basis to any and all determination of time.¹⁰⁰

The proponent of this Kantian view of the origin of time has something in common with the interlocutory voice that proposes, at *PI* 215, the "sameness" of the same as an ultimate basis for the possibility of applying a rule. In particular, both presuppose a kind of automaticity of the rule in its self-

⁹⁹ A 137-39/B 176-78.

¹⁰⁰ A 145/B 184.

identical repetition unto the infinite. On this kind of view, it is the rule *itself* that determines its own infinite application, and the determination of each new case is a kind of repetition of the "same" application of a self-same structure or item. The capacity or power of an agent to "apply" the rule across an (in-principle) infinite number of cases is then understood simply in terms of her symbolic representation or conscious grasp of that item, which is able to underlie all of the (infinitely many) cases all by itself in its infinite repetition of itself. It is this automaticity that figures, on Kant's official view, in the way that the transcendental schema can itself serve as a kind of "pure image" for time, for example in the case of the schematism of substance, which represents an underlying pure image of permanence. In both cases (the Kantian and the Wittgensteinian interlocutor), the medium of the possibility of the indefinite homogenous extension must be assumed to lie in the capacity of a finite subject of representation actually to produce or perceive the finite (because finitely representable) structure that actually underlies, in automatic fashion, the homogenous extension of the rule ad infinitum. But if, as Wittgenstein's critique suggests, it is incoherent to suppose that the finite representation of any rule to oneself as self-identical can provide an ultimate determining basis for the "application" of concepts in this sense, then the Kantian picture of the representing subject as thus giving itself time, in autoaffective fashion, by both producing and receiving the representation of a rule must also be rejected.

Heidegger's own analysis of Kant, developed under the condition of his own radical questioning of the priority of the representing subject of consciousness, in fact suggests a partially parallel critique. As we have seen, Heidegger locates essentially two interrelated paradoxes at the center of Kant's conception of time as given in the auto-affective power of a transcendental subject through the mediation of the schematism. The first is the paradox of spontaneity and receptivity: as spontaneously giving itself time through the schematism which mediates as a common root between the understanding and the sensibility, the pure *activity* of the subject in the self-giving of time must also be conceived, simultaneously, as a pure passivity with respect to what is thus given. Relatedly, there is a second paradox of constituting and constituted: the subject as such must be both capable of constituting time through this pure self-affection, and also capable of *being constituted by it* as the unity of transcendental apperception, which has the same form. These paradoxes are not resolved by the proposal of doubling the subject into a "transcendental" one which produces time and an "empirical" one which receives it. For even the "empirical" subject must be capable of thinking the categories, and applying them in judgment in such a way as to produce empirical knowledge of objects as they are given to us.¹⁰¹ On Kant's account, to possess this capability just is to have access to the schematism which makes the application of the categories, in general, possible. But this schematism is the pure image of time with respect to which the subject is irreducibly both active and passive, both constituting and constituted. As Heidegger demonstrates, it is on the basis of this constituted/constituting structure that Kant thinks in a new way the finite structure of the subject as such, that is as the structure of that whose knowledge stands under the condition of being affected in intuition from a thinkable "outside" in general. But if the suggestion of Heidegger's reading is correct, the real temporal meaning of this structure cannot be found in the subjective and representational form in which Kant lodges it. For the

¹⁰¹ For a similar reason, it is no help to point out that things as they are in themselves, on Kant's picture, do not have any temporal determination, for what is at issue here is not their status but just the possibility of (empirical) knowledge of things as they appear to us under the *a priori* conditions of the categories and of time as the form of inner and outer sense.

assumption of a grounding of time in the (ambiguously active or passive) representational capacities of a subject set off against the world leads to the inevitability of the two paradoxes.

It remains possible, nevertheless, to develop further the positive conception Heidegger actually suggests: that of a constitutive ontic-ontological structure of *Dasein* whereby it structurally carries out "the projection of the Being of the being" always already in advance. This is the structure that Heidegger calls, in *Being and Time* and elsewhere in the late 1920s, Dasein's *transcendence* or "transcending itself toward the world," and Heidegger can accordingly suggest that it is in this structure of transcendence that the specific finitude of Dasein, its always already being in relationship to a general "outside", ultimately resides. In this sense, as Heidegger argues in Being and Time, the transcendence of Dasein is ultimately to be thought, on this conception, as the precondition any possible givenness of entities (whether as present-to-hand or simply as ready-at-hand in everyday circumspective activity) rather than as the transcendence of any particular capacities or limits of the human subject.¹⁰² In this it is different from Kant's conception, although Heidegger can also suggest that it is at the actually deeper ontological/structural basis of Kant's own picture of the human subject as structurally limited by the forms of its possible knowledge in thus being set off against a realm of unknowable things in themselves.

But another result of this suggestion, as we have seen, is that it allows the formal structure of the being of Dasein to be illuminated in a way that is rooted in the constitutive idea of the finite itself, as opposed to any specific determination of it in terms of specifically finite powers, capacities, and the like. Constitutive finitude, in this more "original" sense, is no longer thought by contrast with a supposed infinite intellect which would be capable, as Kant suggests, of an intellectual intuition that could immediately create its object (or indeed, would always already have done so). That is because here the problematic is no longer that of the situation of a kind of being conditioned by certain fixed or static forms of knowledge relative to a being that is not limited in this sense, but rather of the constitutive distinction between the finite and the infinite itself: not, therefore, of an ontic boundary between two regions of beings, but rather of the finite/infinite form of the "relationship" (which is, of course, no "relationship") between beings and being. Within the problematic thus specified, the question of the constitutive forms of the *possibility* of access to anything like the infinite as such, including the problematic of the "open" horizon by means of which finitude communicates with the infinite in general, becomes decisive. For this reason, the kind of limit that matters for the specific consideration of transcendence is no longer the limit of the finite power or capacities of any particularly constituted being, but rather the limit between the finite and the infinite which makes Dasein (as ontico-ontological) both constitutively finite (in one way) and thereby "infinite" (in another). It is rather here to be formally/hermeneutically illuminated from within, not in terms of a being that just is limited, but as the specific structure of limitation or of the limit as such which structurally conditions, in Dasein, both the necessity of being affected "from outside" in general and also the possibility of its projecting (infinite) sense.

This illumination extends to the illumination of the structure of given time. What is the form of such an investigation into the ultimate formal/structural conditions for the givenness of time in its essential nature, and by what means can it proceed? At PI 89, just after invoking Augustine's famous puzzle

¹⁰² Cf. GA 2, p. 364.

about the essence of time (that he seems to know what it is when nobody asks, but when he is asked, he does not know), Wittgenstein specifies this method as the "calling to mind" [besinnung] of what we in some sense already have lying before us, "open in plain view:"

Something that one knows when nobody asks one, but no longer knows when one is asked to explain it, is something that has to be *called to mind* [etwas, worauf man sich *besinnen* mu β .] (And it is obviously something which, for some reason, it is difficult to call to mind [etwas, worauf man sich...schwer besinnt.])

90. We feel as if we had to *see right into* [*durchschauen*] phenomena: yet our investigation is directed not towards *phenomena*, but rather, as one might say, towards the 'possibilities' of phenomena. What that means is that we call to mind [wir besinnen uns] the *kinds of statement* that we make about phenomena. So too, Augustine calls to mind [besinnt sich auch] the different statements that are made about the duration of events, about their being past, present, or future. (These are, of course, not *philosophical* statements about time, the past, the present and the future.)

Our inquiry is therefore a grammatical one.

What is at issue in the context is the particular "depth" that appears to characterize logic as something "sublime", something that must be fixed in advance of any empirical investigation and must thereby be seen as capable of determining the possibilities of phenomena always already in advance. This character of "depth" has long been seen, in temporal terms or ones analogous to them, as that of the "a priori." The problem of the way in which it has been given to us, or the way it can be explicitly retrieved, is thus nothing other than the temporal problem of the *a proricity* of the *a priori* as such. The problem of the "knowledge" of the essence of time which is given to us as finite beings who themselves live and define the distinctive "possibilities" of their life in terms of the way time is given to them has itself long been thought (and is thought, also, by Augustine) as the problem of the "accessibility" of this a priori within this empirical time of factical life and knowledge. Given the general form of this problem, Wittgenstein's choice of Augustine's question *about* the nature of time as an example that illustrates it is thus (though others might perhaps have been chosen) by no means adventitious. As the sort of question that one feels one can answer when nobody asks, but is unable to explain when it is asked, the form of Augustine's question is itself indicative of the problematic of the nature of given time which is its theme. This is the problematic of the recovery of the original structure of possibility from within the temporal life of a finite being conditioned by it.

In response to this linked problem of logic and time, Wittgenstein here suggests that clarity can result from the recollection or "calling to mind" [*Besinnung*] of what we (in some sense) already know – the kinds of *statements* we make – statements, for example, "about the duration of events and about their being in the past, present, or future." The suggestion invokes Augustine's own procedure, but in the context it may also be seen as evoking or resembling one of the original temporal figures of the specific character of rational knowledge in the Western tradition, namely Plato's invocation of *anamnesis* as the recollection, under the conditions of an embodied life, of what one already knows but has in some way, due to this embodiment, necessarily forgotten. The point of connection is not in any assumption that Wittgenstein shares with Plato of the necessary opposition of the sensible and embodied over against

the supersensible and atemporal in itself, but in what it suggests about the temporal structure of an inquiry into the prior givenness of sense that has long figured, in the tradition, as the inquiry into the *a priori* order of possibilities fixed always already in advance.

The distinctive possibility and utility – for investigations of *this* sort (Wittgenstein says that what Augustine says about time could not be said about the answer to a question of natural science) – of this "calling to mind" what one (in some sense) already knows marks the form of an investigation arising not from an interest (as Wittgenstein says) in facts of nature or in the empirical itself, but "from an urge to understand the foundations, or essence, of everything empirical." Through such an investigation, Wittgenstein says, we cannot learn anything "new"; but we may nevertheless illuminate the original "grammatical" forms of the formal possibilities of sense that *can* be possibilities for us. These possibilities are not just "mine" or "ours"; they are, rather, as Wittgenstein says, the "possibilities" of the phenomena in themselves. Their "grammar" is not just the structure of this or that particular language, but it is the order of structural precedence that is first shown in our calling them to mind in the terms and forms in which they are (always already) open to language as such. This, among others, is the way in which "essence is expressed by grammar." Such an inquiry, bringing into view what is "in some sense" already known and reflectively giving me the form of "my" life, may thus indeed illuminate, Wittgenstein suggests, the specific question of time that puzzles Augustine; but as such, and in the same way, it also articulates one reflexive form (among others) of a factual/hermeneutic "inquiry" into the original essence of time itself.

V

As we have seen, Heidegger's reading of Kant in Kant and the Problem of Metaphysics drives toward an elucidation and development of the formal structure of finitude as the reflexive common root of time and Dasein. With this he can suggest, at the outcome of the analysis, that in virtue of this structure Dasein is neither extra-temporal nor intra-temporal but originally is "so 'temporal' that it is time itself, and ... only becomes possible, according to its ownmost essence, as time itself."¹⁰³ If Heidegger is right in his reading of Kant, it cannot be the case that time is produced through the constitutive capacities of a representational subject. But Heidegger is not simply critical of Kant; rather, he sees Kant's conception of time as pure auto-affection as pointing, in a radical fashion unprecedented in the tradition hitherto, at least since Aristotle, to the original connection of being and time themselves. If this connection is to be illuminated on the basis of a consideration of the finitude and structure of Dasein, it must be possible to develop the implications of this structure of auto-affection, even *outside* the context of the assumption of a rooting of time in the activity of the subject or in its ability to represent a rule. The illumination will thereby shed light on the basic ontic-ontological structure whereby there "is" something like time at all. Here, we are accordingly looking for this structure as the formally underlying structural basis for the possibility that anything like time is *given* at all – both in the empirical experience that presents it in immediate presence, and in the 'intellectual' form of its abstract capability of being thought, as such and "in general."

What, then, remains of Kant's picture of the original givenness of time, if we purge it of the assumptions of its rootedness in the capacities of a representing subject but attempt nevertheless to retain its

¹⁰³ GA 3, pp. 174-75.

definitive connection to the finite/infinite problematic it involves? If we drop the constitutive assumptions of Kant's idea of the representational subject as conditioning all possible experience and objectivity, we cannot retain the figure, which is anyway contradictory, of a subjective *activity* of auto-affection whereby the subject both gives itself time from itself and is first constituted by the very form of its being given from outside. Nevertheless, we can *retain* a formally/ontologically basic structure whose definitive features can be briefly adumbrated as follows:

- 1. Reflexivity. Before and beyond the contradictory structure of activity and passivity that Heidegger locates in Kant's account of time as pure self-affection, he suggests, as we have seen, a more basic structure of given time in which time temporalizes "itself" in "giving" itself in the three ecstases, thereby yielding what can be grasped as a past, present, and future. Thus the structure of a basic reflexivity, or self-givenness, is retained in the ultimate and basic structure of given time. This reflexivity is not to be understood as if it were the representation of a self to itself or as if it itself depended on a subject's self-reflection in thought or consciousness. It is, rather the formal/structural condition for any such self-relation. It is also, and for this reason, the structural condition of any possible "transcendence" in the sense of the relationship of a finite interiority to an outside in general. Again, this formal reflexivity is not the outcome of any practice, activity, capacity or ability of Dasein, but it can be seen as, rather, the structural basis for *its* ontic/ontological constitution, whereof its specific structural relationships to the possibility both of truth (as grounded ultimately in "its" world-disclosure) and of time (as the three ecstases).¹⁰⁴
- 2. Totality. As we have seen, Heidegger recognizes the priority that Kant accords to time as both the most universal form of sense inner as well as outer and also in relation to the *thinkable* determination of temporal existence in terms of the categories. But although Kant, according to Heidegger, understands the underlying structure of given time ultimately in terms of what he (Heidegger) calls "world time" the merely extant time of the pure succession of "nows" Kant's analysis stops short, according to Heidegger, of considering the actual structural relationship of given time to the phenomenon of Dasein's "transcendence toward world" and thereby its relation to the phenomenon of world itself. In and through this relation, Dasein, as ontico-ontological, is able to transcend itself *toward* that which ultimately determines the ways of being of entities, or toward their being itself. As soon as this structure is brought into view, the question arises of the form of the relationship between time's self-givenness and the totality of entities as such. In this relationship, it must be at once the case that time gives itself,

¹⁰⁴ It is decisive in this respect to recall that Dasein is first *defined* reflexively and ontico-ontologically in terms of its constitutive concern for being and hence for the kind of being that it itself is. This constitutive concern is articulated, in Division I of *Being and Time*, as the structure of Care, and in Division II this articulation is recapitulated, on the specific basis of the problematic of the wholeness of Dasein, as its deeper "ontological meaning," which is shown to be time. At the basis of all of these analyses is the ontic-ontological structure of Dasein as something which already has, in its being, the positive characteristic of an understanding of something like being. This reflexive structure formally conditions, on the level of the threefold structure of the question as such, the possibility of an explicit retrieval of the question of the sense of being.

irreducibly and "in each case" in and *as* a present moment, but *also* – and just as decisively – that it gives itself as the "simultaneous" determination of *all* "innerworldly" entities, as such accessible in principle and equally to anyone and in general.

3. Paradox. The combination of the first two features is already sufficient to generate a fundamental structure of formal limit-paradox, whereby the givenness of time – which must be the basis for the time-determinability of entities as such and in general - is also always irreducibly at or as a time, located as the phenomenon of a "present" moment or in the form of presence. This means that the ultimately constituting agency must, if the "intra-temporal" is grasped simply as an ontic field, appear to be at once inside and outside it, capable through (what must then appear as) its paradoxical agency of constituting all of time in general, as if from "outside", but only from a position irreducibly located within it. This is the underlying structure of the paradoxical aporia that Heidegger locates in Kant's conception of a constituting and constituted transcendental subjectivity, and it is irremediable as long as what is in view is the simply ontic existence of a constituting entity. But with the suggestion of an underlying ontico-ontological structure at the basis of the "transcendence" of Dasein, the underlying paradox can be (if not eliminated) brought out in its real formal structure and viewed as a positive structural condition for the existence and the sense of (ontic) intratemporality itself. Here, the paradox which appears in Kant as an irreducible duality of the constituting and constituted is instead seen positively as the (paradoxical) self-constitution of the temporal/ontological condition for the being and givenness of entities, the "open" of the ontological difference. With this, the structure of limit-paradox can, without being either reduced or dissimulated, be viewed positively as a privileged figure of this difference "itself" or of the peculiar dynamism, now without image or schema, by which "it" gives time.

With this threefold formal and ontological structure in view, it is then possible to see what is treated in *Being and Time* as the structure of Dasein – whereby it is the structural basis both for truth as disclosure and for the temporalization of time in the ecstases – as *determined by* or manifesting *it*. Understood this way, Dasein is nothing like an an individual agent of abilities or subject of capacities. It is, rather, an occupant of the structurally necessary fixed point of the structural and reflexive "relationships" of being and beings, "across" the ontological difference, that first "constitute" both sense and time as forms of givenness in that they constitute givenness itself. Such a structure is already implicitly visible as soon as it is seen that in the presence of any entity, its Being is in some way co-given. And the "constitution" of sense and time which it structurally underlies is already possible wherever this structure is developed as an implication of this basic co-givenness itself. To grasp Dasein in this way is, then, not (any longer) to grasp it as a specific position in a determinate given field of present entities, but rather as the topological/structural precondition, grasped in terms of the ontological difference, for there "being" anything like presence as such, at first or at all.

In fact, to grasp Dasein in this way is already to overcome the specific conception of "transcendence" and the "transcendental" which Heidegger himself, at the time of *Kant and the Problem of Metaphysics*, still retains from Kant or an "ontologically" inflected residual Kantianism. As we have seen (chapter 4 above), the radicalization that Heidegger undertakes in the mid-1930s of the "guiding" question of the being of beings in favor of the the question of the "grounding" question of the *truth* of being already

implies an overcoming of all earlier philosophical conceptions of transcendence, including the structural "transcendence" of Dasein he had described in *Being and Time*. In particular, truth as disclosure is here no longer to be understood as the function or outcome of the activity or production of Dasein as an entity, but rather, more radically, as the structural/topological *place* in which an entity (as it may be, a "human" one) *can* "become" Dasein by grounding itself in it. With the radicalization of the ontological difference between being and beings that implies that it must ultimately be understood as the event of being "itself" (or *Ereignis*) without primary reference to beings, the specific structure of "ontico-ontological" transcendence is itself overcome in favor of a wholly "immanent" conception of being and its history itself.¹⁰⁵ But with the threefold formal articulation outlined above, this structural "place" of Dasein on the basis of which it is capable of "producing" truth and time is already indicated on a basis that does not depend on the positive existence of an entity "capable" of transcending itself "toward" the being of beings, but rather ontologically underlies that possibility itself.

With this, we can return to the articulation of the four orientations of thought, this time understood in terms of how each proposes the structure of the givenness of time as such. As we saw (chapter 5 above), each of the four orientations involves a specific conception of the infinite, and the specific conception thereby involved articulates a specific figure of the givenness of the world, or the ontic domain as such. These relationships of thought, or its located position, to the totality of the thinkable are, just as such, figures of the relationship of finitude to its structurally possible relationship "to" a world in general. But as four structural figures of this relationship they are also therefore four figures of the givenness of the thinkable *time* of the appearance, in what is here contemplated as the relationship of thought to beings in general, of what is itself without figure, the ontological difference between being and beings. They compose and decompose the conditions of this figuration itself, according to the underlying constitutive ideas of consistency and completenesss, as the original metalogical problematic of limits formally/structurally indicated in the temporal form of a "finite" life.

In particular: the *onto-theological* orientation determines thinkable time as given on the basis of the absolute time of a super-being within which is lodged the power of an original creation, even *ex nihilo*; here, worldly time, whether limited or unlimited, is the time of an *ens creatum* secondary to and derivative of an original absolute eternity, outside or beyond it. In the *constructivist* orientation (as, exactly, in Kant) thinkable time is thought as the outcome of the determinate *activity* of a self-positing agency, capable in itself of unlimited potential continuation, though never given or even possible as a constituted *completed* infinity. In the *generic* orientation of finite conditions of thinkability which laboriously construct the basis of constituted sense in progressive time, and the insistence of the "eternal" truths which draw them forth in accordance with the stringent law of procedural consistency. In the *paradoxico-critical* orientation, the infinite time of the world is originally given as the paradoxical structure of a reflexivity which is, with respect to the original metalogical structure of totality it involves,

¹⁰⁵ Here, of course, "immanence" does not mean *ontic* immanence. The suggestion is rather that the structural "place" of truth – the "open" or "clearing" of being, thought as and from *Ereignis*, is no longer dependent on any distinction of an "immanent" from a "transcendent" domain (rather, indeed, any such distinction is to be thought on the basis of this structural "clearing" itself).

both a giving and a given, and therein stages the original structure of contradiction in relation to the constitutive structure of limit-paradox.

As we saw in chapter 5, the two pre-Cantorian orientations of onto-theology and constructivism correspond to (what Heidegger understands as) the history of metaphysics in (what he calls) its total "onto-theological" determination. Here, the joint assumption of completeness and consistency with respect to beings as a whole produces the closure of a consistently thinkable totality which is either thought as the finitude of what falls within the bounds of constituted sense (constructivism) or as the infinity of the singular Absolute (onto-theology in the narrower sense). In order to grasp the real underlying structure of paradox and thereby indicate in it the actual structure of the ontological difference, it is therefore necessary to take up one or both of the orientations that unfold its consequences: the generic or the paradoxico-critical. And of the two, whereas the significance of the generic orientation for the ontological problematic, and especially for the characterization of the successive epochs of the history of being (see chapter 7), cannot be denied, only the paradoxico-critical orientation figures paradox itself as the fundamental structural basis for the phenomenon of given time. It is thus to it that we can look for a clear formal and ontological unfolding of the implications of this original structure, and its essential relation to the determination of the temporal being of entities as such.

In particular, in the threefold structure outlined above, limit-paradox retains, as we have seen, a basic and determinative significance. On the suggested conception, the givenness of time is itself is essentially paradoxical and remains grounded formally in paradox as original structure. But the significance of original paradox here is not simply that time or becoming is ultimately or simply contradictory. What is to be thought here is rather the original relationship between the finite and the infinite which is, as unfolding from the formal structure of limit-paradox itself, is ultimately formally responsible for the positive constitution of the limited and the unlimited themselves. And what comes into view here is not simply an irreducibility or ubiquity of contradiction in ontic domains, but rather the structure of original paradox which, as an indicative articulation of the ontological difference "itself", ultimately underlies the positive sense and constitution of any "consistent" ontic domain as the structural condition for its possible givenness. With the indication of the basic, underlying structure, there is also therefore indicated the positive basis for the constitution of the metaphysical "totality" of beings as complete and consistent in itself. But at the root of this constitution in the history of metaphysics is (as we have seen (chapter 1 above)) the specific structure and force of "logic" and the "logical" as the *general* medium of thought. This constitution then always implies an actual suppression or prohibition of the original structure of temporal paradox itself. Since the original paradox is nothing other than a figure of the ontological difference, this suppression is also nothing other, as we have seen (chapter 5) than the withdrawal of the ontological difference itself. But it is also the positive condition of the constitution of metaphysics by means of the onto-theological or constructivist assumption of the complete and consistent totality.

It is from this perspective that we can finally understand the ontological/temporal meaning of the law of noncontradiction itself. In particular, if, as we have seen, the "metaphysical" assumption of the joint completeness and consistency of the ontic domain always rests on the suppression or obscuration of the more fundamental temporal structure of paradox, then the consistent ontic totality in general may be

seen as the domain in which a "fundamental" prohibition of contradiction is maintained in force. This prohibition itself produces the specific applicability and force of (noncontradictory) logic in relation to a totality of thinkable entities or contents. It is on this basis that the ultimate correspondence of the "logical" possibilities of thought and the "ontological" or metaphysical possibilities of existence is ensured. But within the regime thus constituted, the prohibition itself will always then be thought in a double and ambiguous way: both as the "logical" impossibility of the contradictoriness of thought – the lack or absence of content of the "contradictory" thought or claim – and as the "metaphysical" impossibility of the contradictoriness of things, states of affairs, or the world in itself. This is the ultimate source, as well, of the ambiguities noted in chapter 4, above, whereby the law of nonconctradiction always operates as the overdetermined debarring of what is anyone considered impossible for thought or reality.

As a consequence and outcome of this, it is then also always possible to think the *self-identity* of the entities thought as subject to the force of the law of noncontradiction in a twofold way: both as identical "in reality" and thereby incapable of contradicting "themselves" and as identified or identifiable "in thought" and thereby incapable of being thought under contradictory determinations. But this duality corresponds directly to the two formulations of the law of noncontradiction that Kant and Heidegger discuss, namely as involving temporal determination and as free of it. If the law is thought as binding directly on the world of objects, as it is (e.g.) for Aristotle, it must involve the temporal determination, for its force then is to hold the unity of a (temporal) object in place by prohibiting the excess of selfdifference in its real determinations that would necessarily double it. If it is understood, instead, as the highest or most general principle of the unity of judgment in thought, as for Kant, the temporal determination is not required, for its force is then only to render coherent the thought of the object, which is here understood as timeless in itself. From the present perspective, though, neither formulation is more "correct" than the other. What is essential is rather to see how the ambiguity between them points to the deeper constitutive structure that underlies the onto-theo-logically assumed correspondence between the "logical" realm of thinkable contents and the ontic in general, and thereby produces the distinction between the temporal and the atemporal in terms of which they are metaphysically thought.

This is the correspondence that is, as we have seen (chapters 1 and 4, above), already invoked by the Visitor's picture of the psycho-logical *koinon* of the great types, both as the thinkable and the real determinations of being in itself, and which is further consolidated and maintained, on Heidegger's reading of the history of metaphysics, by the standing assumption of an identity of *omiosis* whose ultimate form is the *idea* as the common or general. Its basis in each of the subsequent configurations through which it is maintained is the idea of an active correspondence between the identity of things and their identification in thought, the correspondence which is finally understood as the self-correspondence of the rule capable of repeating itself endlessly as the same. It is this thought of self-correspondence as infinite repetition which figures in one way, as we have seen, in Kant's conception of the schema of substance as the ultimate form of persistence, and in another in the conception of the rule as a "rail laid to infinity" which Wittgenstein challenges. It is finally overcome by the radically posed paradox of rule-following, which evinces the ultimate emptiness of the constitution of identity, and hence the consistent and total correspondence between thought and being, that it tries to found. Behind this correspondence, the indication of the original structure of temporal/reflexive paradox is

thus indicated as both its underlying ontological basis and the condition under which it can no longer maintained in force.

What, then, if the formal structure of *any* givenness of time – including that which is given as the endless series of the constantly iterated "now" which Heidegger calls "world-time" – is then referred back to this more basic structure of reflexive paradox in essential relation to the ontological difference?

One consequence is a partially altered picture of the ontological origin and character of this "worldtime" itself. If, in particular, the domain of ontotheological closure in which original temporal paradox and contradiction are structurally prohibited is that in which the rule can appear to apply itself indefinitely as the infinite repetition of the same, then it is just this domain in which time as a whole can accordingly seem to take the form of an indefinite and pure series of identical "nows" whose form is this infinite repetition of the same itself. The identification of the originally paradoxical/reflexive structure of given time in its relation to the ontological difference thus provides the basis for a formally based understanding of the ontological genesis of this series. In particular, it results from the imposition of consistency and the correlative delimitation and foreclosure of the original paradoxical structure itself to produce a domain in which identity and becoming are always *consistently* thinkable. The force of this imposition is marked, as early as Parmenides, in the force of the law of noncontradiction and the structure of correspondence that it institutes between identity in the world and identification in thought. The underlying and ultimate image of the basis of the correspondence is the schema of the persistence of thinkable substance, or the image of time itself as the infinite rule of repetition of the same. With the imposition of this schema and its maintenance in logical force, time as it is accessible "for everyone", "in general" and "as such" can indeed only seem to have the form of the empty repetition of the "now" as determined by the universal rule. But this appearance, and the ontic totality it constitutes as the "general," "objective," and "universal," is itself possible only on the basis of the partial obscuration and suppression of the original structure of temporal/reflexive paradox itself.

Further: if, as Heidegger suggests, the "objective" time of the world, such as it is presupposed in the mathematical natural sciences and employed in the "scientific" description of objects and events on a purely ontic level, is itself based in this image of time as the constantly unfolding series of nows, then the illumination of such an underlying formal structure, far from being opposed to a "realist" doctrine of world-time (in this sense), is actually the positive ontological-hermeneutic precondition for such a doctrine. As Heidegger himself is at pains to point out in his reading of Kant, this image of time does not just come from nowhere, but also results from a particular interpretation of the being of the world and a particular schematization of the unfolding of being as time. Given Kant's underlying picture of the origin of time in the representing subject, he cannot but propose the ultimately incoherent idealist doctrine of a world-time that is itself created or produced, as if from "outside" time or the temporal, by the spontaneous-receptive and constituting-constituted activity of this subject. But if Heidegger's intention were only to replace this constituting/constituted subject with a structurally similar constituting/constituted Dasein as the ultimately substantial basis for the real constitution of world-time (albeit one now located "in" rather than (seemingly) "outside" time as with Kant) he would by no means have resolved the many temporal paradoxes involved in such an idealism. There would still be, for example, the question of how to conceive of the actuality of temporal events occurring before the empirical (intra-temporal) existence of a particular Dasein, or indeed before the existence of any Dasein

at all.¹⁰⁶ And it would be similarly mysterious how the individual Dasein could i*tself,* by means of its production of its "own" time, succeed nevertheless in producing or even relating to a world-time that is binding and equivalent for *all* individuals as such.

If, however, as Heidegger at least suggests, world-time has an original basis in a purely reflective onticontological structure that is also at the formal basis of the very structural possibility of (any) Dasein, then there is no longer any obstacle to considering the "objective" world time that is based on the schematism of the constantly unfolding series of nows to be fully "real" as one possible manifestation of the character of the world itself. As we have seen, the character of the "world" as totality is already involved in the original structure of paradox; what is involved in its "modification" into "objective" world-time is then just the structural/temporal condition under which the "world" itself appears to be consistently thinkable as a whole. This condition is the schematization of time as "world-time" in Heidegger's sense: as the empty and general time of the iteration of the "now". This is then a time that can be seen as fully characteristic of objects, events and processes as they are discussed in the natural sciences, as "objective" and real occurrences, and furthermore, as such, as inherently capable of mathematical measurement and treatment because of their own formal constitution. There is now no bar to seeing "world-time" as genuinely and fully "objective," and as indeed essentially and constitutively accessible "to anyone" and "in general." But it remains the case that it has a deeper ontological basis in the original structure, neither subjective nor objective, by which anything like time and presence are first given at all.

It is not clear that Heidegger sees this with full clarity, at least not in the full scope of its implications, in *Being and Time* itself. There, as we have seen, the "world-time" of the abstract and unlimited succession of now-moments is understood as the outcome of what is essentially a *privation* of the more "original" ecstases, whose primary site is the individual Dasein in its structure of projection on possibilities, the final and highest of which is the individuating possibility of death. On Heidegger's official account, the possibility of this privation, and the specific kind of *infinitude* that it apparently produces as the endless form of the repetition of the "now", results from the modification of Dasein's original structural finitude, articulated by death, into the *publically available* world-time that then becomes known as the time wherein innerworldly entities are encountered. Through the modification, time gains a "public character" (or rather, as Heidegger says, has "already been given" one) through which "several people" can say "now" together; thereby it becomes, according to Heidegger, "the time with which "they" reckon."¹⁰⁷ In this sense, the regular world-time of the series of nows is ontologically understood on the basis of the specific structure of the public or of the "they" – *Das Man* – which is for Heidegger the mode of Dasein in its falling.

This basis emerges, according to Heidegger, when the *counting* or *measuring* of time is made possible by the general availability of a common standard, for example the observed regularity of the movements of the heavens (for "primitive Dasein") or, later, the availability of the clock. Such a standard is one that must, in order to be useable, unchanging and permanently available as "present-at-hand" for everyone

¹⁰⁶ Quentin Meillassoux (2006) has recently resurrected this old problem as the problem of the "arche-fossil" and used it to raise a very broad critique of what he sees as a "correlationism" characteristic of much recent philosophy.

¹⁰⁷ GA 2, p. 411.

at any time. Temporal measurement in general is constituted in the "making-present of a presented standard in the presented span [im Gegenwärtigen des anwesenden Maβstabes in der anwesenden Strecke]"¹⁰⁸ Through this constitution of the possibility of measurement, Heidegger suggests, the temporality that is originally "Dasein's" gains instead the character of a kind of time that is accessible, in principle and in general, to everyone, as a "*present-at-hand multiplicity of "nows*" [vorhandene Jetztmannigfaltigkeit]."¹⁰⁹

The possibility of world-time as a constantly available stream of subsequent "nows" "available" for measuring and dating in general and to everyone is thus understood as conditioned both by the publicity of the "they" and by the factical existence of regular standards of measurement. But it can be objected here that Heidegger does not clarify either the relationship between these two conditions or the ontological/temporal status of the entities (e.g. clocks, sundials, or originally the heavenly bodies) that also provide a basis for the "public" possibility of the measurement of time itself, on the account. In particular: the dating of things according to the motion of the heavenly bodies is such as to make possible a "publicly available" measure, in such a way that "everyone can 'reckon' on [it] simultaneously."¹¹⁰ This is, in the first instance, a dating by means of the motions of objects in the heavens; as such it can be done "with one another" and for 'Everyman' "at any time" and "in the same way", insofar as we are with another 'under the same sky.'"¹¹¹ Through this and along with Dasein's essentially "thrown" temporality, Heidegger, says, "something like a 'clock' is also discovered – that is, something ready-to-hand which in its regular recurrence has become accessible [das in seiner regelmäßigen Wiederkehr ... züganglich geworden ist]." Dasein's temporality is here both the "condition for the possibility of the clock's factical necessity [der faktischen Notwendigkeit der Uhr]" but also the condition of possibility for "its", i.e. the clock's, "discoverability [Entdeckbarkeit]."¹¹² Furthermore, the "natural" clock of the heavens further conditions the possibility of the measuring by means of "artificial" clocks which are a feature of more technologically advanced Dasein.¹¹³ In the regularity of this "natural" clock is thus to be found, according to Heidegger, the basic regularity that conditions both the existence of the "artificial" clock and Dasein's ability to measure by means of it.

But then it must be asked how *this* accessible regularity of the original, "natural" clock is first constituted. On Heidegger's official account, it is itself constituted *by* Dasein (or Dasein's original temporality) and indeed *through and by means* of Dasein's actual activities of 'reckoning' with it. It is then mysterious, though, how the time of reckoning is here related to the time reckoned. If we consider this question in the light of the distinction between constituting and constituted time that Heidegger draws as the distinction between authentic and "vulgar" time, it appears to yield the paradox that the regularity of the movement of the heavens must be ontologically *subsequent* to Dasein's "own" time, but is nevertheless as such available *to* "anyone" *at* "any time". The regularity of the original, "natural" clock" would then seem already to be able to serve as a standard in advance of any particular Dasein or Dasein in general, whereas (on Heidegger's account) this possibility of its serving as a standard

¹⁰⁸ GA 2, p. 417 (transl modified).

¹⁰⁹ GA 2, p. 417.

¹¹⁰ GA 2, p. 413.

¹¹¹ GA 2, p. 413.

¹¹² GA 2, p. 413.

¹¹³ GA 2, pp. 413-414.

is itself a constituted possibility of Dasein's "own" temporality itself. This raises not only the aporia of the pre-existence of countable, measured time in relation to objects and events taking place before the advent of any empirical Dasein, but (more deeply), how the "for everyone" and "at every time" of measured time is *itself* first given. Here, it is not sufficient simply to claim that it arises from a modification or development of the *individual* Dasein whereby it lives in the mode of falling which Heidegger elsewhere identifies with the "they-self". For if it were only this, it would remain mysterious *how* the regularity of natural time first becomes *available* to Dasein *in general* (or to "everyone") at all.

If, on the other hand, the ultimate origin of world-time is seen, not in the privation by which an individual Dasein "falls" into publicity but rather in a formal/structural paradoxical configuration of the type I have suggested above, then there is no problem with explaining this "for everyone" and "at every time". For the "general" character of time as given in this way is already co-included in the original paradoxical structure itself. To see it as included in this way is not, as we have also seen, to diminish or exclude the equally important sense in which time is always given, just as equiprimordially, "for me", "in this moment," or (irreducibly) "now". What is rather to be thought is exactly the paradoxical structure which contains in itself the possibility of both kinds of determinations. Of course, it is not here disputed that the objectivity of clock-time, to be clarified ontologically, must itself be related back to its underlying "formal" condition of reflexive givenness. It is also not necessary to deny, as we have seen, the actual structure of the ecstases in which time "temporalizes itself," since these have, themselves, the formal structure of reflexivity which is, on this analysis, the deeper unified root of both a Dasein's "individual" time (if such there be) and world-time itself. What is apparently to be denied, or at least questioned, is just the particular claim that such possibilities as can stand at the basis of any possible givenness of world-time, must originally be (only) "mine". On the suggested analysis, the way in which world-time is given is indeed conditioned by the possibility of its being measured or counted, and this possibility must be so constituted that it is "for anyone" or "general". But this character of "universal" availability is not to be understood *simply* as a privative mode or modification of a process or activity which is, in the first instance, that of an individual agent or actor. Rather, there emerges here the deeper question of the formal/structural conditions for the very possibility of *counting* time, both on the side of the being "able" to count and on the side of the original possibility of the counted as it is rooted in the original ideas of *number* (such as limit, finitude, and infinitude) themselves.

What, then, of death, which familiarly is, for Heidegger in *Being and Time*, the "highest ownmost" possibility of the individual Dasein, and which officially defines the original structure of finitude in which all of "Dasein's temporality" must be rooted? Without disputing that there is a specific conception of finitude that comes to light here and which is indeed indispensable in any ontological inquiry into time (indeed, the very conception that is developed in much more detail and with greater clarity in the Kant book) it is nevertheless possible to raise questions about whether death must be seen as prior in its relation to *any* possible constitution of time, as Heidegger indeed suggests in *Being and Time*. As we have seen, Heidegger's critique of Kant in *Kant and the Problem of Metaphysics* ultimately provides grounds for disputing any conception of the givenness of time as rooted in the capacities of a subject capable of producing its specific unity in the scope of a subjective "I can"; these grounds are in fact brought out even more fully by considering the implications of Wittgenstein's critique of rule-following. On this basis, and applying the terms of this critique, now, to Heidegger's position in *Being and Time*

itself, it is possible to ask whether the original givenness of time can always be grounded in anything like a capacity that is distinctively "mine" at all, even if it be the "highest ownmost" capacity of death.

In an obvious way, there is an immediate but also deep structural aporia that is involved in this characterization itself, whereby death is simultaneously "my" highest and most individuating possibility and also, as the condition of "possibility of impossibility," the one possibility that "I" cannot attain.¹¹⁴ The paradoxical dynamics of this aporia do not simply prove that death is not the ultimate possibility "for me" that Heidegger says it is. But they do suffice to permit the question of the relationship of sense to the "finitude" of Dasein to be posed in a deeper way. If sense is indeed to be accessible to me as an essentially "finite" being, it must be accessible in a way that is conditioned by this finitude. But this conditioning does not and cannot *simply* mean that it is limited by death. On the contrary, communication in general and writing in particular inherently involve, as Derrida has suggested, the structural iterability whereby a (written) communication is as such legible, even under the condition of the death of the author or her non-presence in general.¹¹⁵ What is at issue here is really the distinction between possibilities "for me" and possibilities as such; and what is to be, at any rate, further clarified is the way that such inherent structural possibilities as the infinite iterability which appears to be a fundamental feature of language articulate (already and as such) "possibilities" which are also evidently rooted in what must be seen as the more "basic" structures of (experienced or experiencable, but also "representable" or "measurable") time.

v

Following Heidegger, I have argued that Kant's conception of the basis of time in the schematism structurally contains, within itself, the formal indications that are necessary for a more radical posing of the ontological question of the basis of the structure of time as it is given to experience and thought. On the other hand, although Heidegger's interpretation of Kant also points to the deeper problematic underlying the structural aporias of Kant's account, it is not clear (at least insofar as he retains the conception of original time as arising from the possibilities "of" an individual Dasein) that he sufficiently illuminates the actual formal configuration of this underlying problematic itself. I have further suggested that this problematic is, in a way that is not directly confronted by Heidegger, the problem of the ontological basis of the "measurement" of time and its marking in thought and experience with respect to the "before", "now," and "after." We shall take up the problematic in more detail in chapters 8 and 9, where it is argued that the deeper ontological basis of Aristotle's original definition of time as the "number of motion with respect to the earlier and later" is itself to be found in this more original problem, and it is thereby intimately related to what Plato thought as the *ideal genesis of number* from the constitutive ideas of the limited, unlimited, the one, and the many. This points, as I shall argue in more detail there, to a specification of the ontological problematic of the "relationship" of being and time which is not ever developed by Heidegger, but which may be seen as integral to it nevertheless and indeed essential, under contemporary circumstances, to its further development.

¹¹⁴ Cf. Derrida (1994); also Thomson (1999b).

¹¹⁵ Cf. Derrida (1971).

Like other aspects of the "ontological" problem, this one is not seen with complete clarity by Kant; moreover, as with the question of the basis of time generally, its development in Kant is characterized by what is, in the context of his assumption of representing subjectivity, the irresolvable aporia of the constituting and the constituted that we have discussed. This aspect of the problem is also, as I have suggested, not seen with clarity by Heidegger, who rather prefers to treat the ontological problems of mathematics and number, following Aristotle, as simply problems of *one* "regional" ontic domain among others. However, like the aspects of the problematic that Heidegger *does* see, it is indicated in Kant's text, in particular at those moments at which, beyond the "transcendental" distinction of appearances and things-in-themselves, the very structural form of being, such as it (officially) characterizes *both* the being of apperances *and* that of things-in-themselves, is at stake.

A passage from the Schematism, which Heidegger (despite the exhaustiveness of his reading of it) does not discuss in detail, may serve as indicative of the complex problematic that emerges here:

The pure image of all magnitudes (*quantorum*) for outer sense is space; for all objects of the senses in general, it is time. The pure **schema of magnitude** [reine Scheme der Größe] (*quantitatis*), however, as a concept of the understanding, is **number**, which is a representation that summarizes the successive addition of one (homogeneous) unit to another [die die successive Addition von Einem zu Einem (gleichartigen) zusammenbefaßt]. Thus number is nothing other than the unity of the synthesis of the manifold of a homogeneous intuition in general, because I generate time itself in the apprehension of the intuition [dadurch, daß ich die Zeit selbst in der Apprehension der Anschauung erzeuge].

Reality [Realität] is in the pure concept of the understanding that to which a sensation in general corresponds, that, therefore, the concept of which in itself indicates a being (in time) [ein Sein (in der Zeit) anzeigt]. Negation is that the concept of which represents a non-being (in time) [ein Nichtsein (in der Zeit)]. The opposition of the two thus takes place in the distinction of one and the same time as either a filled or an empty time. Since time is only the form of intuition, thus of objects as appearances, that which corresponds to the sensation in these [was an diesen der Empfindung entspricht] is the transcendental matter of all objects, as things in themselves (thing-hood/ reality) [die transscendentale Materie aller Gegenstände als Dinge an sich (die Sachheit, Realität].¹¹⁶

In the passage, the ideas of *magnitude*, the *rule*, the *image*, *number*, *time*, *negation*, *sensation* and *being* all are assembled according to the question of the possibility of the schematization of the category of *reality*, in order to present how it accomplishes the *a priori* possibility of the representation of appearances under it. This schematization involves, as Kant says, the constitutive possibility of constituting a number of units in such a way that a "homogenous" intuition is itself brought to unity. Here, time and number are distinguished as image is distinguished from schema. Time, as the pure image, is the sensory form under which "all" magnitudes that can appear to the senses do so appear. But number is the schema that underlies this sensory image, and the possible appearance of magnitude it allows; it does so by "summarizing" the successive addition of units to one another. Number is thus the regular or schematized structure that underlies the application of the category of "reality" to

¹¹⁶ A 142-43/B 182-83.

appearances, or beings presented in time, in determining the magnitude of sensation present in them in a unified intuition.

This possible unity of such an intuition, and thus the possibility of its schematization in numerical terms, is itself conditioned by the "homogeneity" of the intuition in itself, and also by its "apprehension" as unified. In the apprehension of the intuition thus unified, "I generate time itself..." As we have seen, this "I generate time itself" characterizes the paradoxical structure of auto-affectivity whereby given time is both receptive and spontaneous, and both constituted and constituting, with respect to a transcendental subjectivity formally characterized by the transcendental unity of apperception. Here, it implies that the "generation" of time both presupposes and is presupposed by the procedure of a counting, whereby the "units" of a homogenous intuition are also constituted as homogenous units by being counted together as constituting a one. Elsewhere, Kant makes it clear that he sees any possibility of counting or of the determination of magnitude, as such, as conditioned by the temporal form of sense and the distinctive kind of synthesis of the successive that it makes possible.¹¹⁷ However, the counting here that allows the schematism of number to give reality in the appearances is itself the basis for the constitution of time as "pure image". If it cannot thus be said that the counting of the intuition (or of its "units") takes place in time, it cannot be said to be outside time either, for it itself presupposes both a "synthesis" and an "apprehension" of it. It is also capable of being "summarized" in the rule that presents it, as "number" to the understanding. This points to what must be, in Kant, an original paradox of the constitution of number in itself, one which is not distinct from the problem of the constitution of the transcendental schematism in general Heidegger points out and that we have discussed. As the question, here, of the ultimate basis for the determination of magnitude in appearances, the paradox of priority that here arises points, in the context of this determination as greater or smaller in the intensity of sensation, to that element or aspect of them which must escape and precede the temporal form of their representation. This is that, in them, which corresponds to their "transcendental matter," their being as things in themselves.

Within the Kantian conception that links the being of number decisively to the temporal process of counting, it will not be possible to resolve this basic aporia of the temporal relationship of the counting to the counted. If this assumption of the actual basis of number in the temporal process or activity of a synthesizing subject is relaxed, however, the possibility arises of a more ontologically penetrating investigation into the being of number in itself. Such an investigation, though it does not and cannot simply take numbers as "timeless" objects, constituted in advance and in themselves, attempts to illuminate the actual formal structure that, as the genetic structure of number as such, mutually conditions both counting and the counted, both the being and the thinking of countable time as such. This structure of genesis is itself further marked, as I shall argue in the following chapters, in the underlying metalogical dynamics of the constitutive ideas of the finite and the infinite, the one and the many. The problematic structures of combination and dissolution, or of identification and

¹¹⁷ Cf. A 242/B 300: "No one can define the concept of magnitude in general except by something like this: That it is the determination of a thing through which it can be thought how many units are posited in it. Only this howmany-times is grounded on successive repetition, thus on time and the synthesis (of the homogenous) in it."; also A 103: "If, in counting, I forget that the units that now hover before my senses were successively added to each other by me, then I would not cognize the generation of the multitude [Menge] through this successive addition of one to the other, and consequently I would not cognize the number..."

differentiation, that unfold this dynamics can no longer be reduced to distinctions such as those of activity and passivity, or of possibility and actuality, or of the intratemporal and the a priori as such. Rather, as I shall argue, they mark the original logical structure that was once grasped as the pure problem of the being of becoming, as it is grasped in the thought to which number and order are themselves accessible as determining forms.