

Miguel de Beistegui

STUDIES IN
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THOUGHT

TRUTH & GENESIS

Philosophy as Differential Ontology

TRUTH AND GENESIS

Studies in Continental Thought

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Truth and Genesis

Philosophy as Differential Ontology

Miguel de Beistegui

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Or c'est proprement avoir les yeux
fermés, sans tâcher jamais de les ouvrir,
que de vivre sans philosopher; et le plaisir
de voir toutes les choses que notre vue
découvre n'est point comparable à la
satisfaction que donne les connaissances
de celles qu'on trouve par la philosophie.

—René Descartes,
Principes de la philosophie

For if truth be at all within the reach of
human capacity, 'tis certain it must lie
very deep and abstruse; and to hope we
shall arrive at it without pains, must
certainly be esteem'd sufficiently
vain and presumptuous.

—David Hume,
A Treatise of Human Nature

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Preface

This book is concerned with a vast and perhaps overly ambitious question: What of philosophy *today*? Of what is philosophy (still) capable? To what can it aspire? Faced with the extraordinary success of the sciences and the increasing fragmentation of the field of knowledge, philosophy is at a turning point. It can no longer be the universal and unifying science it once was. But, for that matter, is it condemned to link its fate to that of the various sciences, and await from them its own direction and task? Worse still: will it, one day (sooner rather than later), become redundant and disappear altogether? Or can it find the resources to reinvent itself, to delimit a new task for itself?

This book speaks from a sense of crisis and urgency.

It asks whether philosophy can still be envisaged as a legitimate and fruitful enterprise, and at what cost. That cost, as we shall see, is heavy, and the work awaiting he or she who wishes to follow me on this difficult journey certainly hard. Why? Simply because the sense and destination of philosophy I wish to advocate here is at odds with what I would call its current minimalist interpretations. It is a sense born of the refusal to limit philosophy to being philosophy of science, of art, of politics, of the human, etc. While essentially concerned with science, art, and all the rest, philosophy cannot be reduced to reflecting them within the element of the concept. Contrary to a common assumption, philosophy does not merely reflect on the discoveries, the data, or even the presuppositions of other disciplines. Why? Because the essence of philosophy is concerned with one thing, and one thing only — “being.” To be sure, being is at issue, decisively so, in every region and every discipline. It is at issue, though, in such a way that these disciplines cannot appropriate it as their own

object. This is because being is a thing that is unlike all other things, an object unlike all other objects. It cannot be delimited as an object, or treated as a thing. To say that philosophy has being as its object amounts to saying that its object is precisely the difference between being and all other things, in which being itself remains implicated. The sole object of philosophy is this unobjectifiable difference. And so, yes, philosophy is concerned with everything, or with the All, but from the point of view of that which, within it, escapes the grasp of things, and of our own discourse inasmuch as it conforms itself to such things. If philosophy is in a position to relate to these various fields and disciplines, and even, somehow, to hold them together, it is on the basis of a problematic that is its own, and in a way that does not so much presuppose these fields and areas as it opens onto them, returning them to their unspoken and unthought origin. If philosophy is attentive to what all other discourses and practices say and do, it is first and foremost attuned to that which, in them, remains only implicit and unsaid, and yet absolutely decisive.

To the charge of ambition, this book pleads guilty. It is first and foremost an invitation to revive the sort of ambition with which philosophy once identified itself. The terms of this ambition, however, have changed — irreversibly so. For reasons that will be made clear, philosophy can no longer aspire to be the primordial and grounding science it once thought itself to be. It can, and must, however, reclaim its ontological heritage, albeit at the cost of a radical and demanding transformation. As such, it finds itself in an ambiguous relation to classical, Aristotelian ontology, which I shall need to clarify. In this new configuration, which I shall refer to as the “massif” of being, philosophy is the science of the uphill. Philosophy is uphill from all knowing, much in the same way in which being is uphill from beings. The essence of being, however, consists in its own hurtling down, or its own becoming thing. Such is the reason why philosophy spends its time working its way back up the slope that the sciences go down. Philosophy is, in the end, a matter of inclination.

No doubt, in its desire to reclaim an old heritage, in its ambition to settle the issue regarding the place of philosophy in relation to classical ontology and science (as well as art), this book is asking for trouble. No doubt, there are many points that would benefit from further clarification, many thoughts that would require further developments. No doubt, there will be many readers who will object to a number of diagnoses and analyses made in the course of the pages that follow. No doubt, there will be many specialists who will object to my treatment of their area of specialization. I welcome these objections, with the hope that they will indicate a desire to at least go down the same road as me, and help me further my own reflection. I am well aware of how insufficient are many of the analyses I develop. Oftentimes, I have had to negotiate a delicate balance between detailed work and general conclusions or diagnoses. I hope I

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have not sacrificed the former for the latter. For all its ambition, this book is, in the most literal sense, an adventure, and an experiment. It raises more issues than it can solve, clears paths that it perhaps does not always follow all the way down. It is imbued with the certainty that philosophy can reach heights and breathe an air that no other discourse can attain. At the same time, however, it is shot through with uncertainty regarding its outcome, and its ability to convince.

This book is not just ambitious. It is also long, and the language it uses often complex. Its length and complexity are the expression of the breadth of issues that are dealt with, and the nature of the problems it tries to solve. Its division in three parts, which, up to a point, can be read independently of one another, and in whatever order should provide pause and relief to the tired reader. While long, this book is, in many ways, incomplete. My only hope is that this incompleteness indicates a genuine breadth of problems and anticipates further work. It is only a first step, hopefully in the right direction.

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TRUTH AND GENESIS

Introduction

The possibility of upholding philosophy, of identifying and demarcating a task for philosophy today takes place against the backdrop of a current situation, the origins of which need to be exposed.

With the birth of philosophy as the science concerning beings as such and as a whole, or as questioning beings in their being, Western philosophy asserts itself almost from the start as the twofold science of nature and first principles, as physics and *meta*-physics. It is, on the one hand, concerned with beings in their becoming, and the concept of φύσις designates the whole of beings insofar as they are subjected to the movement of generation and corruption. If Aristotle's physics is a science of movement, it is not in the modern, restricted sense of a mechanics, but in a broad sense that includes the processes of generation and corruption, coming into being and withdrawing from presence. Physics is a kinetics, but the concept of movement here presupposed involves change or transformation in the broadest possible sense—in the sense of becoming (μεταβολή). At the same time, philosophy is a science of beings in their being, where "being," this time, is opposed to becoming, and equated with the primary causes, or first principles. As such, it is *meta*-physics, not just in the sense in which, chronologically, in the order of Aristotle's text, it comes after the investigation of "nature," but in the sense of the science of being beyond beings, beyond beings in their mere becoming. It is in this latter sense that philosophy also becomes onto-*theology*, and that it revolves around the concept of οὐσία as designating beings in their *presence* (or *permanence*) and *essence*. Almost from the start, "being" takes on the twofold trait of presence and essence. Decisive, in this twofold nature of the philosophical inquiry, independently of the orientation it gives to

the entire history of philosophy, or at least to its dominant, Aristotelian tradition, is the way in which physics does not amount to an autonomous science, but one that is supplemented and illuminated by metaphysics, the unity of the two constituting philosophy as metaphysics, or ontology, in a general sense. This originary twofold and constitutive sense of philosophy is one that has often been ignored or forgotten in its unity, and philosophy has all too often developed one of its senses at the cost of the other, ignoring its “other” side, to which it remained nonetheless bound despite itself. My goal here is to address philosophy in its (meta)physical unity, and to argue for the possibility of philosophy as ontology, thus remaining faithful to its initial Aristotelian inspiration, yet in a way that presupposes a radical break with the solution and general framework of Aristotelian metaphysics. With classical, and specifically Greek, metaphysics, this book shares the ambition of philosophical discourse as bearing on being as such and as a whole, on beings in their being. Yet, against the backdrop of the basic structure of classical ontology, determined by a twofold principle of identity and permanence which the first part of this book will bring to light, it seeks to construe ontology on what could tentatively (and ultimately inadequately) be called a principle of difference. It is on this concept, which designates something held in reserve in classical metaphysics, and thus also a certain excess, that the unity of ontology as meta-physics will be affirmed.

Yet this beginning unfolds only against the backdrop of an onto-historical situation, which I must evoke here briefly. The project carried out in this book can be understood only in the wake of the following events. By “events,” I mean not actual, datable events so much as fundamental tendencies and epochal shifts, continuities and discontinuities within a single history.

It is not until the birth of modern physics in the seventeenth century that the Aristotelian legacy begins to undergo a profound transformation, and this in such a way that philosophy, while positing itself as metaphysics, or as *first* philosophy, and thus as laying the theoretical and ontological foundations for what has now become “natural philosophy,” begins to detach itself from classical and medieval physics. More specifically, it is physics itself which, in the wake of its twofold mathematical and experimental turn, and through the specific way in which these two traits come together as to define its singularity, triggers a process of autonomization that will turn out to be irreversible. How did such a process of autonomy—one, no doubt, that was only partial, and slow—take place? Through the mathematization of nature, and the geometrization of space. Aristotelian physics could not envisage reconciling the formal perfection of mathematics with the material imperfection of the physical world, a world subjected to perpetual becoming and transformation. Of course, astronomy revealed such a mathematical perfection. But astronomy was precisely

not physics in the proper sense, for it dealt with a sphere that was ontologically separate from that of what Aristotle recognized as φύσις. Only philosophy, it was thought, was in a position to develop a discourse adequate to the intrinsically and irreducibly imperfect nature of the physical world, an imperfection made manifest in the fact that the world of natural things is in perpetual motion. The problem, however, was that philosophy found itself in the position of explaining natural phenomena with concepts such as the “heavy” and the “light,” the “dry” and the “humid,” the “above” and the “below,” etc. This was not so much a physics as, in the words of Bergson, an “intellectual chemistry.”¹ The immediate result of the Galilean revolution was the collapse of the Ancient Cosmos, which medieval science had not changed significantly, despite the omnipresence of the Creator at the heart and origin of all things natural. “Nature” began to be seen no longer as the place of becoming, over against the changeless and timeless sphere of pure Being, as manifest in the eternal and perfect circular motion of the stars and planets, but as encompassing the whole of Being, written in geometrical characters, and united under the fundamental laws of physics, principally that of inertia. At the same time, it is the very signification and conception of movement itself that changed, from an all-encompassing, metaphysical conception to a purely physical, *local* signification, from its initial inscription within the ideal and teleologically oriented figure of the circle, and thus from the privileging of rest over motion, to the straight line of infinite motion as formulated in the law of inertia. Movement was elevated to the status of an independent reality when Galileo, observing the motion of a marble on a tilted surface, decided to study this motion for itself, in itself, without seeking to establish the principle of its mobility in the concepts of the “above” and the “below,” these two motionless principles with which Aristotelian physics had explained it hitherto. Movement henceforth came to be seen as essentially governed by numbers, as expressing an order behind the seeming chaos of worldly phenomena. The geometrization of space meant that the concrete space of Aristotle as a set of natural “places” belonging to each being, or type of beings, was substituted for the abstract space of Euclidean geometry, henceforth considered to be the whole of the real.

What Aristotle could not accept, namely, a nature organized according to the formal perfection of mathematical language, Descartes, who finds himself at the crossroad of the old scholastic *doctrina* and the new *scientia*, of the doctors of the School and Galileo, saw as desirable, indeed inevitable:

I delighted above all in mathematics, because of the certainty and clarity of its reasonings; but I did not then see their real use and thinking that they served the mechanical arts alone I wondered that their foundations being so firm and solid, nothing higher had been built upon them.²

With Descartes and Galileo, and this means with the mathematization of the real as such and as a whole, the very sense of nature, and of philosophy itself, was irreversibly modified. Nature began to be unified under a few simple laws, and this in such a way that it could no longer be opposed to another sphere of reality. It is not that science simply took over philosophy, replacing it. Far from it. This new science was seen, and experienced, as the realization of a goal, and perhaps a destiny, set underway in Antiquity, but realized only with the recognition that, as Plato had predicted, nature speaks the language of mathematics. Physics, in the modern sense of the term, for a Galileo, a Descartes, or a Newton, is realized philosophy, or philosophy of nature. Yet even in this transformation, and as I was only just suggesting, it is not as if metaphysical worldviews themselves had simply disappeared. One commentator has shown, rather convincingly, how Modern Science, in its reaction against Aristotelian physics, marked “the revenge of Platonism.”³ And with this Platonism came the extraordinary effort to explain the fundamental laws of movement with motions that are *actually* impossible, to describe the real world with the help of objects that do not exist, and phenomena that are nowhere given in experience, and nowhere *to be given*. In effect, those bodies that move in a straight line in an empty space are not real bodies moving in a real space, but mathematical bodies moving in a mathematical *hypothetical* space.⁴ What the law of inertia does, in effect, is to account for observed variations in natural phenomena through an *ideal* concept of invariability. This is the remarkable point: it is not actually possible to observe the invariability of momentum quantity directly. As such, the law of inertia is not an empirical law, but a law that is posited *a priori*, and one that presupposes a new theoretical attitude on the part of the scientist—the very attitude which phenomenology will describe as “naturalist” or “theoretical.” By contrast, Aristotelian and medieval physics were rooted in sensible experience, not thought. It was sense perception, and not mathematical speculation, experience, and not *a priori* geometrical reasoning, which provided the foundation of a true science of the real world. With Descartes and Galileo, a different, negative value comes to be attached to sense perception and human experience, and nature is transformed in an object of pure contemplation given to mathematical intuition, of the kind reserved hitherto to essences and Ideas, or to eternal types. The physical world is now grasped as what gives itself to pure thought, henceforth envisaged as calculation. Thought becomes calculative reasoning, or measure, and the world its object. Paradoxically, the world is now severed from sense perception and experience, and treated as an abstract object, as a Euclidean space, absolute, necessary, and eternal. And it is not just space that is absolute, but the world as such and as a whole: time and movement as well are absolute, and can

be apprehended by pure, *a priori* thought alone. This abstraction is now what is true. The sense of nature, and of things as belonging to nature, has changed fundamentally.

In this modern phase, however, we are still witnessing an ambiguity. First, physics retains something of its philosophical origin: it is “natural philosophy,” still held within the ambit and jurisdiction ascribed to philosophical discourse by Aristotle, with this fundamental difference that the language now recognized as best adapted to the description of natural phenomena, the language of nature itself, is mathematical. This event has proven irreversible. Despite its radical and revolutionary signification, this is an event that is still continuous with a general theoretical program that had its roots in an intrinsically metaphysical project. As such, modern physics does constitute the historical unfolding of what was once considered a philosophical inquiry into the nature of those entities subjected to generation and corruption, transition and movement. But it is a development that takes on a movement and a logic of its own, one that is only accentuated in contemporary physics (and biology), although, as we shall have to make clear, contemporary natural science can be seen as enacting a return to Aristotelian physics, without, of course, renouncing the mathematical turn carried out in modern science.

Second, the other, metaphysical side (in the restricted sense) of ontology also undergoes a transformation, one very much triggered by the transformation of ancient physics in a mathematical science of nature. If it remains “first philosophy,” it is now in the sense of providing and securing the ontological foundations for the knowledge of nature as newly revealed. And the “place” of this securing, the substance with which this theoretical foundation is identified, is human subjectivity, or human nature. In this respect, it remains consistent with the Aristotelian metaphysics of the οὐσία-ὑποκείμενον, which it interprets in a new sense. Philosophy now turns to the human, and to human reason in particular, as to the onto-theoretical ground sustaining not just the knowledge of nature, but its very ability to be known, and consequently its very being and destination. The Cartesian moment is, in that respect, paradigmatic, even though the *cogito* turns out to be insufficient in order to guarantee the permanence of the world which it is destined to know and master, thus retaining the necessity of an omniscient, omnipotent, and omnibenevolent Creator. It should suffice, in this context, to merely recall the full title of Descartes’s *Meditations*, as “concerned with First Philosophy, in which the Existence of God and the real Distinction between the Soul and the Body of Man are demonstrated,” or the following passage from his *Principles of Philosophy*, in which he still envisages philosophy as “the perfect knowledge of all things which man can know”.⁵

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Thus the whole of philosophy is like a tree, the roots of which are metaphysics, the trunk physics, and the branches that come out of this trunk are all the other sciences.⁶

And on the following page, Descartes speaks of the division of his *Principles* in the following terms:

I divided the book in four parts, the first of which contains the principles of knowledge, which we can refer to as first philosophy or metaphysics. . . . The three remaining parts contain all that is most general in physics, namely, the explication of the first laws or principles of nature, and the way in which the skies, the fixed stars, the planets, the comets and in general the universe as a whole is composed.⁷

And if, with Hume, we begin to witness a tendency that will leave its mark in a certain tradition of empiricism, mostly in the English and Anglo-American world, a tendency to reverse the order of precedence, so that philosophy, while concerned with the analysis of “human nature” as such, is no longer even “first philosophy,” but is conceivable only against the background of “natural philosophy,” in both its method and its content, a tendency, therefore, that is a precursor to scientific positivism, the Cartesian heritage is upheld in the Kantian conception of philosophy.⁸ Indeed, the turn to transcendental subjectivity and its faculties as providing the site for genuine philosophical investigation means that philosophy, *qua* critical philosophy, is established as the science extracting the conditions of possibility of human experience and thus *at the same time* as the science securing the objectivity of objectal, scientific nature. As critical and transcendental, philosophy is established once again as *first* philosophy. “First,” here, must be understood as providing the ground for. . . . Metaphysics grounds—justifies and legitimizes—physics by turning to the intrinsic power and limitations of human reason. Philosophy is no longer party, but judge, no longer concerned with thinking nature as such, but with unveiling under what conditions we *can* know. With Hegel, this Cartesian, modern impulse is realized in a different way, and taken to a certain completion: reason turns out to be not just human reason, but the very being or stuff of the material world itself; as Spirit, reason is both subjective and objective, thought as moving itself freely between substance and subject. What unfolds, from Descartes to Kant and Hegel, is the movement of substance in its becoming-subject, or what has come to be known as the process of the absolute.

The question concerning the relation between the history of classical (meta)physics and modern science is far from straightforward, and in no way can we see the latter as simply breaking with the former. There is even a sense in which modern science can be seen as the completion of classical metaphysics, a sense in which it constitutes the truth of meta-

physics. This means: the space of questioning opened up by metaphysics, and directed toward nature as such and as a whole, has been taken over by the natural sciences, first by physics, modern and contemporary, subsequently by the theory of natural selection (which, since the advent of molecular biology in the 1970s, has become a rigorous and extraordinarily successful science), and, finally, by cybernetics, information technology, and mathematical modeling, which have all had significant repercussions on the natural sciences themselves. To some extent, then, the natural sciences can be seen as bringing the (meta)physical project to its end. What do I mean by end here? At the most superficial level, first of all, the fact that the field of beings as belonging to nature, and as first opened up by philosophical discourse, which could not envisage such a field as altogether separate from that of the meta-physical, has been taken over by a science, the language and methods of which differ fundamentally from that of classical metaphysics. At a more fundamental level, by “end” we need to understand the completion of a project that is metaphysical in essence and origin: the questioning of natural phenomena from the point of view of their immanent structures and processes, the quest for an ultimate order hidden behind the apparent chaos of the universe. And so, we need to understand that, despite appearances, and despite what the dominant, positivist interpretation continues to claim, science is not merely opposed to metaphysics, and that, far from constituting the battle of rationality and irrationality, of reason and faith (or metaphysical speculation), science and metaphysics belong together, insofar as they unfold from the same ground and the same space of questioning, one first articulated (but perhaps not opened up as such) by metaphysics. They share a common fate, a common history, one that is coextensive with the history of the Western world. Science lives of (and off) its onto-theological past, despite the fact that, to a large extent, it overcomes it, and overcoming it, completes it. In that respect, science is indeed the daughter of metaphysics. And so, while constituting the end of metaphysics, science also constitutes its truth. End does not mean cessation; on the contrary, it means continuation under a new guise, and thus confirmation, affirmation. Paradoxically, then, the end of philosophy in no way signifies its disappearance or its doom, but its complete and utter affirmation, in and through the natural sciences. Contemporary science marks the unconditional success of the metaphysical adventure or destination of the Western Man, the crowning moment of a process begun long before modern science ever appeared. In this regard, I can only agree with Bergson, who writes:

Less modest in my claims for science than most scientists [*savants*] have been, I consider that a science founded on experience as the moderns understand it, can attain the essence of the real. No doubt it embraces no more

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than a part of reality; but some day it will reach the bottom of that part; in any case, it will approach it indefinitely. It is, therefore, already fulfilling half of the program of the old metaphysics: it could be called metaphysics did it not prefer to keep the name of science.⁹

Metaphysics, in this sense, designates nothing other than the process that begins with the possibility of being affected by the very presence of the real, and with the ability to question the real with regard to its being. It is, literally, the passion of and for nature.

What of philosophy today, in the face of this historical development? This question itself points in a twofold direction: What has been and is the reaction of (institutional) philosophy in the face of this (meta)physical transformation? What are the sense of philosophy and the task for thinking which this book sets out to present?

The first question is naturally vast and complex. It is difficult to see clearly through the cluster of areas developed under the authority of philosophy, and most often represented in the philosophy departments of our academic institutions. Yet it is my sentiment that there is not a single aspect of philosophy, or a single philosophy, which remains unaffected by the evolution I have just alluded to, even—and oftentimes especially—where it ignores it. In this respect, we can note the following trends:

There is, first of all, and beginning with Kant himself, or rather, with a certain (so-called “neo-Kantian”) interpretation of his thought, the tendency to construct philosophy as transcendental epistemology, that is, as the discourse regarding the *possibility* and *limits* of scientific knowledge itself, as the question bearing on the conditions underlying the knowledge of all *possible* objects of (scientific) experience. Kant’s philosophy, Hermann Cohen argues, is a theory of experience. Yet the object of experience in question here is interpreted in the sense of an object grasped according to the mathematical laws of physics, and revealed in its total and unrestricted intelligibility only in this context. As a result, the realm of experience is interpreted as the totality of the objects of nature as envisaged in physics.¹⁰ The task of the critical philosophy, as this theory of experience, interpreted in the scientific sense, is to identify the *principles* that underpin the systematic knowledge of the physical-mathematical world—the “principles,” and not the laws of nature. It is precisely to the extent that the exposition is directed toward the *method* by which we know, and not toward the *objects* of knowledge themselves, that it is *transcendental*.¹¹ In Paul Natorp’s words, philosophy “is nothing other than a methodical effort by science to achieve self-transparency. In philosophy, science realizes its own principles, procedures, and value orientations.”¹² And this method, to which philosophy directs itself, is to be of the order of pure thought. In other words, and contrary to what Kant himself

thought, it is not to be restricted or limited by intuition, by anything that would be *given* independently of it. In other words, the Kantian *Empfindung* cannot be elevated to the status of a principle of knowledge, and *a fortiori* to the status of a principle limiting or restricting the power of thought itself. It is only at the cost of neutralizing the role played by sensation in Kant's thought, and by overcoming the separation established by Kant between mathematics (as an independent science) and physics, as rooted in intuition, that the unity of the world, as the world of mathematical physics, could be asserted, and that thought could be envisaged as not having its beginning or initial impetus in any principle outside of itself. Yet although supposedly *a priori*, this thesis, central to the Marburg School, remains bound up with a very specific situation of the sciences themselves, and especially with the status of infinitesimal calculus as the *method*—and hence the very *logos*—of scientific physics.¹³ As Cohen himself puts it, through a conditional that is as massive as it is decisive: "If logic is the logic of science, and principally of mathematical physics, then it must above all be the logic of the principle of infinitesimal calculus."¹⁴ Natorp, as a faithful commentator and follower of Cohen, clearly identifies the centrality of the infinitesimal method for his mentor's thought when he identifies it as "the sovereign power of thought over Being, to which no absolute limit can be opposed."¹⁵ It is thus the sense of *logos* (and logic) itself that has changed, and irreversibly so: to think, in classical ontology, is to speak, and specifically to formulate definitions of things or substances according to their genera and specific differences; now, in the face of a nature mathematized through and through, to think is to calculate, and calculation refers to an ability to produce a concept of relation formulated as a *function*. The mathematical function has replaced the category. Yet we know today that the calculus in question, elevated to the status of a universal method by the Marburg School, holds for some aspects of nature only, and that the *a priori* itself turned out to be empirically overdetermined. In the end, philosophy can no longer uphold its ambition to *legislate a priori* as to what can and cannot be known, as to what is required in order for something to be known.

As a result, philosophy goes one step further and becomes philosophy of science, epistemology in yet a different sense: it is now the discourse on science, the discourse which, through an examination of the scientific discoveries, procedures, and methods, forges the concepts and language in and through which the sciences reflect their own activity. This is essentially an operation of reflection, and one which, in many circles, has come to be identified with the sole possibility of thought, with thought as such. One understands why. The philosophy of science has at the very least attempted to come to terms with the significance of the event of modern science. It has drawn the conclusions—conclusions of modesty and humility—of the scientific revolution, and proceeded to reverse the

order in the hierarchy of knowledge: once the science of all sciences (for science of the first cause and the highest being, as well as science of the being of all beings), philosophy is now determined empirically, subordinated to the dominating discourse regarding nature as such and as a whole, its questions and concepts being derived from whatever emerges from within the natural sciences. It has become, one could say, a derivative science. The philosophy of Hume was, in that respect, visionary. In a way, given the historical evolution of philosophy, and by that I mean its self-overcoming in a mathematized science of nature, the philosophy of science is the logical outcome of this consummation: having as it were recognized such a historical process, philosophy can only take the form of a reflection on and from the sciences themselves. It is no longer even metaphysical in the sense exhibited by Heidegger, and characteristic of a certain modern gesture, from Descartes to Kant, as the science that brings out the “*a priori*” of the sciences themselves, revealing and opening up their own domain of inquiry. Rather, and in what constitutes its extreme thematization, best expressed by the logical positivism of the Vienna Circle, philosophy becomes solely concerned with the logical clarification of the propositions and method of empirical science. As such, and in the words of Carnap himself, it is no longer even philosophy (“the Vienna Circle does not practice philosophy”), in the sense of advancing philosophical theses. It simply engages in logical analysis aimed to clarify the propositions of empirical science and, at the same time, to criticize and refute the claims of traditional metaphysics. According to Otto Neurath, metaphysics’ classical ambition to constitute a science of all sciences, or a universal science distinct from the “one empirical science,” simply collapses in the face of logical positivism: “There is no such thing as philosophy as a basic or universal science alongside or above the various fields of the one empirical science.”¹⁶ It has now simply become a matter of recognizing and validating the scientific and empirically determined conception of the world, which Neurath referred to as “unified science”:

The representatives of the scientific world-conception resolutely stand on the ground of simple human experience. They confidently approach the task of removing the metaphysical and theological debris of millennia.¹⁷

In relation to this scientific conception of the world, the propositions of classical metaphysics (or onto-theology) are considered not so much false as meaningless, to the extent that they have no *cognitive* content. As such, they may be the expression of legitimate feelings, but such feelings should have their proper medium in art, music, or poetry, rather than philosophy. In short, and in the words of one commentator, “philosophy,” now understood in an extremely restricted sense, has become an “under-labourer to science.”¹⁸ For the most part, and in a remark-

able inversion of the Cartesian image, emblematic of modern metaphysics, philosophy now becomes a discipline grown out of the tree of science itself, a branch of the natural sciences. This historical process is clearly formulated in the following passage from Natorp's *Philosophie und Pädagogik*, in which the demise of philosophy is announced as a logical outcome:

At first philosophy hid in her womb the germs of all sciences; but once she had given birth to them and given them motherly care during their infancy, and once they had, under that tutelage, become mature and great, she is not averse to watching them grow out into the big world in order to conquer it. For a while she watches them with loving care, perhaps now and again with a soft warning word that neither can nor wishes to restrict their newly won independence; eventually, however, she quietly withdraws to her retirement corner, from where one day, scarcely noticed and scarcely missed, she will have vanished from the world.¹⁹

Once again: the intellectual merit of such a stance is to have recognized, more or less explicitly, the full impact of the advent of modern science in its ambition to take over a domain of inquiry once reserved to philosophical questioning. But, in doing so, it has condemned the initial ambition of metaphysics to a lost era and has failed to recognize the possibility of a genuinely philosophical practice in excess of the natural sciences. In addition, the sphere of art, of a certain experience of language and of certain affects, is excluded from philosophy. This book wishes to bring such an ambition and such a practice back to the heart of philosophy, and to show how the fate of philosophy remains bound up with that of art, and with the sphere of the affective, in a way that is irreducible.

Another reaction, somewhat akin to a metaphysical rebellion, conceives of philosophy in a way that is antithetical to the one I have just exposed. This is the reaction which, in the face of the decisive transformation of the very nature of philosophy, shies away from the challenge natural science poses for thought, and recenters or reterritorializes philosophy on the human. In the process, it becomes mere anthropology. By "anthropology," I do not mean simply the actual science of the human (although it too, I would suggest, has its roots in classical metaphysics), but, more generally, the philosophical discourses that bear on the human, on its situation and its fate, as the sole concern of thought. Whether religious, ethical, or existential in inspiration, they all share this same assumption regarding the task of thought. Not all anthropologies amount to anthropocentrism, however. Many such discourses envisage the human in relation to something that exceeds it (the Other, God, Death, etc.). Yet I cannot help analyze them otherwise than as a result of a progressive withdrawal or shrinking away of philosophy, from a questioning regarding the whole of that which is, to the question regarding the ethical

or existential destination of the human. In classical, medieval, and modern philosophy, the place of the human was directly a function of the broader metaphysical context within which nature was thought. In a way (only this way has become merely implicit), this is still the case today: all anthropologies are overdetermined by the current metaphysical situation, one that is marked by the prevalence of the question regarding the knowledge of nature in its totality. Failing to recognize the ontological and historical ground from which the question of the human can arise amounts to a philosophical abstraction. It is not therefore the question of ethics, or of existence *as such* that is at stake, but only those discourses about which I feel that they are born of a need to recenter or reterritorialize philosophy on the human, and this from out of a profound distress linked to the crisis with which philosophy is faced. Here the Kantian moment is once again paradigmatic and broaches the extraordinary fascination with the ethical in contemporary philosophy: in order to endure as philosophical questions, the classical metaphysical puzzlement regarding the origin of the cosmos, the immortality of the soul, and the existence of God, the possibility of affirming human freedom, must undergo a change of place and become a matter for ethics. Let me be clear: it is not, for me, a question of doing away with the question of the human, of adopting an anti-humanist stance. Such a stance would in the end amount to nothing other than a mere gesture, and would run the risk of introducing another humanism. It is a question, though, of addressing the question of the human from that which, from the start, exceeds it, and in the excess of which it finds its own humanity. But this excess is itself not a matter for ethics. It is a matter for ontology.

Finally, philosophy does not just become *of science*, or *of the human*. It also becomes philosophy of art, or of religion, or of history, or of politics, etc. This proliferation of domains, of so-called areas of philosophy, once held together within a single and all-encompassing metaphysical horizon, seems to testify to the good health and expansion of philosophy. Never, in the entire history of Western civilization, have we witnessed such a display of philosophical publications. Yet this proliferation testifies to the very shattering and dispersal of philosophy I here wish to overcome. Its increased specialization and fragmentation, modeled after that of the sciences themselves (we live in the epoch of specialization, and this is the only reason why some say we still need “generalists,” and this means philosophers, much in the same way in which general practitioners of medicine are seen as the philosophers of medicine), means that philosophy is increasingly cut off from its metaphysical ground, and this means from the historical process that sustains it.²⁰ The discourses multiply and proliferate as the philosophical shagreen continues to shrink. In this context, philosophy does not even have any longer the systematic and highly speculative dimension it once had in German idealism, and in

Hegel's thought in particular, where art, religion, history, science, philosophy even, albeit in a singular way, could be developed for themselves, but always and only from out of a rational process (the process of rationality itself) that traversed them all and united them in an organic totality, the articulation of which, never given in advance, was precisely the task of philosophy. For the specificity of philosophy, Hegel tells us in the *Encyclopaedia*, is that, unlike the various sciences, it cannot presuppose its object (truth), which is everywhere *represented* in the sciences.²¹ There the ambition of systematic philosophy remained intact and managed to bring about the closure of the metaphysical field first broached by Aristotle. But philosophy is now shattered, and its various domains, once held together under a unified conceptual apparatus, now dispersed. These are in turn simply taken for granted and find themselves in a position similar to the one I described regarding the philosophy of science's relation to science: its field is pre-given, and the philosophical activity consists in nothing other than a conceptual reflection on the field itself. Art, history, religion, politics, etc., are given *in advance*, and philosophical questioning is directed *at* them. This is a situation radically different from the one we find in Hegel. In the case of both anthropology and of what, after Hegel, we could call the philosophy of spirit, we cannot help but note the remarkable absence of confrontation with the natural sciences, as if questions of ethics, of religion, of existence, of history, of art, etc., escaped *a priori* the grip of natural philosophy, as if a certain kind of philosophy could live on in total ignorance of the massive impact and borderless nature of science, on the very transformation of the way in which nature is now given to us.

This brings me to my second point, regarding the proper task of philosophy. In identifying such a task, my intention is not to salvage philosophy from its takeover by science. It is not a question of saving from the grip of scientific thought what can still be saved, the human, for example, or nature itself. It is not a question of keeping alive a humanism (and its many idols) as the last glimmer of hope in the desolate landscape of unrestrained and victorious science, and of the technological framework within which it operates. The human (or the divine, for that matter)—as the being whose secret destiny escapes *a priori* the grip of science—cannot serve as the last bastion in which philosophy withdraws. For it already has been entirely dislocated from its original centeredness. *That* man is dead. At the same time, it would be a huge, and indeed catastrophic, mistake to believe that the end of philosophy in the sense I have described, and of its conception of the human, amounts to the end or the impossibility of thought as such. The metaphysical project is indeed fulfilled, or is in the process of being fulfilled, in the natural sciences. This is the field where its destiny unfolds. Yet the question is to know whether the possibilities of thought itself are

exhausted in this historical process, whether, somehow, thought cannot be dissociated from the becoming-science of metaphysics. Would this mean that a hitherto untouched and preserved area is awaiting thought, and that a new philosophy would constitute itself simply by turning to such a (somehow miraculously spared) territory? In no way. For in the same way in which thought is precisely not (just) metaphysics, it is also not merely indifferent to, and simply outside, the realm of metaphysics, and of science onto which metaphysics opens. What, then, is the nature of thought's relation to science? What, exactly, is the nature of thought, such that in turning to science it does not simply become absorbed by it, nor subordinated to its logic and destination?

This is a relation based on the recognition of the object that is proper to thought, and on which metaphysics has no hold. This "object" is not to be understood as an area or an aspect of the real. For the real, at least in its actuality, or its materiality, falls precisely under the authority of scientific thought. There is, in a sense, nothing "real" which science cannot turn into its object. But this domain of thought, this object, is precisely not an object; it is precisely that which cannot be turned into an object, or that which, in being turned into an object, ceases to be the object of thought. It then becomes the object of representation, of metaphysical thought. This object, which belongs to thought most properly, is precisely the object through which thought escapes metaphysical representation. At the same time, it is the very object which, in its escape from metaphysics, allows metaphysics to unfold. This object is the un-thought *of* metaphysics, this un-thought on the basis of which metaphysics thinks. And it is precisely in singling out this horizon, in turning to the un-thought of metaphysics, that thought encounters contemporary science. It is from this excess that it comes to it and encounters it, thinks it and is able to extract in it this share beyond metaphysics. In this regard, I am in agreement with Merleau-Ponty who writes that, in "his effort to secure his hold" on the world, the scientist ends up "uncovering [*dévoile*] more than he actually sees," and this in such a way that the "philosopher must learn to see behind the back of the scientist what he himself cannot see."²² Thought opens itself onto—and simultaneously opens up—that which, in metaphysics, closes itself off, and in the very closure of which metaphysics as such comes about. This closure is the very event of metaphysics, and of science, which thought counter-effectuates. The event of thought is the counter-event of metaphysics. Thought is not opposed to science. Rather, it turns to—and returns it to—its unknown source, returns upstream, ascends the very slope down which science descends.

What, then, is this un-thought, through which metaphysics, and science itself, "thinks," or rather, represents, and in the thinking of which the thought beyond metaphysics opens up? It is difference, the

process of difference, and all the differences to which this process leads. This difference is, first and foremost, that between being and beings. This work is entirely rooted in the Heideggerian problematic of the onto-ontological difference. This problematic is, however, enlarged to the sphere of modern science, in what amounts to a certain break with Heidegger's thought. Thought situates itself resolutely within beings, yet within that which, in beings, exceeds them. This excess is also a default: it is that which, in beings, falls short of beingness. In recognizing such an excess, it is not a question of reinscribing a degree of transcendence within the immanence of the world. There is only nature in its immanence, in its immanence to itself, and nature does not refer to anything outside itself, or, for that matter, to any privileged being within itself. Yet it is a question of uncovering an excess proper to immanence itself, a residue or supplement *within* immanence. It is as this thinking of Being as a supplement of immanence that thought thinks that which, in metaphysics and science, remains un-thought. With Heidegger, we shall see how the dimension of Being, which escapes all representation, gives itself to the gaze and the experience of he or she who, withdrawn from all subjectivity, and from all objectifying relation to the world, opens him- or herself to the opening of the world, or to the "there is" prior to all presence. We shall see how this opening opens onto a thought of language, and of history, as granting an instituting or a founding of Being in its truth. At the same time, against Heidegger, who situates science irrevocably within a horizon of representation, and hence within the metaphysics of presence, I wish to show how, by turning to certain recent developments in science, from quantum mechanics to non-linear dynamics and complexity theory, it is indeed possible to single out or extract a dimension of Being that is proper to physical and material systems. I shall go as far as to suggest that it has become impossible to understand the significance of today's science without turning to this horizon. It is not even enough, therefore, to show, as I will, that the study of contemporary science enables us to undo the ontological presuppositions of classical metaphysics. This critical moment must give way to an exposition of the positive ontology science harbors. If science can be seen as criticizing classical or naive ontology, it is to replace it with a new, positive ontology. This means that, unlike much of what twentieth-century ontology has claimed, and phenomenology in particular, science does indeed provide an access to Being—and, I shall claim, to the ontological difference itself—to the same extent as literature or painting. Yet this positive ontology is not pre-given, already constituted. It must be extracted from scientific discourse itself, the aim of which is primarily to secure its *hold* on a world of *facts*. The philosopher, on the other hand, seeks to extract the share of eventfulness—what he calls a concept—that is proper to the facts science controls. The philosopher alone is in a position

to extract the ontological horizon within which contemporary science unfolds, and thus to construct a philosophy of nature.

This, turning to the thought of Deleuze, is what Part Three of this book seeks to achieve. This is the point at which, while entirely rooted in the Heideggerian problematic of the ontological difference, this book dissociates itself from the thought of Heidegger. The fate of ontology will turn out to be played out not only in this dimension that I would like to call poetic and epiphanic, not only as instituted and set to work in the work of art and in poetic saying, but also in this other dimension, which I would characterize as mathematical and genetic. If Being is said indeed poetically, it is also said mathematically. If nature speaks the language of art and poetry, it also speaks that of geometry. If nature is indeed growth and opening to the gaze and the language of the human, it is also production and generation of entirely pre-individual and radically impersonal differences. If the philosopher, in his desire to think Being in its brute state, as it is for us, before any thesis, representation, speculation, is drawn to art, which itself draws on this primitive and barbaric layer of signification, must he not also turn to nature as revealed by science? "How can we not be interested in science," Merleau-Ponty asks, "when it is a question of knowing what nature is?" And how can we not think nature from the point of view of science, when, "in the last fifty years, [science] no longer charges toward its object, without being surprised that it encounters it"?²³ Similarly, though, and as Merleau-Ponty himself has attempted to demonstrate, how can we not be interested in art, when it is a question of understanding the way in which Being is there *for us*, prior to any theoretical construction and thesis regarding the world?

In its attempt to reassert the sense of philosophy as ontology, against the backdrop of the historical situation I have already described briefly, this book draws widely on two different sources. Through a detailed engagement with the thoughts of Deleuze and Heidegger, a thinking of being in its two-sidedness will emerge. By engagement, I mean precisely this: an effort to grasp that which these thinkers' texts actually respond to, and an attempt to allow a series of questions and a hypothesis to run through them. By engagement, I mean not so much an exposition, or a critique, or both, but a path that cuts across these texts, a thought that attempts to find its way through them. Needless to say, this approach might be seen as involving a certain degree of violence. Yet this may well amount to nothing other than the irreducible degree of violence involved in the work of interpretation, which remains the sole form of fidelity toward what is most thought provoking. Allow me, at least in a preliminary way, to justify the turn to these thinkers' texts, and to the way in which they contribute to the overall goal of renewing ontology at the end of metaphysics. This will also allow me to clarify the structure of the book.

I have already alluded to the fact that the general problematic governing this book is that of the ontological difference. This is the problematic which, ultimately, I will extend by turning to the thought of Deleuze, but which I will begin by situating in the thought of Heidegger (Part Two). Allow me to introduce it—or what I take to be its most important philosophical significance—as economically as possible. At its simplest level, this is an intuition that stipulates that philosophy begins with the ability to distinguish between beings and their being, but where “being,” unlike what the metaphysical tradition has asserted for centuries, refers not so much to the “beingness” of beings, to what is most common to them all (and this means to the twofold sense of being as presence and essence), as to their eventfulness. Philosophical thought begins with the ability to distinguish between things in their presence, and the event of presence itself, which is nothing like a thing, yet the eventing of which opens onto the presence of things themselves. The thinking of the ontico-ontological difference wishes to bring things back to their birthplace, to the way in which they unfold and make sense for us, prior to any metaphysical speculation and scientific representation, prior to the way in which, once given, merely there within presence, they become mere things (*blosse Sachen*, as Husserl already suggested), “objects” abstracted from their original and primitive soil. The world that this thought opens up is one the worldhood of which unfolds from a horizon which itself is not inner-worldly, but precisely horizontal, liminal. This horizon is what, following Husserl, Heidegger calls the earth, the other side or the lining of the world and its collection of *blosse Sachen*. With Heidegger, phenomenology takes this unobjectifiable horizon as its object and, in the process, asserts itself as a phenomenology of the Inapparent (*Unscheinbare*). Thought is now directed toward that which, in every phenomenon, withdraws and effaces itself as the very condition of its phenomenality.

Consequently, there emerges the further step that consists in understanding this eventfulness itself, or the event of being, *in terms* of difference. It is now in and through difference *that there is*. Difference is now the “principle” of Being. This means that thought is no longer measured according to its ability to *distinguish* between two pre-given and separate realms, but to think and speak from within the space of that difference, which coincides with the clearing or unfolding of Being itself. In this decisive shift, which I shall be concerned to trace, thinking, in its very possibility (or impossibility), is itself born of the very difference to which it is directed. In other words, thought is itself *of* difference, and this means oriented by and drawn toward it. This is the moment at which the radical transformation, indeed, the very overcoming of classical, Aristotelian metaphysics is enacted. This is the moment at which, wrested from the twofold principle of identity and presence to which it had hitherto remained bound as to the condition of its own possibility,

Being breaks with all substantialist and essentialist links, and reveals itself as the forever evanescent “Between” that sustains and traverses all things.

There emerges, finally, in the wake of this ontological resurgence a thinking of nature as involving a sense and a constitution that is simply other than that revealed by the natural sciences. Heidegger shares with the rest of phenomenology a fundamental suspicion regarding modern science and the image of the world it projects. This is the suspicion born of modern science’s claim—in effect, its illusory claim—to present nature, or being, as this mathematical construction, forgetting from the very start that that world is a constructed world, a world rooted in a primitive soil, effaced and forgotten in the very fruits it bears, ever more forgotten beneath our faith in this constructed world as in the real world. Science aims to grasp the world in order to secure its hold on it, whereas philosophy aims to describe the world as it emerges at every moment for us. No one, I believe, has gone further than Heidegger in this attempt to free a sense of nature, from deep within the way in which it is given to us, there *for us*, as these beings who stand out in the truth of being, precisely at the place where Being unfolds and opens up. Human beings are witnesses to this burgeoning, and their humanity testifies to it. The human being is the being who is only in and through this relation to that which, from the start, situates it, this being that is only in its capacity to shelter that which, from the start, exceeds it. It is the being whose being consists of this pure opening to the opening up or the event of Being. Consequently, the “we” behind the “for us” of Being is no longer the man of metaphysics: neither a thinking thing, or a capacity to represent and know, neither autonomous and self-positing substance, this being is no longer the man of Aristotelian metaphysics, *defined* on the basis of its kind and its specific difference as the rational animal. Yet he does remain the being to whom Being is addressed, the destinee and the privileged interlocutor of a sending and a dialogue, on the basis of which history (*that there is* history) and language (*that there is* language) can be thought. From Husserl to Heidegger and Merleau-Ponty, phenomenology has continuously striven to reveal the ontological layer and the dimension of experience marking the opening of the human to the world, and of the world within the human, and consequently the human in its pre-theoretical or pre-noetic understanding of Being. This is the layer from which not just phenomenology, but also art and poetry, draw, as phenomenology itself has continually recognized (and thematized). Art is never done with presenting (and not representing) this birth of the world, this absolutely singular event. It is not a coincidence if phenomenology has come to focus on the artwork and the artistic experience as such. As such, this means insofar as it bespeaks the clearing of the world, or its birth. All art is primitive (as Barnett Newman so aptly remarked), insofar as it sets out to gather things in

their birth to presence, to grasp the world *as* it opens up. All art is *logos*, in the strictest and originary sense of the term. And the human being is this capacity to gather, and this means to preserve by way of creation—in thought, works, and deeds—the event of Being.

Still operating within the problematic of the ontological difference, Part Three seeks to establish a dialogue between philosophy and science, and so to distance itself from the phenomenological, and specifically Heideggerian, critique of science as naturalistic and technological. It does so mainly by turning to the thought of Deleuze. Allow me to justify, albeit briefly and schematically, why his thought, as it is developed around *Difference and Repetition*, is so central to my investigation.

In relation to modernity, characterized, on the scientific level, by an abstract, essentially Platonist and Euclidean conception of nature, and, on the philosophical (or metaphysical) level, by the turn to subjectivity as providing the ground for the natural sciences, the question is to know whether our age is still held within this horizon, or whether contemporary science has not itself evolved in such a way that a metaphysics of subjectivity is no longer possible. For, on the one hand, relatively recent developments in the natural sciences, from thermodynamics and quantum mechanics to chaos and complexity theory, amount to a return to the conception of nature as initially developed by Aristotle, and can be seen (up to a point only, of course) as his own “revenge” against Plato. Today we know that circular motion is indeed the most widespread type of motion in the universe, whether it be that of galaxies and nebulae, stars, suns, and planets, or atoms and electrons. Similarly, we know since Einstein that a local curvature of space can produce motions akin to the spontaneous motion of bodies once described by Aristotle. And the question of the finitude or infinity of the cosmos is itself undecided, although we do know there is no sense in speaking of there being anything “outside” this space.²⁴ Finally, we know nature, and life in particular, to be *also* the stage where the play of chance and contingency is played out, as Aristotle had argued. With the significant difference, however, that chance and contingency have themselves become mathematized, scientific objects in the modern sense. On the other hand, the so-called ground of these sciences themselves, namely, the *res cogitans*, or the transcendental unity of apperception, turns out to have its own history, and one that is not so much transcendently as empirically constituted. For this ground is itself inscribed within a history, the history of evolution, in which the human figures as one accidental development, and not as the possibility guaranteeing the stability and permanence of a world itself recognized in terms of pure becoming. How can we continue to turn to human subjectivity as providing the conditions of possibility of experience, and thus of the objectivity of all objects, when this subjectivity itself turns out to be empirically determined, and contingent, when, contrary

to what it believed, it turns out to be not essentially different from the world it contemplates, but made of the same ontological fabric? How can we continue to situate the field of philosophy as unfolding between subject and object, when the ground itself begins to open onto an abyss, the abyss of its own groundlessness? Increasingly, the human needs to be recognized and taken into account as being *of* or belonging *to* the very nature it investigates. This, it would seem at first, could only reinforce its central position amid nature, the impossibility to abstract itself from the position it finds itself in within nature. In the end, however, it means the exact opposite: it means that it can no longer act as the foundation securing the theoretical and ontological validity of nature, that it is itself always operating and theorizing from within a nature that no longer stands there op-posed to it, as ob-stance, and it as sub-stance, but as this gaze whose very gazing is not incidental to what it sees, as this gaze that presupposes its own material constitution, in what amounts to what the late Husserl called a reciprocal *Fundierung*—and Merleau-Ponty an “intertwining”—between “matter” (or nature) and “spirit,” between the relative and the absolute.²⁵ As Merleau-Ponty evocatively puts it, it is no longer the case that the theoretical gaze of the human can conceive of itself as a pure *kosmotheoros*, for the world it contemplates is not ontologically different from it. It sees the world from within, and this in such a way that, in contemplating it, it is also always contemplating itself.

In what, with the necessary caution, we could call the post-modern phase of the relation between philosophy and science, and this means of philosophy itself, since, as I have tried to show, science is born of the metaphysical project to think beings as such and as a whole, science no longer finds in philosophy its metaphysical ground. It no longer finds in it, or needs to find in it, the principles of a world or a plane, which it investigates for itself. Objectal nature no longer finds in transcendental subjectivity, or indeed in the Creator, its very foundation. For transcendental subjectivity is itself referred back to, and indeed reminded of, its own empirical contingency, of the impossibility of erecting itself, within the physical and biological realm, to the status of a world-constituting transcendent origin. But should we conclude that philosophy has simply disappeared in the process, that it has been absorbed by the process to which it originally gave birth (“natural philosophy”), devoured as it were by its very child, and that, in the face of the undoing of subjectivity as providing the metaphysical ground for natural science, it also collapsed in this abyss? Not Saturn-philosophy, then, but philosophy as devoured by its own offspring? In a way, yes: “nature,” once inconceivable outside its philosophical frame of reference, has gained a theoretical autonomy and taken on a life of its own, such that, in a way, of course, very different from, if not altogether opposed to, that proposed by Hegel, we could nonetheless speak of a certain *Aufhebung* of metaphysics in physics, and

this in such a way that the metaphysical position adopted by philosophy itself came to be called into question from within science itself. But if metaphysics, as a metaphysics of the ground, and of subjectivity — of subjectivity as constituting the very ground for the objectivity of objectal nature — is no longer possible, if philosophy can no longer turn to subjectivity as to the transcendental site revealing the conditions of possibility of experience, and of beings as such and as a whole as a realm of objects, can it not undergo a transformation and reinvent itself, precisely out of this “crisis” of foundation? Can we not think the future of metaphysics, and the possibility of ontology, out of this very event, the event of un-grounding? And so, before proceeding with the rites of burial of philosophy, before declaring its death irreversible, and its new life as science — and, once again, that which, in the context of the current institutional, professional, and cultural landscape, seems to testify to the good health of philosophy, in my mind only confirms the diagnosis I have just formulated — let us at least consider the possibility of a philosophy which, neither metaphysics in the sense of grounding, nor philosophy *of* science, nonetheless remains in relation to science, at once absolutely different from it and coextensive with it. What sort of relation would that be?

It is a relation born of this “crisis” of foundation. Yet because it is a relation, it does not coincide simply with a collapsing, whether understood as a total collapse, or as a collapsing of the one (philosophy) into the other (science). Neither grounding (*fondement*) nor collapsing (*effondrement*), it is a relation of what, following Deleuze, we shall call an un-grounding (*effondement*). This concept is indicative of a twofold gesture, of a double possibility: the possibility of situating philosophy in relation to science anew, first of all; and, in close connection with this first possibility, the possibility of reasserting philosophy as ontology on the basis of a distinction in being between the actual, or the empirical (and the science it enables), and the virtual or transcendental horizon (which philosophy brings out) from which the former unfolds. This is the extent to which Deleuze is perhaps the “true” inheritor of Kant: not a neo-Kantian, but the Kant of the twentieth century, the thinker of the transcendental as un-grounding.²⁶ But such a characterization must be immediately qualified. For it is only at the cost of a formidable transformation of the very sense of the transcendental that philosophy will be reasserted as metaphysics and ontology. Specifically, it will be at the cost of a series of displacements, according to which the transcendental no longer refers back to a transcendental *subjectivity*, but to the real as such. In effect, the transcendental no longer designates the conditions of *possibility* of (subjective) experience, nor the conditions of *possibility* of phenomena themselves. It now designates their *real* conditions of existence and is concerned with their actual generation and production. Yet it is no longer indicative of philosophy as *first* philosophy, inasmuch

as it reveals a layer or plane of reality that is neither *a priori* nor *a posteriori*. It isolates a dimension that relates to the empirical, and to the empirical sciences of nature, by way of neither precedence nor consequence, but absolute co-existence *and* absolute difference. In other words, if the relation between philosophy and science is one of un-grounding, it is because Being, with which philosophy concerns itself, is precisely that in which beings, or states of affairs, with which science concerns itself, *un-ground* themselves.

The transcendental is therefore a dimension of the real itself. As such, it allows philosophy to overthrow the “Kantian revolution” and overcome the limitations Kant had imposed on human reason. While the transcendental understood as identifying the conditions of possibility of experience, and of the objectivity of objectal nature, inevitably refers back to a theory of subjectivity (of the faculties of knowledge and the power of the understanding), precisely as a power of organization and as sense bestowal, the transcendental as harboring the conditions of *existence* of the real refers back to a horizon of *being*, to a dimension of virtuality inherent to being itself. This is the way in which philosophy posits itself again as *ontology*. Not as *fundamental* ontology, as the ontology that grounds all regional ontologies, and the sciences that unfold therein, but as an ontology of the un-grounding, in which the donation of the real is no longer bound to the *a priori* conditions of human subjectivity or consciousness, but to a virtual and immanent horizon of reality, to beings in their being. By “being,” we now need to understand the unfolding of a spatio-temporality that differs essentially (or in nature) from both *actual* space and time, with which metaphysical thought begins, and space and time as the *a priori* conditions of sensibility. And yet, while differing from *actual* space and time, or rather, and quite precisely, in its very difference from them, *virtual* time-space generates them. For the difference at issue here is not so much a distinction of the understanding as a genetic power, and in fact the only power of generation. And so, we shall have to see how actual physical and material processes are themselves born of this difference, how difference alone, in its many aspects, accounts for the coming into being of beings, and thus for beings in their being. We shall have to see how the ontology that characterizes contemporary science is differential and genetic: heterogenetic. Here the ontological difference is to be understood as genesis, and not as truth (in the Heideggerian sense of *aletheia*). Yet, very much like what happens in Heidegger, Being is nothing like a ground. It is rather the opposite of ground: an un-ground (*Sans-fond*), an abyssal or chaotic ground whence order emerges. Philosophy turns to this un-ground not as to the conditions of subjective experience, or of the objects of nature, but as to the conditions of genesis of these objects. In all physical and material systems, philosophy identifies a non-actual horizon, and this ultimately means the brute and primitive

spatio-temporality from which the actuality of such systems is played out. Thus, philosophy is, with respect to science as well as to all other fields, in a relation of absolute coincidence, or co-extension, *and* of absolute distance, or disjunction. It is at once closest to such fields, and infinitely remote. For it touches on what, in them, is untouchable. It is linked to them by the absolute power of proximity and distance of the ontological difference.

In and through this newly defined concept of difference, around which it comes to articulate itself, philosophy also posits itself as metaphysics, insofar as it extracts this “ground” (in the sense of a background) whence phenomena are constituted. But insofar as this “ground” does not refer back to a constituting subjectivity, or a self-present and self-identical moment, but to an always and already differentiated horizon (being “as such”), philosophy becomes immanent: we must avoid confusing the immanence of transcendental reality with the transcendence of transcendental subjectivity.

It is at the cost of such a reworking that metaphysics becomes once more possible. As metaphysics, it comes neither after (Aristotle) nor before (Descartes, Kant, Husserl) physics. Rather, it is with respect to science in a relation of explication and implication, but not of foundation. Its “meta” no longer refers to any transcendence. It is no longer onto-theology. It is no longer a science of first principles or causes—unless, of course, we were to affirm *difference* as its only “principle,” which, given the very nature of such a concept, would amount to a very problematic, and ultimately self-defeating affirmation. And if it is or remains a science of “conditions,” these are, once again, not of possibility, but of reality, and this in such a way that, between the conditioned and the condition, there is no relation of resemblance, and thus no identity. By metaphysics, we must now understand neither the science of first principles and highest causes nor the science of beings as onto-theology, but indeed the science of the being of beings, where “being” refers to neither a being (or a substance) nor the quiddity or any principle resembling the being it founds, but to that which, in excess of beings themselves, signals the *event* of beings themselves. Ontology becomes the science of being as event, the science of the event of being. In that respect, I see Deleuze’s thought as keeping open and extending the Heideggerian problematic of the ontico-ontological difference.

Ultimately, then, and following the thoughts of Heidegger and Deleuze, it will be a question of envisaging Being as made up of two sides. There is indeed Being, or nature, in its poetic-epiphanic side—and this is the side phenomenology is concerned to bring out, often turning to art and language as a happening or a grounding of true being. Yet there is also Being in its mathematical-genetic side—and this is the side Deleuzian thought is concerned to trace. A different language is spoken

in each case, and on each side. And it is this double language philosophy must learn to hear, if it is to be attuned to the voice and to the double truth of Being. Philosophy does not have to play one side against the other, it does not have to choose one side over the other. It does not even ascend or progress from one to the other, as if on a ladder. It is on both sides at once, and on both sides it is philosophy of nature. As philosophy, it is concerned with the event of nature, with the *natura naturans*, and not simply the *natura naturata*. And in this effort, it touches on art as well as science, on truth (as unconcealment) as well as on the real (as production). Nature or Being is at once “in itself” and “for us.”

In introducing this vocabulary of the “in itself” and the “for us,” we must be careful not to reintroduce the concepts of subject and object. In other words, in identifying such a two-sidedness of nature, it is not a question of distributing it along the lines of the subjective and the objective. Subject and object, and their very opposition, belong to a metaphysics of representation, and to a phase of the history of Being, which this book aims to overcome. Subject and object are here both off-side, or off-topic. And it is not only philosophy, from Heidegger to Merleau-Ponty, Derrida, and others, that has managed to think beyond this distinction and overcome its dualistic conception of the world. Science itself has done the same. What is referred to here as the “in-itself” of nature has nothing to do with its so-called “objectivity,” to which science is supposed to oppose the subjectivity of worldviews and opinions. This, of course, does not mean that science is itself subjectivistic, a mere worldview or opinion among others, as creationism wants us to believe. With quantum mechanics, the (metaphysical) ideal of a purely objective nature has suffered a fatal blow. The quantum “object” is not an object, circumventable and representable in the classical sense. This is an “object” that defies the attitude of the scientist as subject, an object that forces the scientist into a different attitude, a different epistemic posture. If quantum mechanics is no longer “objective,” it is insofar as it reveals an incompleteness that is intrinsic not just to the theory, but to the object itself, to nature as such. Nature escapes us, from a certain aspect at least, and this escape, this elusiveness, has become a problem for physics itself. It is not a metaphysical problem, as if physics was faced with something it could not explain or formalize, as if it had encountered an absolute limit beyond which it could not venture. Rather, this limit is internal to nature itself, and the problem it poses to physics is a physical problem, one which it alone can formalize. So it is not as if nature escaped science from one of its sides—a literally meta-physical side, which philosophy alone would be in a position to address. Rather, science itself accounts for those natural phenomena that escape us. But this, in turn, means that this “us” at issue here has undergone a certain transformation, and is no longer this *kosmotheoros* Merleau-Ponty spoke of, or this “God’s-eye

view” characteristic of modern science. It is not, at least no longer, this pure gaze of mastery: it itself must surrender to the principle of uncertainty that animates nature *as such*. It itself is no longer secure in its position as a purely contemplative gaze. So—and I cannot stress this point enough—the bifurcation between subject and object is called into question, and radically so, on both sides of the massif of Being. There is something like a double dissolution of this opposition (and this includes of its *Aufhebung*), both on the side of being for-us and in-itself.

Nor is it a question, in this two-sidedness, of dividing philosophy along the now classical lines of a philosophy of spirit and a philosophy of nature (or matter), whether in its Hegelian or Bergsonian form. For “nature” is what is at issue on both sides of the divide, and philosophy as ontology is entirely absorbed in this two-sidedness. It does not recognize Spirit as the “after” or the “other” of nature, as its corollary or its outcome.

But whether genetic or epiphanic, poetic or mathematic, Being unfolds only in and as difference. And this is the sense in which it is One. Difference is the concept that designates the unity of Being, the concept that grasps Being in the movement that is proper to it, and through which ontology avoids reinstituting an insurmountable dualism. With the concept of difference, which is the very concept of philosophy itself, the concept in and through which philosophy posits itself as such, philosophy cuts across the two senses or sides of Being. It is in and through this concept that the two are made to communicate. Philosophy is the hyphen and the hymen of Being, and difference is the trait that cuts across and unites the twofold side of Being. The difference of thought from metaphysics is precisely a function of its ability to open itself onto difference *as* difference, and this means onto that which, from within nature itself, marks this excess from which it itself unfolds, of retaining it within this intangible, undecidable space where nothing is yet fixed, where everything is being decided. Ultimately, the question of difference is the question of the place—of the space and the time—where beings and events are being constituted, individuated. It is the question of the horizon of actuality of all things actual, a horizon that is “before” all presence and all actuality. Difference will turn out to be that by which “there is,” in other words, that on the basis of which presence unfolds and the material world is generated. Phenomena themselves will turn out to be traces of difference.

I began by suggesting that philosophy must overcome its current fragmentation and increasing specialization by taking the real or Being as such as its object. In its ambition to reconcile itself with its initial (Greek) aspiration and universal impulse, however, philosophy must avoid the following twofold pitfall: reinscribing, almost despite itself, the Aristotelian metaphysics of substance and essence in the conceptual order; condoning the “death” (which we distinguish from the “end”) of philosophy

in the flourishing of the sciences, and especially the natural sciences. In other words, against the backdrop of classical metaphysics, which I will expose in Part One, and the development of the sciences, to which I shall return in the opening chapter of Part Three, I shall attempt to show how philosophy can reinvent itself as differential ontology (Parts Two and Three). Through a detailed discussion of the ontological difference, and the way in which Heidegger radicalizes it in his later work, Part Two will reveal a sense of Being as it is “for us.” There difference will be associated with truth. This will be followed by an interpretation of the thought of Deleuze (Part Three), in which the other side of Being (Being “in itself”) will be revealed. There difference will be associated with genesis. The conclusion will highlight the extent to which, whether for us or in itself, difference amounts to nothing other than a process or a dialectic of spacing and temporalizing. Ultimately, space and time will turn out to be the two attributes of Being as difference.

PART I. ONTO-TAUTO-LOGY:

THE ARISTOTELIAN LEGACY

It is through wonder that men now begin
and originally began to philosophize;
wondering in the first place at
obvious perplexities, and then by
gradual progression raising questions
about the great matters too, for example,
about the changes of the moon and
the sun, about the stars and about
the origin of the universe.

— Aristotle, *Metaphysics*,
A, 2, 982b12-17

The Origins of Onto-tauto-logy

Introduction: The Parmenidean and Platonic Heritage

When the Greeks inaugurated metaphysical speculation they first asked themselves of what things were made. From the outset, this took the form of an enquiry into the nature common to all such things. Thus, to know the nature of the real in general, or of beings in general, is to know that each of the beings of which the universe is composed is ultimately, and regardless of the apparent differences distinguishing it from others, identical in nature to any other being, whether real or possible. Driven by this conviction, which was as compelling as it was spontaneous, the first Greek thinkers tried to envisage beings as a whole on the basis, first, of water, then of air, then of fire—in other words, on the basis of a very particular being, until one, Parmenides, hitting upon the most general, but also most complex and daring, solution to the problem, declared that the primitive stuff from which all things are hewn, so to speak, is being. With this declaration we arrive at the beginning of ontology. As Plato points out in the *Sophist*, philosophical activity proper begins the moment we stop trying to account for beings by concocting stories about them, positing instead a privileged being as ground and origin for all other beings.

With the claim that it is *being* that is common to all beings and irreducible to them, Parmenides attains a pure metaphysical position, which is to say, one that would prove unsurpassable for any thinking setting out on the same course. At the same time, however, he was obliged to explain what he meant by “being.” His description still merits attention.

What strikes us at the outset when reading Parmenides’ philosophical

poem, particularly fragment viii, is the extent to which being is endowed with all the attributes of identity and permanence, and the extent to which the very possibility of a science of being is set against the concepts of γένεσις and φύσις. “Uncreated” and “imperishable,” without “birth” or “destruction,” being “neither was nor will be, since it is now, all at once and entire, one, continuous.” This means: eternal and indivisible “because it is entirely identical [ὁμοῖον].” “Remaining the same and in the same state,” being appears in itself, immutably fixed. Being admits of neither discontinuity, nor division, nor heterogeneity since anything introduced into it would still have to *be*, which is to say, would still belong to being. Thus, from the start, the ontology of “that which is,” of beings as a whole, culminates in the negation of the becoming which, because it contradicts being’s self-identity, is excluded from the outset as at once non-being and unthinkable (and we should perhaps recall how the goddess warns against pursuing any such path). The immediate result of all this is that the entire world of sensible experience, along with the perpetual transformations it harbors, has to be excluded from the order of being and referred back to that of appearance; or—in what amounts to the same, since we can think only what is—it has to be excluded from the order of *true* knowledge, that ontological or metaphysical knowledge Parmenides begins to chart. Now, we need to be extremely careful in using terms such as “ontology” and “metaphysics,” since the former does not appear until the end of the seventeenth century and the latter until the posthumous publication of Aristotle’s *Metaphysics*. At the same time, though it is important to see that what is at work in Parmenides’ *Poem* is precisely the passage from a physics to a meta-physics: even if Parmenides remains one of those “physicists” who, in seeking the basis for φύσις as a whole—φύσις referring here to beings in general—sought to determine the stuff from which everything that is is made, his answer forces him onto a course of thinking that goes beyond physics and ends up in the realm of pure being. This does not mean that this “beyond-physics” implies positing some sort of transcendent entity as the origin and cause of nature, as will be the case in the Christian era. Inasmuch as, from a Parmenidean perspective, such a transcendence would refer to some particular being, it would still fall under the remit of the enquiry into being. Accordingly, and precisely to the extent to which any such enquiry aims to grasp the common and universal basis for everything that is, which is to say, everything that becomes, it cannot itself be subject to the same aporias, and cannot be thought other than as self-identical presence. In this way, true or philosophical knowledge comes to be opposed to mere opinion in the same way in which being is opposed to becoming and appearance.

On this point, Plato remains heir and upholder of Parmenides, or rather of that fundamental intuition whose necessity the Eleatic had rec-

ognized. When he comes to tackle the problem for himself, Plato seeks to define what he himself calls the $\delta\upsilon\tau\omicron\varsigma\ \delta\upsilon\nu$. This is translated into Latin as *vere ens*, the true being, thereby losing the reiteration of being that is so expressive in the Greek formulation. It would be better to say: the being that is, the being in its true being, or the being insofar as it is. But however we translate it, the meaning of the expression is clear. In using it, Plato is clearly looking to designate the beings that, within the objects of knowledge considered as a whole, fully and truly deserve the name being; in other words, those beings that we can legitimately designate as being.

But what does it mean, to be *truly*? What is it to be in the mode of being? As Plato constantly says, it is to be “oneself as oneself” ($\alpha\upsilon\tau\omicron\ \kappa\alpha\theta'\alpha\upsilon\tau\omicron$). Here, then, the proper mark of being is the thing in its self-identity. And the word Plato latches onto, the concept he creates in order to designate the thing understood in this particular way, is that of Idea ($\text{i}\delta\epsilon\alpha$). The Platonic Idea is the thing insofar as it is what it is and nothing else. With this, we rediscover the mysterious yet inevitable relation, already discerned by Parmenides, between identity and being. This relation is one of equality. For anything whatsoever, “to be” is “to be what it is.” This abstract formulation takes on a concrete sense when we come to ask what it would mean for anything to “become something else.” Strictly speaking, the question is meaningless since it implies a contradiction. “To become something else” would be to cease to be, since the being in question would thereby cease being the being that it is. “To be the being that one is” means the same as “to be.” And the same goes for any being whatsoever: the abolition of a being’s self-identity is equivalent to its annihilation.

For this sort of thinking, in which self-identity is the condition and mark of beings that truly are, being necessarily appears as one, as the same, as indivisible and exempt from all change. These are aspects of identity as much as characteristics of being. What is self-identical is *one*. As Leibniz will constantly repeat, *to be* a being, to be *one* being, and to be one *being* are all one and the same thing; in other words, to be and to be self-identical are one and the same thing. For the same reason, being as being is incompatible with any sense of alterity or difference: the equation between non-being and alterity or difference is the inevitable correlate of the equation between being and sameness or identity. It is this rejection of alterity and difference, their situation on the side of non-being, that is responsible for being being conceived as devoid of change and becoming: to change is to be first one thing and then another, at least from a certain point of view.

This stability, this permanence in self-identity and self-presence proper to being, is what Plato will call $\sigma\upsilon\sigma\tau\alpha$, a concept that will constitute the core of Aristotle’s thought and so carry the entire history of metaphysics. Setting aside for the moment the vexed issue of precisely which translation of the term best accords with Plato’s use of it, let me point out

that the term οὐσία, formed by way of the present participle of the verb εἶναι, for which Latin provides a literal translation with the notion of *essentia*, primarily designates things more generally associated with the possession of land (κλῆρος): patrimony, wealth, property, what is one's own, the most stable and permanent economic substance, generally. And this apparent good (φανερὰ οὐσία) was once opposed to the category of the ἀφανὴς οὐσία, the inapparent good, which included money or cash. In this opposition, money is clearly less valued (it "comes and goes") than land, which is the more visible, substantial, permanent—in other words "real"—good.¹ Οὐσία in a Platonic sense gestures toward something like the philosophical equivalent of the φανερὰ οὐσία: a permanent, stable, self-identical form. The difference, of course, one that amounts to a reversal of its use in the economic realm, is that the Platonic οὐσία is what is precisely not immediately visible and which requires us to train our sight in a particular way if we are to be able to see it. Here is how Socrates defines it in a passage from the *Phaedo* (78 D):

Is οὐσία in itself, which in our questions as well as our answers we define as being [τὸ εἶναι], is it, I ask, always the same, or is it now in this way and now in that? Is it possible that the Equal in itself [αὐτὸ], the Beautiful in itself, the existence [ὃ ἔστιν] in itself of each singular thing [ἐκάστα], its being [τὸ ὄν], is liable to some degree of change [μεταβολὴν]? Or does the being of each of these singular things, which is itself on the basis of itself [αὐτὸ καθ' αὐτό], always behave in the same way in itself, never admitting of variation at all, or in anyway, or at anytime?

It must always be the same in itself, Socrates, replied Cebes.

In other words, everything that is the same or self-identical *is*; everything that is other, or differs from itself, *is not*. This exclusion of alterity and difference from the realm of being understood as οὐσία is itself constitutive of the constitution of philosophy as ontology, something that remains—at least this is the hypothesis I want to advance—its characteristic and fundamental trait.

Having accepted the yardstick of true being posited by Parmenides, Plato proceeds to measure everything by it. If only what "is itself as itself" truly deserves the name being, what are we to do with perceptual reality, which is always becoming other than itself and never remains truly faithful to what it was? The question is one quite obviously prompted by the passage cited above:

But how about the many things, for example, men, or horses, or cloaks, or any such things, which bear the same name as what is beautiful in itself, or equal in itself, etc.? Are they always the same and according to the same? Or are they, in direct opposition to those things that are self-identical, con-

stantly changing in themselves, unlike each other, and so to speak, never the same? The latter, said Cebes, they are never the same.

At the outset, then, there is precisely that opposition that Nietzsche was later able to characterize as constitutive of metaphysics as such. On the one hand, there is the species of that whose form is always identical to itself, uncreated and indestructible: the one that Plato again and again describes as “divine, immortal, intelligible, uniform, indissoluble, and always possessing its identity with itself in the same way” (80 b), and by which we should understand that which truly is since, like Parmenides’ sphere, it consists in a perfect internal homogeneity and an absolute essential purity. On the other hand, there is the species of that which is born and dies and is always in motion. As such, it is apprehended through the senses only and so cannot become the object of science, merely that of opinion.² The stark contrast between what always is and what never is rests on the fundamental opposition between the same and the other, identity and difference. If being is truly identified with the ontological purity of an unsullied essence, the entire realm of sensible experience is relegated to the order of appearance, and hence to non-being. “To possess always its identity with itself in the same way”: this is what is proper to being. In this way we can see how a reevaluation of perceptual reality and appearance—what Nietzsche called the overturning of Platonism—necessarily proceeds by virtue of a reevaluation of difference and heterogeneity, of a reality that *is* only in virtue of its ability to make itself *other* than itself.

For how, as Heraclitus never tired of reminding us, can we fail to see that the perceptual world is that of becoming? That nature, insofar as it manifests itself before our eyes, and of which we are a part, is a fluid reality? How can we fail to see that becoming is the sensible world’s—and hence our own—sole mode of being, thereby relegating pure being to the status of illusion? “Everything flows” (πάντα ῥεῖ), Heraclitus is supposed to have claimed.³ The All is nothing other than this pure flow, this innocent becoming that invents itself as it flows. This flux is the whole of being. And this is why, in Heraclitus’s own words, we never bathe twice in the same river: the river is never where it actually was. In another sense, though, it remains what it was, namely, this movement of absolute becoming. And this is why, in a way, we only ever bathe in the same river: “We step and do not step in the same rivers; we are and are not.”⁴ So do we have to neutralize nature in its very becoming and stay with philosophy as the science of beings at rest, which is to say, as the science of Ideas? Or must physical beings, insofar as they are in motion, find a place in philosophy and be rescued from the realm of mere appearance? In other words, does philosophy possess the ability to establish itself both as metaphysics and as physics?

It is Aristotle who, in a gesture as foundational as it was daring, furnished philosophy with just such means, unifying it (only in part, as we shall later see) as a double science of being and of becoming, of immobility and of movement. With Aristotle, philosophy posits itself as the science of the being lying “behind” or “beneath” beings, *and* as the science of being in motion. It is this double status of philosophical knowledge, as well as its formidable destiny, that I want to address here, doing so in terms of the problematic set up in my introduction. For if, following Aristotle, we continue to inscribe philosophy within an ontological perspective and to locate its possibility in the intersection between metaphysics and physics, the meaning of such an ontology, as well as of such an intersection, will have to be played out in its irreversible break with the Aristotelian approach.

From Parmenides, Aristotle retains the conception of philosophy as addressing beings in their being, where being refers not to some privileged being or element, in the way of the physicists, but to their common origin or ground, or to the principle from which they unfold. This is a principle that lies beyond and is distinct from the realm of physical things; it is, quite literally, meta-physical. Yet, from Heraclitus, and from the Ionian physics echoed in his work, Aristotle retains a conception of the world in which we live as a world essentially in motion, as a world of becoming, yet a world that does not fall so much under the authority of the senses and of a type of approximate knowledge known as opinion, as it is incorporated within philosophical discourse, thus raising the highly complex *philosophical* question of the relation between being and becoming, between the metaphysical (which continues to speak in the name of a certain conception of φύσις) and the physical. With the birth of philosophy as the science of beings as such and as a whole, or as a questioning of beings as to their being, philosophy asserts itself from the start as the two-fold science of physics and *meta*-physics.

As far as Aristotle’s physics is concerned, I shall limit myself to a few remarks. The first and perhaps most decisive feature that needs to be stressed is that this is a physics, and thus a conception of natural phenomena, that is not mathematical but ontological and metaphysical through and through. This is what distinguishes it from modern physics. Aristotle’s physics remains entirely within the confines and under the jurisdiction of metaphysics. The Aristotelian cosmos, for example, is not compatible with Euclidean geometry, and his considerations regarding the structure of the universe, which he sees as *metaphysically* curved and circular, do not even attempt to reconcile it with Euclidean geometry. Strangely enough, it is perhaps closer to Riemann’s geometry (at least potentially), which Einstein used in his demonstration of the physical curvature of space-time. For Aristotle, as for the physics up to Galileo and Descartes, geometry is not the fundamental science of

the real world; it is not the science that expresses the essence and fundamental structure of that world. It is only an abstract science which, in the eyes of physics, itself the science of what is, can only ever serve as an adjunct. It is perception, and not mathematical speculation, experience, or a priori geometrical reasoning, that constitutes the bedrock for the true science of the real world. This is precisely the approach that will be overturned by Galileo. In short, Aristotle's conception of nature cannot be abstracted from the ontological considerations within which it occurs. This intertwining will become clearer as we go.

The second point concerns the most relevant aspects of the Aristotelian conception of nature. As an immediate effect of the first aspect of Aristotle's conception of the universe, one disqualified by modern science, it should be noted that the Aristotelian cosmos is finite, differentiated, and hierarchical: it is composed of various spheres, vertically ordered, each sphere corresponding to a degree of ontological perfection higher than that of the sphere immediately below, all spheres being moved by their inner telos more fully expressed in the higher spheres. At the top of this pyramidal structure lies the divine principle, the motionless origin of all motion, or the Prime Mover.⁵ Aristotle emphasizes that metaphysics (which he also calls "first philosophy") is required only to the extent that there is indeed a motionless reality (οὐσία ἀκίνητος),⁶ without the existence of which physics would be the primordial and universal science. It is the very existence of a motionless reality that turns physics—the object of which is the kind of reality that has the principle of its own motion and rest within itself, in contrast to the *technical* object—into a merely secondary philosophy.⁷ For Aristotle, φύσις does not designate the whole of reality, but only "a specific kind of beings."⁸ There is, therefore, a reality of being, which the world of becoming does not exhaust.

Central to the entire order, then, are the concepts of perfection and movement—the latter constituting both the negation and the goal of the former. But how are we to understand these concepts? Answer: ontologically, or metaphysically. All of which is to say that we cannot even begin to speak of the Aristotelian conception of the physical realm without implicating the metaphysical, and this despite the fact that metaphysics as first philosophy addresses a specific kind of reality, the being of which differs from that of natural beings.⁹ At this point, let me simply point out that the concept of movement, under which all things natural are unified, is wide ranging. If Aristotle's physics is a science of movement, it is not in the modern, restricted sense of a science of purely local movement, or mechanics, but in a broad sense that also includes the processes of generation and corruption, coming into being and withdrawing from presence.¹⁰ As such, it is also a science of life and is concerned with the nature of time as duration as well as that of space.¹¹ Physics is a kinetics,

but the concept of movement presupposed here involves change or transformation in the broadest possible sense—in the sense of becoming (μεταβολή). The science of φύσις, as designating one sphere of the real, and not the universe as such, is the science of beings in their becoming.

At the same time, philosophy is a science of beings in their being, where “being,” this time, is opposed to becoming and equated with the primary causes or first principles (περὶ τὰ πρῶτα αἰτία καὶ τὰς ἀρχάς).¹² Indeed, of all the recognized types of cause inherited from the tradition, there is one that stands out as the highest and most primordial of all: οὐσία, and quiddity (τὸ τί ἦν εἶναι).¹³ Consequently, everything turns on the meaning or the meanings of this term. Yet all such meanings will point toward some reality beyond or in excess of physical reality. As a first and highest principle of generation and movement, beyond which there is nothing, it will lead to a science of the divine, or to theology. Insofar as it designates the whole of beings in their being and raises the question of being as such, it is ontology. In both instances it is *meta*-physics, not just in the sense in which, in the chronological order of Aristotle’s text, it comes after the investigation of “nature,” but in the sense of the science of being beyond beings, beyond beings in their mere becoming. Decisive, in this twofold nature of the philosophical enquiry, independently of the orientation it gives to the entire history of philosophy, or at least to the dominant tradition, is the way in which physics amounts less to an autonomous science than to one that is supplemented and illuminated by metaphysics, the unity of the two constituting philosophy as metaphysics, or ontology, in a general sense.

My aim in this chapter is threefold. First, to show how the science of being is a science of οὐσία, how ontology is established as ousiology. Second, to reveal the twofold sense of οὐσία, and the decisive privilege of one (*quidditas* or essence) over the other. Finally, to show how this privileging commits ontology to a thinking of identity.

1. Ousiology

Following the lead of Parmenides’ insight, as well as that of certain Platonic dialogues, Aristotle also envisages being as what is common to all beings (“what is common to all,” he states in his *Metaphysics*, “is being”),¹⁴ and consequently as that to which a particular science must be devoted, the science of being *qua* being, or, more precisely perhaps, the science of beings as beings: “There is a science that studies being *qua* being [τὸ ὄν ἢ ὄν] and the properties which belong to it by virtue of its own nature [τὰ τούτῳ ὑπάρχοντα καθ’ αὐτό].”¹⁵ As one commentator rightly points out, the expression “*qua* being” is crucial, and is indeed the condition of possibility of the overall affirmation insofar as Aristotle rejects the possibility of a single, all-encompassing science for all beings, as well as the attribu-

tion to *all* beings of properties that belong to a being by virtue of its own nature, as if they constituted a single genus.¹⁶ “*Qua* being” points to the being that all beings have in common. The possibility of studying beings with respect to their being, and thus the possibility of a science of beings as a whole, rests upon the second *ὅν* in the sentence. This *ὅν* does not point to a particular thing, but to that according to which and that on the basis of which all things can be said to be. Beings are now envisaged from the point of view of their community of being. Yet it is precisely this predicate “being” that grants things their factual being, that can be said in many ways. Nevertheless, if “beings can be said to be in many ways” (*τὸ ὅν λέγεται πολλαχῶς*),¹⁷ and in so many different ways that in order to circumscribe these one has to list them by means of “categories,” it also needs to be pointed out that “being is said of all things,” and that as a result “beingness” will be the most universal of all categories. The universality of being corresponds to the plurivocity of beings. Aristotle envisages this community of being among all beings as primarily a community of predication, situating the problem from the outset within the context of language, and the language of the predicative proposition in particular. This will have decisive consequences for the entire tradition, from Porphyry to Hegel. Insofar as it is predicated of everything, being is characterized as a universal predicate, or as a predicate that is absolutely common to everything that can be stated. It is that same “thing” which can be said of all things, the “same” (*τὸ αὐτό*) by means of which all things can be related to one another. It is in this respect that Aristotle characterizes it as a homonym, but as a homonymy that is not so much accidental (in the manner of ordinary homonyms) as it is necessary: if beings are said to be in many ways, it is always relative to and on the basis of a single term (*πρὸς ἓν*), a single nature (*φύσιν*), and a single principle (*ἀρχή*).¹⁸ In this sense, being is well and truly the Homonym. And the term which, here as in Plato, designates being in its essence is that of *οὐσία*:

Indeed the question which was raised long ago, is still and always will be, and which always baffles us — “What is being?” — is, in other words, “What is *οὐσία*?” For it is this that some assert to be one, others more than one, and that some assert to be limited in number, others unlimited. And so, we must consider chiefly and primarily and almost exclusively what that is which *is* in *this* sense.¹⁹

And elsewhere:

Some things are said to be beings because they are *οὐσία*, others because they are affections of *οὐσία*, others because they are a process toward *οὐσία*, or productive or generative of *οὐσία*, or of terms relating to *οὐσία*, or negations of some of these terms or of *οὐσία* itself.²⁰

If being is said of everything that is, if it is the absolutely common, it is because, in the depths and at the origin of each thing, it underlies and upholds beings as a whole: it is the universal sub-strate or sub-stance, the *ὑποκείμενον* that characterizes things in their beingness (*οὐσία*). Everything that is *is* on the basis of *οὐσία*, which is the foundation, the principle or origin of beings as a whole. The sense of being that is implicit here is that of existence: there is, strictly speaking, a *problem* of being only for those beings that unfold within being, temporally, or ekstatically, only for those beings that can be called *natural*. The science of being *qua* being is in reality a science of beings as such, which is to say, the science of the ground on the basis of which beings *are*, or deploy their being in being. As such, ontology is first and foremost an *ousiology*, or the science of the beingness of beings. Of all the categories that serve to designate the different senses in which beings can be said to be, *οὐσία* is the first and the most fundamental. Indeed, only *οὐσία* is capable of existing in a state of its own; only *οὐσία* is included in every definition; finally, only *οὐσία* is that without knowledge of which nothing could be known. We shall have to wonder about the sense of *οὐσία*, such that it can satisfy all of these conditions.

Since *οὐσία* is envisaged as the stable and self-identical ground for that which differs from itself ceaselessly, and is never self-identical by virtue of itself alone, ontology is also a science of the One, or of the Same. Before being anything like a formal law of thought, or a logical principle—in the shape of the principle of identity or non-contradiction, a definition of which is already provided in *Metaphysics*, 1005b19–20—identity is an ontological value: it is because *οὐσία* is postulated, and postulated as an ontological principle circumscribing beings in their identity as beings (as was already the case with Plato), that logic can make identity its supreme principle; it is by affirming itself as absolute identity—by rejecting contradiction as its own impossibility—that *οὐσία* can be established as a ground and principle. If, in the final analysis, the principle of non-contradiction is the cornerstone of the entire logical edifice, if it is what guides, sustains, and guarantees the possibility of a science of being *qua* being, it does so on the basis of an ethico-ontological decision in favor of identity. Logic remains wedded to ontology as to its ethico-theoretical presupposition. The very principle of “principle” presupposes an entire ontology, a metaphysics that refers back to being, or to substantive and substantial beingness, as that which lies at the origin of its own authority and provides the source for its legitimacy; it presupposes an entire ethics of stability and identity, of presence and substantiality. In this sense the “principle” is only secondary, or derivative: it is instituted not on its own ground, but on the basis of a philosophical decision. This can be clearly seen in *Metaphysics* B, 1, 996a5ff., where Aristotle declares that, of all the difficulties and *aporias*

tied to the question of first principles, or of being *qua* being, difficulties which constitute so many knots in the object of enquiry itself, “the hardest and most perplexing of all” is that of knowing whether Being and the One (τὸ ἓν καὶ τὸ ὅν) are truly the οὐσία of beings (τῶν ὄντων), or whether the ὑποκείμενον is something completely different again (ἕτερόν τι), something other than Being-One. While Plato and the Pythagoreans, as I have already hinted, opt for the first hypothesis, certain physicians lean toward the second: Empedocles, for example, thinks that the ὑποκείμενον, the substrate-principle, is friendship (φιλία); Heraclitus thinks fire; Thales, water; Anaximander, air. Aristotle gives his answer—one that itself remains largely aporetic—at 1001a20, by reasoning as follows: if Being and the One do not possess the status of οὐσία-ὑποκείμενον, then we cannot posit the existence of any universals, since beingness and oneness are what is most universal (one can say of all things, as Leibniz clearly will state, that they are, or that they are one). There would be neither genera, nor species, merely a pure multiplicity of beings, of simple ἕκαστα, singularities or individuals, with no possibility of talking about them other than that of naming them—precisely what, centuries later, Ockham will claim. Would it not seem necessary, then, to posit the existence of Being itself or by itself, and of the One itself or by itself, which is to say, as self-identical substrate? On the other hand, though, as soon as we postulate the existence of beingness and oneness as οὐσία itself, the question of the multiplicity of beings, of the ἕκαστα in their singularity, arises. By envisaging these on the basis of Being-One, don’t we annul their singularity and multiplicity? How can we remain faithful to the multiple without lapsing into what would amount to an utterly meaningless empiricism? How can the concepts of “beingness” and “oneness” be anything other than empty, general concepts? How are we to go about thematizing the absolutely common? In being said of each and every thing, does being, in the final analysis, allow itself to be envisaged *as such*? And if being really is the universal predicate, that which is predicated of everything, how does it let itself be predicated in turn? Hasn’t being, on account of what Aristotle called its natural homonymy, already and always exceeded the bounds of the predicative proposition? But then what language, what discourse can prove appropriate to being? These are all questions that, taking their point of departure in Aristotle, will continue to drive the discourse on Being beyond him and for centuries.

2. The Two Senses of οὐσία: Presence-Substance, Essence

In an attempt to understand what is at stake in Aristotelian ontology, and in order to provide the elements of an answer to the questions raised

above, let me return to the “translation” of the question of being into the question of οὐσία, and of the latter into the question of the ὑποκείμενον. In his *Physics* (192b32–34), Aristotle defines οὐσία very precisely as ὑποκείμενον. This substantive form comes from the verb ὑπόκειμαι and has the twofold sense of, first, that which is merely present, lying before us, and, second, that which lies beneath and sustains what is present. It is this double meaning of the ὑποκείμενον that, subsequently, will allow metaphysics to think together the objectal and the subjectal, bare presence (as extension) and thought (insofar as it supports and underlies what presents itself thus), the *Vorhandenheit* as well as the *Wesenheit*. In one sense, therefore, the ὑποκείμενον first defines everything that is there and extends itself, everything that is present: the actualized presence that medieval philosophy, in an interpretation-translation which, although already suggested by Aristotle himself, will have far-reaching consequences, defines as *existentia*.²¹ From this point of view, when it comes to designating present or subsistent beings, οὐσία and ὑποκείμενον are equivalent terms for Aristotle. And it is precisely because of this first sense of being that Aristotle is in a position to designate both the sublunary world and divine being together in a community of being. In fact, it is only from the point of view of being as presence that Aristotle can use the term οὐσία to designate both sublunary realities and divine reality without this community of nomination remaining merely metaphorical or analogical. All of this allows us to understand why οὐσία, as ὑποκείμενον, designates not only what *is* insofar as it is present, but also this or that particular being, precisely to the extent that it is present, there, extended before us: the ὑποκείμενον is the *sub-stantia* or *sub-stratum*, the individual present thing. There is a sense, therefore, in which all beings are substances. Οὐσία, the substantive formed using the participle of the verb εἶναι, means the actuality of what is, the realization of what is given in the unfolding of presence.

But this actuality (which Aristotle characterizes also as “entelechy”) is never given, never presented with greater force than with the presence of what, in the Heavens, is eternally what is, and whose elliptical trajectory is the very figure of eternity, the very image or the realization within the sensible world of divine perfection. As Aubenque notes, we have here what amounts to a privileged experience — privileged in the sense that the contemplation of the Heavens provides us with the sensible intuition of eternity,²² from which it follows that the straightforward opposition between the sensible and the intelligible, matter and spirit, contingency and necessity, is overcome in favor of an intuition that is indissociably sensible and intellectual. And it is on the basis of this intuition that a genuine *science* of the divine (rather than mere speculation about it) can be founded: astral theology. Hitherto hidden from the discourse of man, the divine henceforth becomes perceptible to him. A first science is finally

possible, one that will have to be called theology. In vain we struggled, mortals that we are, to speak of the divine, only to realize that it now gives itself to us in an intuition that is as fundamental as it is indubitable. What we see in the sky, the Life of God, is nothing other than the pure presence of what is, pure actuality. It is He, and He alone, who defines perfection and consequently provides the measure of all things present. But from this point of view, there is what seems to be an insurmountable difference between divine being and sublunary being. The distance between the Heavens and us remains unbridgeable. The Life of God is, in effect, incommensurable with that of sublunary life. Strictly speaking, God does not live, because all life presupposes death, and because only beings that perish can be said to live. Divine being is always one, without beginning or end, absolutely itself, which means fully actualized, while sublunary or sensible beings, physical beings, are always striving after their unity, tending toward a state of perfection or rest in which they would be fully realized. From where do they get this goal (τέλος), which is the source of their movement? From where does nature derive its becoming? From the fact that, as matter (ύλη), as power or potentiality (δύναμις) oriented toward a form (εἶδος), it tends toward pure being; from the fact that it is drawn irresistibly by a principle of perfection which is God's mode of being or οὐσία, which is to say, pure immobility. We cannot talk about God by extrapolating from human experience, therefore. Quite the contrary. It is precisely to the extent that sensible beings *imitate* the οὐσία of God in their own way that they themselves will be able to accede to the dignity of essence. Between the physical and the metaphysical, between sensible being and super-sensible beings, there exists a principle of imitation and desire or aspiration. In other words, there is between them a relation like that of the copy to the model, of the image to the original, which is to say, a relation of resemblance and identity, even if, by definition, there is still an unbridgeable gap or difference between them. This difference is the one that separates the act of potency, the full and already accomplished being that is proper to the Prime Mover, from the being which, in a perpetual condition of realization, characterizes sublunary beings. Οὐσία means beingness in the sense of full presence (παρουσία), fully realized potency. Being is above all a synonym for presence, or actuality. What is real or actual in divine being, however, is merely a goal for the sublunary world, something toward which it tends. The God of Aristotle, as Aubenque so aptly summarizes Him, "is thus the pure Presence of what is perpetually offered to us in the eternal sufficiency of its always already actualized actuality."²³ In the sublunary world, by way of contrast, the act is never pure; it is always mixed with potency, and this potency is what constitutes the movement of the world. Beings are fully actualized and motionless only once they have ceased to be. For becoming is precisely that irreducible share of imperfection in beings, one whose

reduction, for them, is synonymous with nothingness. In other words, in the sublunary world there exists an insurmountable separation between two senses of being (which are united in the divine being): the separation between beings from the point of view of their *essence* and between beings from the point of view of their *presence*. If beings in their presence indefinitely approach their own essence, it is according to an asymptotic logic, and the coincidence between the two modes of being simply signifies the cancellation of that mixture of being and potency which is proper to physical beings. Furthermore, if there is a *problem* of being, if being constitutes a *question* for us, it is precisely because of this separation, this tense yet ineliminable relation. Where divine being is concerned, the question of being does not arise. It arises only for beings that are in motion or engaged in the process of their own becoming. Becoming, movement, is in fact what is proper to those natural beings (τὰ φυσικά) which the *Physics* sets out to describe.²⁴ But the *Physics* cannot describe that movement in itself; it cannot describe movement in its own terms. It can conceive it only on the basis of that superior and motionless reality that is God. Let us take just one example. In book VIII of the *Physics* Aristotle shows that the fundamental physical movement is local circular movement, because only a movement of this sort can be infinite and continuous.²⁵ This effectively says that physics can be conceived only on the basis of metaphysics. The God of Aristotle is that motionless ideal toward which the regular movements of the spheres, the more complex movements of the seasons, the cycles of generation and corruption, the vicissitudes of men's actions and works are continuously striving.²⁶ Basically, as pure act, the Divine is the goal and end of φύσις as such, the super-nature to which all nature aspires. Accordingly, movement is conceived as sublunary being's movement outside itself, as a movement toward motionlessness—as *ecstasy*: “Movement forces the subsistent outside of itself” (Ἡ δὲ κίνησις ἐξίστησι τὸ ὑπάρχον).²⁷ Movement, then, is that through which the sub-sistent or the substance *is* only as an ex-istent. It characterizes beings precisely insofar as they are not self-present from the start, but separated from themselves and consequently outside themselves. It characterizes beings insofar as they are entirely extended toward their final state, which is a state of rest or motionlessness (ἐρεμία) corresponding to their realized essence, but which is nonetheless not to be confused with the a-mobility of the Prime Mover and the Heavens. Indeed, this motionlessness that has *become* is actually inseparable from time, which is the number or measure of movement, whereas divine immobility is simply extra- or a-temporal. Nature, as the site of beings in motion, is also the site of time, the source of all aging and all destruction. We have here an acknowledgment of the effect of time or duration on the physical world, one that modern physics will strive to neutralize, but which thermodynamics will succeed in taking into account mathematically.

By way of a provisional conclusion, at least so far as this first meaning of οὐσία as beingness is concerned, I would say that it applies to the sub-lunary world as well as to the celestial and divine world in that it characterizes beings in their presence, or in what will be come to be called their existence (with some confusion, since Aristotle does not identify παρουσία with ἐξίστημι and restricts the use of the latter to the world of natural beings, which is to say, beings composed of potency and act, matter and form). From this point of view, the category of being designates beings insofar as they are pure being, fully present, their essence actualized from the outset, as well as beings in a state of becoming, or physical beings. This first sense of being can be situated on the side of physics as well as on the side of metaphysics, although it has a different function in each case.

Let me now turn to the other sense of οὐσία-ὑποκείμενον I introduced earlier. This sense is more metaphysical (or ontological) than the first and is implicated in it from the outset. It allows us to understand the extent to which Aristotle's physical materialism remains oriented toward—and subordinated to—an eidetics. Let us briefly reconsider the term ὑπάρχον, or ὑποκείμενον. The latter, as I have already said, is not only what is extended before us, or what is simply present, whether in the form of the absolutely present (the divine, of which the lunar world provides an image and an imitation) or of the present awaiting its full actuality, but also that which underlies and supports this presence, that which lies in the depths and at the origin of each thing and maintains it as the thing that it is. In other words, it is the ground of being which allows the thing to maintain itself in being, over and above the various changes to which it may be subjected in a world of becoming. It is on the basis of this ground, which lies and acts beneath (ὑπο) the multiple effects of a reality in motion, that the thing can be envisaged as substance. Aristotle refers to this ground as an ἀρχή, a principle or essence.²⁸ The science of beings in their beingness, or their presence—regardless whether the latter is already fully constituted, as is the case for celestial realities and the Prime Mover, or whether it is in a state of becoming and so drawn toward its motionless state—is also and indissociably the science of the first and highest principles. In other words, it is also the science of beings in their essence. This second sense of οὐσία (δεύτερα οὐσία, as opposed to πρώτη οὐσία, or presence) will turn out to be the most decisive, the one upon which Aristotle, only to be followed by the dominant tradition in the history of philosophy, focuses his attention: “being in its primary sense is the ‘what the thing is,’ a notion which expresses nothing other than οὐσία.”²⁹ The rest is nothing but a quality, a quantity, or an accident of essence, of the thing in its “whatness.” By “essence,” we need to understand an irreducible core of being, to which any number of qualities and events can be attributed, but

which remains untouched in its fixity and identity. And there can be science in the strictest sense, that is to say, discourse in the most rigorous sense of the term, only of beings with respect to their essence, and not their eventfulness. For such a discourse, the substance is that which can be predicated as a subject within a proposition, the aim of which is to provide a definition of its essence.

The formulation that defines the concept of essence most rigorously, and that the tradition will translate by the Latin expression *quidditas*, is a complicated one: τὸ τὶ ᾧν εἶναι, the “what it was [for a thing, a being] to be.”³⁰ If the Latin retains the importance of the question in the formulation, a question directed toward the thing in its *quid*, its whatness or essence, rather than toward the fact of its being or its presence-existence, it misses the curious temporality through which the question is formulated, to wit, the past: what was it for such and such a thing to be? If this is the case, it is because this question is aimed primarily at physical or sublunary beings, which, because they are in motion (until their final rest), are incapable of revealing their essence other than with their death. In other words: where sublunary beings are concerned, their presence never totally and absolutely corresponds to their essence; the latter cannot be articulated in the mode of the present, but only in the mode of some sort of future anterior. It is the very nature of nature to unfold within the never reduced or only retrospectively reduced space that separates its presence from its essence. Aristotle introduces, or rather reintroduces (Plato and Parmenides had already done so before him), into the physical world a separation between presence and essence, between the two fundamental senses of οὐσία: the thing insofar as it gives itself to be seen by the sensible gaze, which is to say, as carried away by the uninterrupted flux of becoming and subject to the contingencies of the physical world, should not be mistaken for the thing as it gives itself to be seen by the eidetic or scientific gaze, which is to say, in the necessity of its essence. Once again, this difference remains inoperative for the celestial world and for God, for whom, as pure actuality, or as the essence that is fully manifest and entirely equal to itself, it is meaningless. Be that as it may, in the physical world, which is the only realm in which the *question* of being arises, we cannot help notice that it is the *same* thing that is now this, now that. In this regard, the thing has to contain within itself an irreducible core of being—the substance—that acts as the stable, self-identical ground and substrate for a manifold of accidents and events. In Aristotle the question becomes one of knowing whether it is as matter (ύλη) or as form (εἶδος) that the ground unfolds. Is the essence of physical things material? Or is it formal? Aristotle’s answer is well known: insofar as matter is precisely that in which becoming is grounded, it cannot designate the thing in its being; insofar as it is generated and corrupted, it cannot be identified with pure, essential being. Only the form can. By

substance in the second sense, then, we should understand form. And it is only as such that it can become the subject of a proposition and exceed the predicates to which it is *accidentally* bound. The process of logical attribution, like that of ontological constitution, clearly distinguishes between the (essential) subject and its (accidental) predicates, or between substance and attributes. It is only as the science of substance thus understood that ontology becomes possible. Since every science presupposes a stable and self-identical object, there cannot be a science of accidents and chance as such. More specifically, there can be a science of accidents, of matter in its state of becoming, only as subordinated to the science of forms.

Having identified being with what persists beneath the thing in its own state of becoming and maintains it in its self-identity, Aristotle finds himself in the position where he has to force becoming into the realm of the merely accidental, and the secondary. There is no doubt that Aristotle envisages inner-worldly things as substances to which certain attributes, accidents, and events can be attached. It remains the case, nonetheless, that what constitutes such things as substances, as *really* real, is their fixed, self-identical ground, which no affection can either alter or threaten. Time and again, Aristotle will distinguish the predications of essence (ἐν τῷ τί ἐστὶ) from those predications which, by way of contrast, he will characterize as accidental (συμβεβηκός).³¹ Essence finds itself opposed to accident, as necessity to chance (or contingency). The first type of predications include the definition, the genus, and the species, while the second includes the accidents. Let us note, therefore, that there can be no *definition*, and consequently no *science*, of accidents or events:³²

Therefore there is an essence only of those things whose formula is a definition. . . . Nothing, then, which is not a species of a genus will have an essence—only species will have it, for these are thought to imply not merely that the subject participates in the attribute and has it as an affection, or has it by accident; but for everything else as well, if it has a name, there will be a formula of its meaning, namely, that this attribute belongs to this subject; or instead of a formula we shall be able to give a more accurate one; but there will be no definition nor essence.³³

What characterizes the predication of essence is the fact that subject and predicate belong to the same genus. In a predication of accident, on the other hand, subject and predicate belong to a different genus. Consequently, accidents don't characterize the subject in its ultimate reality. Only substance is the ultimate subject. From this distinction another immediately follows: beings can be said in accordance with themselves (καθ' αὐτό) or in accordance with something other than themselves, with an accident (καθὰ συμβεβηκός).³⁴ The principal characteristic of an accident, which is always the property of a subject, is that it has no necessary con-

nection to the subject. Moreover, everything that happens by accident happens by chance and so is in no way indicative of an essential property. By contrast, to say that something belongs to the subject of a proposition intrinsically, or on the basis of itself (*καθ' αὐτό*), means that it is essential to that subject or that it possesses that subject in its own essence:

The essence [*τὸ τὶ ᾗν εἶναι*] of each thing is what it is said to be *propter se*. For being you is not being musical, since you are not by your very nature [*κατὰ σαυτὸν*] musical.³⁵

“By nature,” or, more literally perhaps, “according to itself,” means “as it-self” (*ᾗ αὐτό*) and relates to the subject, not the predicate. Metaphysics is concerned only with what can be said of a thing in accordance with its own nature.

To grasp the thing in its being, then, is to grasp it in its essence or in its identity as a thing. This is what definitions are for. But as Aubenque very subtly remarks, this essence, in its specific Aristotelian formulation (*τὸ τὶ ᾗν εἶναι*, rather than simply *τὸ τί ἐστὶ*) becomes clear only retrospectively, only once the movement of the thing has been completed.³⁶ The quiddity of every being coincides with what every being is said to be in accordance with itself. This, however, can be affirmed only of what is no longer in a state of becoming. Strictly speaking, essences alone can be said to *be*. They derive their ontological dignity from their capacity to preserve their own identity and relegate difference to the inessential, the accidental, the secondary. If physical beings are ecstatic and existing, always in motion, they are also sub-sistent. But that on the basis of which they sub-sist and that *defines* them in their identity as singular things differs from that through which they ex-ist. There is, then, a certain separation between existence (or presence) and essence, between becoming and being, between matter and form, between difference and identity.

So long as sublunary entities unfold according to the mode that is proper to them (becoming, change), they cannot be fully grasped as beings. As soon as they have been grasped as the beings they truly are, they have ceased to be. But it is precisely this separation, and the aporia that follows from it, that Aristotle struggles to overcome. How? Through a *widened* conception of essence and definition. Widened to encompass what precisely? A certain degree of accidentality or eventfulness. It is to this end that the complex formulation of quiddity comes to be forged. What this formulation aims to bring about is the possibility of a definition that would not be exclusively restricted to a particular genus and a specific difference, hence a definition that would not confine itself solely to the Socratic question of the *τί ἐστὶ*.³⁷ Genus on its own is not enough to slake our thirst for knowledge. And since things are singular, it is natural to want to know them in the singularity

proper to them. When faced with the traditional question of essence, “Who is Socrates?” can we only ever respond “a man”? To the question “What is a man?” must we respond “a rational animal”? Is not Socrates also *essentially* more than a man? Is there not a “Socrates-ness” which, although not belonging to the essence of Socrates, nevertheless circumscribes its truth? It is precisely in striving after a greater degree of precision in definition, in striving to attain a more precise grasp of the singularity that “Socrates” is, that the retrospective gaze becomes necessary. For what is being aimed at through such striving is not some necessarily atemporal genus or difference, but what, once completed, a life or a becoming is able to teach us about its subject. What, exactly, was that thing “Socrates”? What, exactly, was that event? What, in the end, was that particular life all about? These questions can crop up and take hold only once the process has been completed. And they point toward accidents or events which, although not of the order of definition, are nonetheless significant. It is not a matter of knowing whether or not Socrates was in fact ugly, or bearded, or small, but whether he was just and wise not simply occasionally, but very profoundly, in such a way that the name of Socrates can remain associated with such virtues. These are the—in a certain sense, essential—accidents that Aristotle characterized as *συμβεβηκότα καθ’ αὐτά*, and that the Schoolmen will call “inseparable”:³⁸ a paradoxical expression if ever there was one, since it unites two terms that had until then been systematically opposed. But, again according to Aubenque, it is precisely this intermediary dimension between pure essence, as captured in a definition, and insignificant accidentality, between the generality of the genus and meaningless singularity, with which the *τὸ τὶ ᾧν εἶναι* is concerned. We have here an attempt to open up philosophical discourse to a mixed reality, one that is a mixture of necessity and contingency, universality and singularity, form and matter. But such a possibility can become apparent only through the imperfect: the reality of a thing only ever reveals itself in the past tense. Only once Socrates is safely dead does the essence of Socrates reveal itself. By contrast, the present is the site of contingency and becoming. Within the limits of the sublunary world, as long as a being is in motion, no one can say what its future holds; no one can foresee where the contingency of becoming will take it. In other words, “as long as beings are in motion, one cannot, from among the multiplicity of determinations that occur to them, distinguish those that are properly accidental from those that are *per se*.”³⁹ Discourse remains mute and powerless before the movement of things. It has to stabilize what moves in order to give an account of it. But so far as this stability is concerned, Aubenque continues, Aristotle “prevents himself from looking for it anywhere other than at the heart of the sensible world itself, that is to say, a world in motion; he will then realize that at

the heart of movement there is no substitute for immobility other than rest, no substitute for eternity other than death.”⁴⁰ Only from the point of view of *arrested* or accomplished movement, only from the point of view of rest or ultimately death, does essence reveal itself.

Unlike Plato, who envisaged such stability, the realm of pure being, only by locating it in another world, Aristotle envisages it at the heart of the sensible world as such, at the heart of the world in motion. But does this not still amount to an admission of failure? Does the Aristotelian discourse not remain in the grips of an aporia, of a limit that it attributes to the very nature of human discourse? There is, in effect, no hope of grasping movement as such, or reality *as it is unfolding*; yet the desire to make sense of it in the present is still there. Man exhibits a capacity for making sense of what is given in the present, but only by ascribing it to a certain timelessness and a degree of generality that always compromises both its singularity and the present within which it is given. He also exhibits a capacity for making sense of that singularity as a singularity, but only as a *past* or *dead* singularity. What a natural being *is* is always different from *what* it is. It can never be itself, *present*, in the present, and at the same time reveal its *essence*. In the world of nature, the two senses of being are at odds. In the end, presence is opposed to essence in the same way in which becoming is opposed to being, matter is opposed to form, or difference is to identity. Each thing involved in a process of becoming remains in thrall to an alterity or heterogeneity which, far from defining it as such, provides the index of its non-being in it.

3. Identity and Difference

It is within this ontological and largely aporetic context that the Aristotelian discourse on difference unfolds. This is the discourse in the wake of which much of Western metaphysics will come to be engulfed. Since the ontology I propose to set out here is going to orbit around a concept of difference fundamentally opposed to its Aristotelian conception, I want now to delineate the latter and indicate its ramifications.

First of all, there is the question concerning the tripartite status of difference, one to which the tradition will ceaselessly refer: for reasons that will become apparent, difference in its widest sense lacks, strictly speaking, the status of genuine difference (*διαφορά*). Aristotle prefers to characterize it as alterity or heterogeneity (*τὸ ἕτερον*):

Things are called “other” if either their genus or their matter or the definitions of their essence are more than one; and in general “other” has meanings opposite to those of the same [*τῶ ταὐτῶ*].⁴¹

In the broadest sense, this alterity is what allows me to say, for example, that I am other than my neighbor. “Other” than him, and precisely not

“different” from him. The status of difference is reserved for things or concepts that, in other respects, can be conceived in terms of a relation of identity that will ultimately prove to be a unity of genus: two things can differ only in some particular respect, only on the basis of some other thing they have in common:

“Other” and “same,” then, are opposed in this way; but difference is distinct from “otherness.” For that which is other than something else need not be other in a particular respect, since everything that is is either “other” or “the same.” But that which is different from something is different in some particular respect so that in which they differ must itself be identical, for example, the genus or the species.⁴²

Genera do not differ among themselves because there cannot be an ultimate term that would be common to both and on the basis of which they could then be said to differ. The second sense of difference therefore comes into play in this space beneath the genus and between species. It is that of *specific difference*. This is a formal difference. The third sense of difference will come into play at the level of what Aristotle calls the accidents themselves and implies a *material* difference.

From the outset, then, let me stress that one of the characteristic traits of difference is that it presupposes the unity and identity of a pre-existing term to which it remains subordinated and which alone defines the thing in its being or its identity. Difference is always *secondary* and *derivative*, conceivable only on the basis of an identity and a relation of resemblance which it presupposes: “Difference is said of things which, while being other, have some identity, not according to number, but according to the species, or the genus, or the proportion [ἀναλογία].”⁴³ Let me also stress that, from the point of view of the λόγος, the thinking of difference is subordinate to the principle of identity, which no difference, however great, can hope to undermine. Once again, difference should not be confused with alterity, or pure heterogeneity, about which there is, strictly speaking, nothing to be said. It is not heterogeneity, but contrariety, that designates the ultimate degree of difference. Contraries mark the largest possible difference between species. Differences between genera can never be contraries, for a difference in genus is precisely too heterogeneous, and genera do not share an identical term on the basis of which they can be said to differ: “animal” and “vegetable” do not have contraries, but “black” and “hard” do:

Since things which differ may differ from one another more or less, there is also a greatest difference, and this I call contrariety [ἐναντιώσιν]. That contrariety is the greatest difference is made clear by induction. For things which differ in genus have no means of passing into each other, but are too far distant and are not comparable; and for things that differ in species the extremes from which

generation takes place are the contraries [ἐναντίων], and the distance between extremes—and therefore that between the contraries—is the greatest.⁴⁴

If difference can lead as far as contrariety, it cannot lead as far as contradiction. To the extent that difference is thought on the basis of a prior identity, contrariety constitutes its absolute limit. The principle of contradiction is quite naturally the corollary of the principle of identity, so long as difference is thought on the basis of the latter. And it comes as no surprise, then, that this principle should have had such a destiny, perhaps expressed nowhere more strongly than by Leibniz. The principle of identity ($A=A$) claims that a concept or a thing, in order for it to be the concept or the thing that it is, must remain identical to itself. By contrast, the principle of contradiction claims that whatever includes a contradiction can be neither true nor real. Indeed, since the principle of identity presupposes a definition of truth and reality through self-identity or self-coincidence, whatever includes a contradiction does not coincide with itself, and is thus, at the level of cognitions, false, and at the level of realities, unreal. Only that which has the form of self-identity is “real” or “true.”⁴⁵

A further sense of difference, which Boethius will qualify as *proper* (ἰδίως), designates ways in which an essence can be qualified. It is not constitutive of essence as such; rather than the question *quid* it answers the question *qualis*:

Difference is never the genus of anything. This is obviously true; for no difference indicates the essence [οὐδεμία γὰρ διαφορὰ σημαίνει τί ἐστίν], but rather some quality [ποιόν τι], such as “pedestrian” and “biped.”⁴⁶

Differences such as these, insofar as they denote something that is not purely accidental about the thing (in the case of the human, for example, that it is rational and mortal, as opposed to hook-nosed or snub-nosed), obviously bring to mind those inseparable or “essential” accidents discussed earlier. Remember that, although they do not characterize the essence of this or that thing in the narrow essence (τῷ τί ἐστί), such accidents still allow us to approach and circumscribe it in the name of a wider conception of essence, which takes into account the material and changing reality of the physical world. In fact, difference characterizes the thing as *material* thing and not as *form*:

[I]n definitions, the first component, which is stated as part of the essence [τῷ τί ἐστί], is the genus, and the qualities are said to be its differences . . . that to which the difference or quality belongs is the substrate, which we call matter.⁴⁷

Accordingly, it is through differences, which are here synonymous with those accidents *propter se* mentioned earlier, that we can grasp the

thing in its materiality, in its sensible reality. In other words, even though difference is not part of the essence of the thing in the strict sense, which is to say, in the sense of its τὸ τί ἐστίν, it does allow us to grasp the thing in its singularity as a thing, at least up to a certain point. In assigning the essence, Aristotle claims, “it is more appropriate to state the genus than the difference; for he who describes ‘man’ as an ‘animal’ indicates his essence better than he who describes him as ‘pedestrian.’”⁴⁸ But this is assuming that what we are concerned with from the start is a thing as “secondary substance,” that is, as already held in view with respect to its genus and its species. And from this perspective we shall never be able to move beyond a certain degree of generality. Yet the beings we encounter in the world are precisely not essences or generalities, precisely not secondary substances. They are singularities, what Aristotle calls primary substances or individuals. Yet these are precisely the sort of substances in the face of which philosophical discourse remains powerless. This is made explicit in the following passage:

Suppose someone asks you “what is it?” regarding a primary substance. Your answer is both more instructive and also more apt to the subject, provided you mention its species than if you should mention its genus. Take this or that man, for example. You would give a more instructive account if you stated the species or “man,” than you would if you called him an “animal.” The former belongs the more to him, the latter is somewhat too wide. Or again, take an individual tree. By mentioning the species or “tree” you will give a more instructive account than by giving the genus or “plant.”⁴⁹

From the very start, what is of concern here is the thing as an individuated thing, as a singularity; what is intended is, as Aristotle puts it, *this* or *that* man, *this* individual tree. Yet, when faced with this demand to address something in its singularity, thought is unable to move beyond the identification of the specific level. In moving from the level of animality (genus) to that of humanity (species), have we made much progress? Have we at all begun to address this thing in its singularity? Or is the species still not too “wide” to really say anything about the substance under consideration? If and when we address this thing as such, we do so not only in relation to something that is incidental, to something extraneous; we no longer envisage it as substance, that is, as informed matter, but only as random matter. Differences are only ever material, and make sense only in relation to the species and genus under which they are subsumed. And so, were we to rehabilitate differences in philosophical discourse, we would need to overcome the primacy of ontology as *ousiology* or, more specifically, overcome the punctual character of substance, and the conception of discourse as propositional. We would need to begin with differences, and with matter, and to show how they themselves are generative of identities and substances. We would need to consider them

no longer as accidents, not even as accidents *propter se*, since accidents always presuppose a substance to which they occur, but as events, and as events constitutive of our world. In so doing we would begin to move from an ontology of substance and essence to an ontology of events. Following Heidegger and Deleuze, this is the direction I shall eventually take.

Setting aside these ultimate differences, which Boethius characterizes as “inseparable,” and which Aristotle manages to integrate into the being of the thing from a qualitative point of view alone, we need to take into account one final operation specific to difference, one final level at which it operates. This is the difference, intrinsic to the genus, through which the genus is divided into species:

That which is other in species [Τὸ δ' ἕτερον τῷ εἶδει] than something else is other in respect of something; and that something must apply to both. For example, if an animal is other in species than something else, they must both be animals. Hence things that are other in species must be in the same genus. The sort of thing I mean by genus is that in virtue of which two things are both called the same one thing, and which is differentiated in no merely accidental way, whether conceived as matter or otherwise. For not only must the common substrate belong to both, for example, not only must both be animals, but this very animality must also be different for each (for example, in the one case equinity, in the other, humanity), and so this common substrate is specifically different for each from what it is for the other. One, then, will be in virtue of its own nature one sort of animal, and the other another, for example, one a horse and the other a man. This difference, then, must be an otherness of the genus.⁵⁰

Difference is “that through which” a genus is divided into species. At this stage it is essential to note that such a difference has its basis in human discourse, and in no way constitutes an ontological, to wit, onto-genetic, principle: difference does not produce; it is not a source of life or a principle of individuation. It has a strictly logical application. Contrary to differences that are accidental, and accidental in accordance with beings themselves, “specific” differences define the thing in its essence and, as such, are integral to its definition. Thus, when I ask “Who is Socrates?” and reply “an animal,” I state an essence, but not a difference. By way of contrast, if I reply “a man,” I state an essence *and* a difference. It is this difference, which is at once a principle for the division of the genus and constitutive of the species, that, by way of Porphyry’s commentary on the *Categories* and Boethius’s translation of the latter, the tradition will retain under the name of *differentia specifica*.⁵¹ This, according to Boethius, is difference in the *strictest* or *most proper* sense (ἰδιαιτάτα) of the term: “In the strictest sense, two things are said to differ because of a specific difference, as a man differs from a horse because of a specific difference, the quality rational.”⁵² Specific differences, therefore, are “those which make a spe-

cies different and which are comprehended in the quiddity [ἐν τῷ τὸ ἦν εἶναι].”⁵³

It is difficult to underestimate the extraordinary influence which, through Porphyry and Boethius, the Aristotelian account of difference, both in the “proper” and “in the strictest sense,” had on the tradition. Let me mention a few highly significant examples.

We know that the principal concern of Scotist thought concerned the univocity of being. This univocity was meant to unify the site of our experience, which is made of finite beings, and our discourse on God as the infinite being, thereby securing the unity of metaphysics as the science bearing on beings as a whole. Such a theory, however, was valid for concepts, genera, and species alone. In other words, it held for those entities grasped in their essence and definition only. In the hierarchy of successive particularizations, the definition of an essence presupposes, on the one hand, a genus that is in potency and determinable (in the case of man, for instance, “sensible being” or “animal”) and, on the other, a difference that is actual and determining (“rationality”). The first concept is included in the definition in a quidditative manner (*in quid*). The second is added to it in an extrinsic manner. Granted, rationality is not an accident but a specific difference intrinsic to the living being which is quidditatively constitutive of being-man. But rationality is external to animality as animality; that is why it names it in an extrinsic and accidental manner, as a difference that falls under the remit (*accidit*) of the genus. In more technical terms, we might well say that this is an instance of a qualitative predication, of an “in which” (*in quale*). The ultimate difference, therefore, the one of which no other species or difference is said, which ultimately characterizes essence as a proper species, is not *internally* predicated of beings: it is attributed to them from outside, in other words, qualitatively. It is added to them in this way, not by saying what beings are (*quid sit*), but by saying what kind of beings we are dealing with. It is determining without being determinable in turn:

“Ultimate difference” is so named because it has no difference, since it cannot be analyzed into a concept that is quidditative and qualitative, determinable and determining, but its concept is qualitative only, while the ultimate genus has a quidditative concept only.⁵⁴

What beings *are*, beings in relation to their being or their *concept*, is situated entirely on the side of identity, or what they are said to be “in themselves.” This is why, in the final analysis, the concept of being is not a univocal concept predicated of ultimate differences; it is not directly included within the latter. As was already the case in Aristotle, the concept of being, as common being (*ens commune*), doesn’t allow us to get right down to those ultimate differences,⁵⁵ and this precisely insofar as it

remains caught within a fundamentally quidditative conception of ontology (and even of physics).⁵⁶ This question concerning the “passage” from Aristotelian secondary substances, species and genera, or “universals,” to primary substances was one of the burning issues in thirteenth-century metaphysics. As Aristotle claimed, however, the only science *stricto sensu* is that of the universal, from which it follows that metaphysics can constitute itself only as a science of universals. All the same, we need to acknowledge that the individual (this man here) does not have the same relation to the species (man) as the latter does to the genus (animal); in other words, the individual is not a species of the species. This is how an additional principle came to be sought and identified by the Schoolmen as the *principio individuationis*. It was situated at times within matter, at times within the form, at other times, still—as was the case with Scotus—in a difference close to the specific difference. This difference was called “individuating” and was forged in order for thought to reach beyond the mere concept into the existing singularity, known as a haecceity.⁵⁷ In spite of this effort, difference, as ultimate or singular difference, always remains external to the process of being, the univocity of which rests precisely on the logical principle of non-contradiction, which alone guarantees the identity of the thing (or the unity of the concept). As singularity, difference can be integrated into the concept but only insofar as it does not push it into contradiction. In other words, difference can be envisaged only as (1) subsumed beneath the unity of the concept, or the identity of the genus, and not *as* a concept (there cannot, strictly speaking, be a concept of difference) and, consequently, as (2) neutralized, which is to say, never threatening the identity of the concept. Not until Hegel will difference go as far as contradiction (and no longer only as far as the contrary), thereby calling into question the very foundation upon which logic, and metaphysics along with it, rested. But the question will then be one of knowing whether difference as integrated into the concept in this way, and hence constitutive of its own identity, amounts to a genuine concept of difference. Long before Hegel, however, it was Ockham who made it possible to go beyond the realist ontology of Aquinas and Scotus by affirming that there can be an ontology of singular beings only, that singularities alone are, *stricto sensu*, real, thereby bringing about a return to what Aristotle himself could not help but notice, before subordinating singular differences to the work of universals and the primacy of quiddity.

Despite his opposition to the triumphant realism of the thirteenth century and the univocity of beings proposed by Duns Scotus, despite, also, the singular position he occupies in the history of medieval thought, when it comes to the question of the status of difference and its relation to the other four universals (genus, species, accident, proper),⁵⁸ Ockham remains a faithful follower of Porphyry. Certainly, Porphyry’s predicables—like most Aristotelian categories for that matter—are, to Ockham’s eyes,

devoid of reality: genus and species are merely terms (concepts or vocal signs) predicable of a plurality of individual beings. Ockham grants reality and existence to the individuals alone. The universal is devoid of any reality outside that granted by the concept and the mind. Therein lies Ockham's nominalism: he refuses to grant any form of independent existence to a common nature supposedly distinct—whether really or formally—from the singular individual.⁵⁹ All knowledge begins with the intellection of the singular, a direct intellection that was already called "intuition" in Ockham's day. The singular is an object not only of sensation but also of intellection: knowledge apprehends beings in their real existence, which is to say, in their singularity. Thus, the thing is in effect the cause of the concept and hence what turns the latter into a natural sign: the sign is the substitute for a real thing, and it is this relation of substitution that provides the basis for the signification of terms and the truth of propositions. The categories do not refer *directly* to singular beings. The real difficulty, then, consists in knowing the indirect or lateral modalities according to which they refer to them. What is at issue in this new theory of the sign, therefore, is a radical transformation in the link between language and reality, rather than a mere transformation in logical technique. A radical and decisive shift takes place: the universal no longer falls under the aegis of ontology, but of logic. In Ockham's eyes, there is room for a minimalist "ontology" only, one that would consist of a discourse bearing on beings as singular beings (this stone, this man, etc.) and of a purely empirical knowledge. Singularity is the ground of all things, the being of beings; it is at once being and beings, essence and existence.

From this point of view, Ockhamist thought seems more to anticipate physics and the modern sciences of nature than it relates back to classical ontology. In fact, as Alféri demonstrates, ontological discourse, although indispensable as a preliminary step, actually paves the way for its own disappearance, for its abnegation in the face of the experimental method and the particular sciences. With Ockham, ontology begins the path to physics, a journey already foreseen in Aristotle, the completion of which has effectively been under way since the sixteenth century.⁶⁰ Ockham fights every variety of ontological universalism on its own territory, as well as fighting against philosophy itself, later determined as a general ontology or as a metaphysics of "being *qua* being."⁶¹ He wages war against this traditional ontology, which is universalist and realist, and which, since Boethius, sees universality as a certain mode of being distinct from singularity, and "universals" as "substances" distinct from singular individuals. Ockham grants the status of substance to primary substances alone, thereby devalorizing the object that Aristotelian metaphysics or classical ontology claimed as most worthy of it, as most fundamental and most intelligible, namely, substance in general, and "secondary substance" in particular (in relation to which the former is subordinate). In a

gesture as violent as it is revolutionary, Ockham tears the *ens commune* and the universal from philosophy, but does so in order to return them to the province of a theory of signs or a logic. With Ockham, the universal is envisaged as a way of *saying*, and no longer of *being*. The crucial question for us will be to know whether it is possible to posit ontology as a science of *being* and not simply of singular beings, while foregoing the association between being and generality, or being and secondary substance. In other words, and contrary to Ockham's own position, can being itself be envisaged as a singularity? Must ontology be doomed either to a minimalism of singularity, or to the community or universalism of realist ontology? To go beyond this alternative means that we will have to call into question Porphyry's tree as such, regardless of whether we attribute to it an ontological or merely logical function.

Yet this tree, and the theory of universals that accompanies it, is in fact the one Ockham continues to use as a yardstick. Although displaced (and this displacement is of crucial importance), the theory of universals is reinscribed and confirmed in Ockhamist "terminism," and difference as *specific* difference reinforced. So, from the point of view of this terminism itself, there is also a continuity with the Porphyrian tradition. The question of the relation between concept and singularity continues to be formulated in terms of universality and generality, in terms of genus, species, etc. The entirety of Aristotle's conceptual apparatus, especially in its Porphyrian version, is redeployed, even though it will now be a question of thinking beings in their singularity. And the principal reason for this is that Ockham continues to envisage the singular as substance, that is, as the substrate or subject of properties and accidents. It is only as substrate, as the ultimate ontological consistency, that the singular is able to possess this real unity which justifies the privilege of numerical unity. Moreover, it is only as the subject or substrate of properties and accidents that are ultimately similar to those of other beings, only as that which underlies beings while remaining irreducible to them, that the singular can be unique and distinct from all others. Unlike accidents, which vary and can be transferred, substance is the only real site of self-identity, the ground on which ontological discourse, in accordance with its logical requirement of non-contradiction, rests and dwells. As a subject, substance is what is neither property nor accident. It is on the basis of the distinction between subject and accident, and on it alone, that the substantial character of the singular can be demonstrated. But what Ockham's demonstration shows, almost despite itself, is precisely the impossibility of such a distinction. In the final analysis we are still left with the structural impossibility of grasping beings in their pure self-identity. From a strictly ontological viewpoint, the self-identity of the singular is compromised by the existence of those accidents that are *per se* or inseparable, those very accidents Porphyry characterized as differences *in the proper sense* (*pro-*

prie). By accident we need to understand any content or “passion” of a substance that can appear and disappear without implicating the disappearance of the substance itself: the color black, for example. In some instances, however, such “passions” are permanent and cannot be extracted from their subject; the blackness of a crow, for example. Is it not the case that contents like this, insofar as they bring about an indissoluble connection between accidentality and its subject, undermine the substantial identity of the singular? In other words, although ontology finds itself *logically* obligated to presuppose an identitarian subject of the singular underlying its accidents, it is in fact incapable of attaining the latter in its purity: the natural beings to which ontology restricts itself are constitutively tainted with accidentality. There is, then, something like an impotence of nature, of natural beings, when it comes to presenting the singular in the pure unity, the pure identity that ontology must logically ascribe to it; something like an impotence on nature’s part when it comes to realizing the principle of contradiction. Is it surprising, then, that, despite Ockham’s initial intention, singularity is denied in its difference, and affirmed solely in its identity as substance in God, who is the sole guarantor of the principles of principles as well as the complete actualization of logical identity? Such a power alone could call a non-black crow (who would not thereby be red but colorless) into existence (or, better said perhaps, subsistence), and so separate two things that are *naturally* inseparable:

The separable accident is what can be deducted by nature without destroying the subject; the inseparable accident is what cannot be deducted by nature without destroying the subject, although it can be deducted by divine power.⁶²

As such, we find ourselves in the paradoxical situation in which only the affirmation of divine power is able to justify and to preserve the ultimate object of ontology, namely, beings in their identity or singularity as beings. It alone can save ontology. But from our own standpoint, there can be no phenomenal verification, no experience in the proper sense, where this ontology is concerned: it is posited and verified through the act of faith alone.

As for specific difference, or entirely proper difference (*magis proprie*), which henceforth relates to logic alone, it is simply redeployed, in the version given by Porphyry, alongside the other predicables. Again, specific difference “does not belong to the essence of the thing.” It consists in a “certain intention of the soul, predicable of what is without content beneath it, but not *in quid*.” If it is called difference, Ockham continues, it is to the extent that,

without being predicated *in quid*, it is nevertheless the middle term that allows us to conclude with a negative proposition in which that of which it is

the difference is denied of [or differentiated from] something else. Thus, “rational” is the middle term that allows us to conclude with a proposition denying the humanity of the ass, as well as of other beings that are not men, through the following reasoning: “Every man is rational; no ass is rational; consequently, no ass is a man.”⁶³

Ultimately, then, specific difference consists in an intention of the soul that expresses a determinate part of the thing, one that is predicable *in quale* of those same things of which the species can be predicated *in quid*.

Now, this is the same specific difference that crops up again a few centuries later in the *Logique de Port-Royal*, a text that testifies to the exceptional longevity of its Aristotelian origin. In Part One, Chapter VII, “On the Five Kinds of Universal Ideas” (in which the order of Porphyry’s text is faithfully reproduced, albeit with a strong Cartesian influence), we read the following:

When a genus has two species, the idea of each species must necessarily contain some idea not contained in the idea of the genus. Otherwise, if each contained only what is contained in the genus, then they would be identical with the genus. And since the genus is predicated of each species, every species would be predicated of the other. Difference is the name given to the principal essential attribute contained in the species but not contained in the genus. The difference is a universal idea, since one and the same idea allows us to represent this difference wherever it may be encountered, and this means at the level of the species.

Example. The idea of the body and the idea of the mind are two species of the genus substance. Therefore, there must be in the idea of the body something more than in the idea of substance. And similarly with the idea of mind. Now the first thing we perceive in the body, that is not in the mind, is extension, and the first thing we perceive in the mind, that is not in the body, is thought. Consequently, the difference of the body is extension, and the difference of the mind is thought. Body is extended substance; mind is thinking substance.⁶⁴

What is most remarkable about this passage, and about the conception of difference it displays, is the way in which specific difference is integrated into what is now a modern, Cartesian conception of the world. In other words, despite the extraordinary transformation of the nature of philosophy itself, despite the interpretation of the world as thing (*res*), and its division in *res cogitans* and *res extensa*, or mind and body, the canonical conception of difference, as subordinate to the unity of substance, remains intact. And it will remain intact for much—if not the whole—of modern philosophy.

Let me take one final example. Let me show how, closer to our own time, some aspects of Husserl’s thought echo this Aristotelian legacy and its developments in the thoughts I have just analyzed. This legacy is

mostly visible in the so-called “static” phase of phenomenology and would need to be nuanced, if not radically revised, in the light of the later, so-called “genetic” investigations that characterize Husserl’s thought in the 1920s and 1930s. Similarly, we would need to show how much of Merleau-Ponty’s work, for example, if not the whole of that work, is an attempt to overcome some of the (essentially Aristotelian) shortcomings of those aspects of Husserl’s thought that I am about to discuss.⁶⁵

Put bluntly, Husserlian phenomenology is an attempt to fulfill the Aristotelian ambition to establish a science of being *qua* being. Specifically, phenomenology reinscribes the twofold fundamental sense of being or οὐσία: first, that on the basis of which (ἀρχή) or in relation to which (πρὸς ἓν) all things can be said to be; second, as a way of addressing things in their τὸ τί ἦν εἶναι, that is, in their “what it was to be” for them, or in what the scholastics called their *quidditas*. First philosophy is an investigation into the essence or the whatness of things. So what form does this basic structure of ontology take in Husserl’s phenomenology? In §76 of *Ideas . . . I*,⁶⁶ Husserl suggests that we need to distinguish between two senses of being: first, being as consciousness, and second, being as what “announces itself” (*sich bekundedes*) in consciousness. The first sense of being is the one attained by way of the phenomenological reduction, and corresponds with the domain of “absolute” being. It is, Husserl claims, along wholly Aristotelian lines, the *Urkategorie* of being, the primordial sense and category from which all others unfold. It is also the transcendental dimension of being: consciousness is not of this world, it is not innerworldly, but “before” the world, since the world is constituted in and for it. As such, consciousness is not a region alongside others (empirical consciousness, for example, or nature, or things), but the first region, or the region of all regions. This amounts to saying that it is precisely not a region, and that phenomenology, insofar as it takes consciousness thus defined as its object, is not a regional ontology, but the ontology of all ontologies: “pure phenomenology seems to contain within itself all ontologies.”⁶⁷ The second sense of being is that of transcendence, or of beings as such and as a whole. This sense of being only becomes an object for phenomenology through the eidetic reduction, that is, through the operation that converts an empirical intuition, or the experience of a concrete singularity, into a vision of essence (*Wesensschauung*). Within the latter sense of being, then, it is quiddity that is retained, leaving the τὸδε τι or the individual being outside of the sphere of philosophical inquiry. Thus, in a way, Husserl is even quicker than Aristotle to convert the question of οὐσία, originally envisaged by Aristotle in its primordial sense (πρώτην οὐσία) as παρουσία or presence (subsequently identified as *existentia*), into the question of *quidditas*, or *essentia*: “The universal essence can be unfolded in thought, and its unfolding necessarily leads to an *ontology*.”⁶⁸ And the subsequent distinction drawn by Husserl between “matters of

fact" (or existents) — toward which the empirical sciences are directed — and "essences" — toward which the pure sciences in general, and philosophy in particular are oriented — takes place within the prior interpretation of being as quiddity.⁶⁹ And this is ultimately why phenomenology and psychology are two radically different sciences: they do not deal with the same objects. Whereas the objects of phenomenology are unreal (*irreale*), those of psychology — or of any such empirical science — are "realities" (*Realitäten*) or actual events: they are spatially and temporally individuated singularities. From the start, then, phenomenology deals not with events or with existents but with essences; it is a science that is developed, at least in principle, completely independently of experience (like mathematics or logic, phenomenology is a "pure" science). Furthermore, whereas essences are considered to be "necessary," concrete individuals — which are always an instance of an essence, and thus of a necessity — are themselves deemed merely "contingent" or "factual" (*tatsächlich*).⁷⁰

Now, the primary consequence of ontology thus understood is the undisputed and unquestioned privilege granted to identity and permanence as sustaining and guaranteeing the twofold sense of being as absolute *ἀρχή* (whether as prime mover or as transcendental consciousness) and as essence or quiddity. Ousiology, whether in its Aristotelian or its Husserlian version, is committed to the twofold principle of permanence and of identity, which legitimize and ground both the ego-substance in its archaic status as constitutive power as well as the idea-essence in its manifesting power. Transcendental consciousness — as the origin or primal horizon within which the world is constituted — and the essence of any given phenomenon both share the structure of self-identity. Both are exclusive of heterogeneity and differences. Leaving aside for the moment the first sense of being, I want to focus on the second and emphasize the structure that underlies it, in an attempt to tease out the various consequences attached to such a commitment to a conception of philosophy as "seeing of essences." Almost inevitably this means that we will have to turn to the remarkable role attributed to imagination, or rather phantasy (*Phantasie*)⁷¹ in the operation of eidetic reduction. What I want to emphasize, then, is the distinctive role of phantasy played in the reduction of the phenomenon to its absolute, permanent, and in principle indisputable identity.

Yet before turning more explicitly to the classically metaphysical structure governing such a conception, I want to point to one way in which Husserl's discourse differs from that of Aristotle. Remember how, at one point in the *Metaphysics*,⁷² Aristotle arrives at a serious problem regarding the possibility of grasping a being in its essence. Having established that for a physical being "to be" is primarily for it to be in some way fixed and unchanging, and thus necessary invariant in the contingent be-

coming that characterizes the realm of φύσις, Aristotle ponders the extent to which the definition of a thing, as the definition of its essence, can envisage that thing in its physicality. In other words, is there not a hiatus, if not a straightforward incompatibility, between the nature of the philosophical concept, intended to grasp essences, and the physical world, primarily defined in terms of change (μεταβολή) and movement (κίνησις)? Will the definition (λόγος, ὁρισμός) or the concept of a thing ever be capable of integrating more than just its genus and its merely *specific* differences? And if not, will such a definition not amount to the very negation of the thing as a thing of nature? In short: can philosophical concepts define or grasp things not only in their form, but also in their physicality and materiality? It is with a view to addressing this issue, and in an attempt to move beyond the classical Eleatic opposition between the sensible and the intelligible, that Aristotle, in what amounts to a paradoxical or seemingly antinomic formulation, introduces the complex and somewhat ambiguous notion of an accident *per se*. With this concept, Aristotle is suggesting that we consider something like an essential accident or difference of a thing, a kind of attribute which, while not being absolutely essential (while being neither genus nor species), is nonetheless relatively essential. It is important to note that this level of reality that is brought into the definition or the concept or the quiddity of a thing is precisely the one which, venturing beyond—or rather beneath—that of pure form, attempts to integrate a certain degree of the materiality of the thing. Now, with respect to this question concerning the degree of specificity or differentiation with which philosophy may be able to apprehend any given phenomenon, phenomenology does have certain tools that are inaccessible to Aristotelian ontology. For the object of phenomenology is not so much the essence or the form as distinguished from its various attributes and its materiality, as it is the essence as encompassing the entire *Wesensgehalt* of the phenomenon, from its largest generality down to its most seemingly innocuous differences, with the exception of the “ultimate difference” or level of differentiation, namely, actuality or individuation. It is the phenomenon as such and as a whole that is the object of the seeing or the description of the phenomenologist, the lived experience in its bodily and manifold—yet reduced—presence: not just the general essence, or the genus (e.g., sound, or number) and the species, then, but, in the case of a mental process of the kind “phantasy of a physical thing,” for example, that

physical thing-phantasy in the entire fullness of its concretion precisely as it flows smoothly in the flux of mental processes, precisely the determinateness and indeterminateness with which it makes its physical thing appear now from one side and now from another, precisely in the distinctness and blurriness, in the vacillating clarity and intermittent obscurity, etc., which are indeed proper to it.⁷³

Only its actual presence, its factual existence, falls outside the description, since actual existence adds nothing to the object with respect to its phenomenality. Following Kant on this point,⁷⁴ Husserl argues that being or existence is not a real predicate: by positing the existence of a thing, I posit nothing more than what is posited in the concept of the thing. In doing so, however, I posit it *absolutely*. Thus, everything happens as if the possible preceded the actual, as if actuality were merely a late and accidental addition to the essence. But for existence, or individuation, the possible gathers in its concept all the characters of the real: individuation, or the ultimate difference in the process of differentiation, makes no “real” difference. Here existence or actuality is distinguished from possibility, as if the couple actuality-possibility exhausted the real as such. A phenomenon can thus be described with the greatest degree of precision without it having to be given in actual experience. So long as it is given in *intuition*, which is by no means the same as sense perception, it is a phenomenon in the most genuine sense. The vision of essence is thus a “seeing” in the ontologically most primordial sense of the term; it is at once *sinngebende* and originary, not just a representation or a derived mode of apprehension. Ultimately, then, whereas Aristotle only partly succeeded in bringing into the essence of a thing a degree of specificity and differentiation beyond that of the kind and the species, and this meant that degree of specificity that pertained to the thing in its materiality, Husserl, through the twofold action of the transcendental and the eidetic reduction, is able to grasp the thing in its complete *Wesensgehalt*, excluding only the concrete and singular individuations of such an essential content. The object is now not the individuated thing, but the thing in the many ways in which it can give itself. In other words, the thing is envisaged as a potentially infinite multiplicity. With Husserlian phenomenology, yet in a remarkably different way from what takes place in Kant’s conception of the object as a sensory manifold unified through a power of representation, the object is revealed as a multiplicity. Everything happens as if, with phenomenology, the limits of ontology as *ousiology*, or as the discourse oriented toward addressing things with respect to their quiddity, were pushed further, integrating within the essence itself the whole content of the phenomenon, in its manifold and complex dimension, leaving outside of its jurisdiction only the question of individuation. Everything happens as if Aristotelian *ousiology*, in the twofold sense of a science oriented toward the one principle on the basis of which things can be said to be—what Heidegger will reinterpret as the “meaning” of being—and toward revealing things in their whatness, had reached a certain completion.

Let me now return to the question of essence as self-identical substratum, and to the role phantasy plays in revealing it. Phantasy, and the eidetic variation which it enables, is to free the pure, universal, identical, and necessary essential content (*Wesensgehalt*) of the phenomenon. If we

are going to acquire pure concepts, or concepts of essences, then, so Husserl claims, we are going to need more than a comparison between empirically given images. In order for such concepts to be acquired, what is needed is for “the universal which first comes to prominence in the empirically given [to be] freed from its character of contingency.”⁷⁵ And this, Husserl goes on to say, can be done only by “special arrangement.” The arrangement in question consists in an act of volition in which, with the help of phantasy, we multiply images of the model originally given in experience and produce free variations of the original image. This is how Husserl describes the process:

Carrying out eidetic focusing, we now proceed to the pure sense; we abstract from the existential positing of the actually occurring experience. . . . We move about with free power of choice in the realm of “empty possibilities.” Making unlimited use of this freedom, we keep the identity of sense, insofar as the objectivity presented with it is supposed to be able to appear as identical, univocal in itself, in any series of variations that we carry out. Thus freely phantasying we let the thing move, deform its shape in any way we like, let its qualitative determinations, its real properties change themselves as we like. . . . Freely proceeding in this way the phantasy produces the most incredible deformities of things [*die unglaublichsten Mißgeburten von Dingen*], the wildest physical spectre [*den tollsten dinglichen Spuk*], scorning all physics and chemistry.⁷⁶

There is something monstrous and wild about phantasy’s unlimited power of transformation. There is something like a delirium in the operation of eidetic variation. And this delirium is indeed productive: the phantasy has generated an infinite multiplicity of possible things. What we have here is indeed a multiplicity (that is, a collection of elements united by a common property), since it is a domain of pure variation. This multiplicity, moreover, is potentially infinite, since phantasy is this unlimited transcendental faculty able to move across an infinite number of variations without ever losing sight of the thing in its unity. This is quite a remarkable discovery, and one that is indeed decisive for Husserl: to the grasp of the real belong only those limits imposed by phantasy, which, restricted only by the demand for evidence, is essentially limitless. Yet this faculty reveals the object as multiplicity simply in order to refer it back to the unity *of which* it is the multiplicity; it reveals it as a heterogeneous collection of elements simply in order to bring this heterogeneity back to a variation of a fixed and homogeneous kernel, as a collection of images and faces of an original and organizing model. In other words, a *unity* necessarily runs through this multiplicity, and an *invariant* is necessarily retained as the general form without which the object would be simply unthinkable, ungraspable as such. The invariant is the substratum that is presupposed in the very unity, and thus in the very phenomenality of the

phenomenon. It is the *de jure*, if not *de facto*, primary or originary image (*Urbild*). Now, in the process of eidetic variation, so Husserl claims, we cannot but be indifferent to the differences between the variants, since our only concern is the *form* (εἶδος) as an “absolutely identical content” (*ein absolut identischer Gehalt*), an invariable *what* or a *general essence*.⁷⁷ We can direct our look toward it as toward the *necessarily* invariable underlying all variation, which is thus a variation of the *same original image*. Now, contrary to what Husserl himself suggests, this quest for the invariable essence or model behind fleeting images amounts perhaps to nothing more than the repetition of the founding metaphysical or ousiological gesture. For such a gesture does not amount so much to what Husserl calls a “metaphysical interpretation” of the essence as to the very theoretical—and indeed ethico-theoretical—decision to let the question of being be driven by the question of essence or quiddity, the decision to construe ontology as an eidetic. And essence, in a way that remains consistent with its ancient determination, is envisaged throughout as the “identical something” or “substrate” “in which opposite determinations can be exchanged,”⁷⁸ and which therefore can never coincide absolutely with an existing individual or an ὄντιον. Essence, therefore, is always in excess of existence, or of the concrete *hic et nunc*, which is always a mix of necessity and contingency, identity and difference, universality and heterogeneity. It is not surprising, therefore, that difference itself is envisaged solely on the basis of the identity which it always presupposes, and *of which* it is the difference. While the seeing of the identical presupposes a congruence (*Kongruenz*) in the coincidence of the multiplicities of variation, difference designates those aspects of the variation that do not coincide in the identity of the essence, but come together in a relation of conflict. In other words, difference marks the site of an obstacle to the vision of essences: it is that which, “in the overlapping of the multiplicities, is not to be brought into the unity of the congruence making its appearance thereby, that which, in consequence, does not make an εἶδος visible.”⁷⁹ Difference is that which turns our gaze away from the seeing of essence, and thus that from which our own theoretical or phenomenological gaze must turn away. With respect to the question of essence, difference has to be neutralized. And the way in which difference is neutralized, once and for all as it were (or so it seems),⁸⁰ is precisely by bringing it back to the identity which it will have always already presupposed, and to which it therefore must remain subordinated. Thus, for two things to differ or come into conflict, a third one must be presupposed, in such a way that the difference will appear as specific to a common genus: this round yellow dish differs from that square yellow dish only because they are both extended figures: “every difference in the overlapping with others and in conflict with them points toward a new universal to be brought out (in our example, shape) as the universal of the superimposed differences

which have momentarily come into the unity of conflict.”⁸¹ A yellow dish, on the other hand, cannot be said to differ from a mathematical theorem, insofar as the two are different kinds of objects. Pure alterity, of which, Aristotle insists, nothing can be said, is not to be mistaken for difference, which is always and only *specific*, always and only referring back to a presupposed identity. And what, according to Husserl, holds for a variation, in which we artificially drop the identity of an individual and change it imaginatively into another possible individual, holds *a fortiori* for the alteration or the becoming-other of a real individual, which necessarily remains identically the same through its various phases of alteration: a color does not change into a sound, but only into a different color, so that “every possible alteration is accomplished with a highest genus, which it can never contravene.”⁸²

Yet although supposedly neutralized, and its place secured under the authority of the self-identity of essence, difference reappears in the Husserlian text in more ways than one, and always in a manner that would testify to the irreducible and unmasterable autonomy of difference itself.

One such occurrence—and there are no doubt others—is to be found in the pages immediately following the ones I have been discussing from *Experience and Judgement*. In §91 of that text, Husserl begins by reformulating the claim according to which phenomenology does not deal with the question of individuation, or with concretely individuated entities in the world, but focuses instead on essences or on the essential content of phenomena. If we take the examples of the pure concepts “man” or “duration,” we see that all men and all durations belong to the extension of these concepts, completely independently of their existence in the world. This extension is limited purely by the power of phantasy, which proves to be precisely infinite. In other words, “this totality of the extension of the concept of duration affords no individuation of the species’ ‘temporal duration,’ just as the totality of imagined colors which belong to the smallest eidetic difference of color are not individual colors in the actual sense, are not individuations of this lowest species.”⁸³ Yet it is precisely at this point, precisely at the point where Husserl, once again, separates radically and absolutely the question of essence from that of existence or individuation, that another sense of difference emerges, one with which phenomenology would presumably have nothing to do. It is this *other* difference, this difference other than the specific or the conceptual, which Husserl himself characterizes as “remarkable”: “But then we come across the remarkable thing [*das Merkwürdige*] that within the *same* imagining [and not between two different imaginings] . . . and, accordingly, also within the unity of one experience, a *further differentiation* [*eine weitere Differenzierung*] takes place, which is *not specific* and which cannot be taken out of this world.”⁸⁴ This “further differentiation” refers to nothing other than the process of individuation, and it is precisely at this point, on the

threshold of individuation, that the jurisdiction and thus the power of philosophy come to a halt. It should come as no surprise, therefore, that Husserl remains remarkably elliptical regarding this question.⁸⁵ But should it surprise us, considering the fact that the question of individuation, as the question concerning the “ultimate difference,” coincides with the thing in its *hic et nunc*, or its spatiotemporal difference? True, we cannot conceive of a level of differentiation of an essence that would be more differentiated than that of a concrete singularity, with its particular place in space and time. And Husserl is right to claim that “the first and most radical character of individual existence makes its appearance in the form of the being-now,” and to add that “a second possible character, being-here, already presupposes it”:⁸⁶ the individuated being is always a matter for the “here” and “now”; the mode of *appearance* of the phenomenon is always the *hic et nunc*. But does it inevitably follow that the “now” really is “the point of origin of individuality”? Should we not distinguish between the “now” as the *form* in which the phenomenon is originally given, and the origin of the “now” itself, which, while entirely temporal, is itself perhaps nothing now-like? What of time (and space) *as such*? Are they innerworldly data? Are they *of* the world, precisely as *hic et nunc*? Is space primarily a “here” and time primarily a “now”? Or are space and time in excess of the world? Are they world-constituting and world-opening? Is space-time not the event of the world as such, that in and through which there is a world—not a world of essences, at least not primarily, but a world of events or facts? A factual and eventful world? In other words, before we can speak of concretely *individuated* things in space and time, ought we not to raise the question of *individuation* as such, that is, the question of the process or the event whereby individuals are constituted, the question of the spacing of space and of the timing of time? The question would then become one of knowing what sort of transformation phenomenology would need to undergo in order to address this question as *its* question. It would require at least that phenomenology take its point of departure in that question which Husserl judged to be the last or ultimate question, and one which did not concern phenomenology. It would require that phenomenology begin in the middle as it were, in between already individuated or differentiated entities in the world on the one hand, and eternal and self-identical essences on the other hand. In other words, it would require phenomenology to begin with the unexplored domain that stretches between difference and identity, not as between two terms or poles already constituted, but as the very between in the unfolding of which these terms would first be constituted, as the intermediate zone that distributes singularities as well as essences. Neither *ens* nor *essentia*, this zone of being would coincide with that of time and space as the always operative “there” or event of being.

And in a way, almost despite himself, almost accidentally, this is

where Husserl actually ends up. For when, looking further into the question of time, and of temporal objects, Husserl is inevitably brought back to consciousness as the originary site from which all objects are constituted, whether explicitly or implicitly, whether as temporally transcendent or temporally immanent objects, consciousness is envisaged in effect as principle of individuation, yet as one which, as such, is itself in excess of any *hic et nunc*, since it is nothing other than the absolute and uninterrupted flow of time.⁸⁷ Time, then, far from referring to a moment or an event in the world, could be interpreted as the transcendental *a priori*, or the non-worldly event in which the world happens. It is the pre-individual flux from which all individuals emerge; it is less the differentiation of a pre-given, self-identical, and always presupposed kernel of being (εἶδος) than it is the realization of an ontological potential (to be distinguished from a possibility as well as from an essence), which is itself no thing. Not even a consciousness, then; not even a Dasein, at least if by Dasein we understand the actual and factual singularity of existence.⁸⁸ It is only later on that, in a daring and decisive move which I shall have to analyze in some detail, Heidegger will even begin to push the problematic of Dasein further into that of the pre-singular field of individuation, signaling thus a shift from *Zeitlichkeit* to *Zeit-raum* as the principle of individuation.⁸⁹ Yet this same problematic actually begins, almost imperceptibly, to take shape in Husserl's own text, as if behind his back.⁹⁰ For does not the recognition of a consciousness as absolute flow signal the end of a pre-constituted identity? Of a stable and permanent substrate providing the model for the interpretation of being as a whole, that is, precisely as self-identity? In recognizing that consciousness too constitutes itself in this absolute flow, does not the very self-identity of consciousness undergo a fundamental crisis? Must it not itself come to be seen as derivative, as deriving from the work of time (and space), which itself does not point back to any identity, to any now, but only to an always already differentiated field of pre-individualities?

What, then, if ontology were to be redefined in such a way that it would no longer be concerned primarily with essences, but with events or facts? And what if being itself were not an ἀρχή—at least understood as a self-identical and self-present “moment” (albeit transcendental and pure, and this means supposedly independent of time and space as the forms in which it can be given)? What if, in other words, ontology were “originarily” and irreducibly differential, where difference would refer both to the an-archic origin of the world, nowhere to be located and identified *as such*, and where differences would mark the site of events or multiplicities resistant to their being traced back to a presupposed and always governing identity? What if, in other words, the real were itself *essentially* multiple, ultimately without essence? Can ontology move beyond ontology? Could such an ontology retain the form a

phenomenology, and phenomenology remain bound to the self-identical structure of a transcendental consciousness?

Before turning to the thought of Heidegger and Deleuze, which, each in its own way, provides a way out of classical ontology as I have defined it, let me point to aspects of Merleau-Ponty's thought that engage with Husserl on precisely the question I have just raised, taking phenomenology into a new direction in the process.

Merleau-Ponty's reference to the *essences sauvages* in his later work is precisely an attempt to move beyond the residual Aristotelianism in Husserl, and beyond the opposition between fact and essence in particular. That Merleau-Ponty's own conception of essence owes a great deal to Heidegger is beyond doubt: every time he talks of essence "in the verbal sense," he includes the German *Wesen*, with explicit reference to Heidegger's own reworking of this old concept as involving a verbality and an eventfulness lost in the classical, metaphysical interpretation. We can go as far as to say that Merleau-Ponty's thought revolves around the attempt to bring out as its explicit theme the level of reality—raw and primitive—that lies "behind" and "beneath" the eidetic layer identified by Husserl. In other words, prior to anything like a vision of essences, prior to the very possibility of isolating the invariant kernel of phenomena, and so, also, prior to the interpretation of our humanity in terms of a noetic capacity, lies, buried yet vibrant, the rich, inexhaustible, "deep," and "carnal" being of the primarily sensible and perceptual life-world. Nowhere, perhaps, is such an insight more clearly formulated than in the chapter from *The Visible and the Invisible* entitled "Interrogation and Intuition," echoes of which can be found in some "working notes" from February and November 1959. In that chapter Merleau-Ponty begins by acknowledging the originality and the decisive contribution of Husserlian phenomenology, particularly with respect to Cartesianism. Despite its seeming radicality, Cartesian doubt is in no position to call into question and hold in view as its explicit theme the very "umbilical tie" to the "something in general" which it continues to presuppose even as *radical* doubt. Phenomenology does not doubt so much as take a step back in order to let this very link, this irreducible tie, speak for itself. For the first time, with Husserlian phenomenology, the world, Being itself, is allowed to speak for and from itself, and is granted the quotation marks of direct discourse. For the first time, the light is directed at the very *link* that binds us to the world, and not at *things* within the world, or even at ourselves as one such thing within the world. In doing so, the gaze of the phenomenologist shifts from the world to what allows the world to be a world, to "an imperative grammar of Being" or "indecomposable nuclei of meaning, systems of inseparable properties." The essences are precisely this intrinsic sense, these necessities by principle. And however may be the realities in which they are compounded and confused, they are, Merleau-

Ponty argues, the sole legitimate or authentic being, because it is the system of everything that is *possible* before the eyes of a pure spectator, the diagram or pattern of what, at all levels, is *something*—something in general, or something material, or something spiritual, or something living. Through the question *quid sit*, then, and more effectively than through the doubt (whose question was that of the *an sit*), philosophy succeeds in detaching itself from all beings, because it changes them into their meaning. This, in a way, is already the procedure of science. But science does not go all the way: it does not entirely disengage its essences from the world; it maintains them under the jurisdiction of the facts (at least as far as the natural sciences are concerned), which tomorrow can call for another elaboration. Philosophy, on the other hand, must be seen as this same operation of meaning carried out to its conclusion, as an exact science, the sole exact one, because it alone goes all the way in the effort to know what Nature and History and the World and Being *are*.⁹¹

Having credited Husserl with the discovery of this new “something,” which radical doubt itself left untouched, Merleau-Ponty proceeds nonetheless to call into question the further identification of this something as *essence*. Does the question of sense, and of the sense of Being in general, inevitably lead to the question of essence? Is the question of essence the ultimate question, the question with which we are at the source? Merleau-Ponty’s response deserves to be quoted in full:

The essence is certainly dependent. The inventory of the essential necessities is always made under a supposition (the same as that which recurs so often in Kant); if this world is to exist for us, or if there is to be a world, or if there is to be something, then it is necessary that they observe such and such a structural law. But whence do we get the hypothesis, whence do we know that there is something, that there is a world? *This knowing is beneath the essence*, it is the experience of which the essence is a part and which it does not envelop. The being of the essence is not primary, it does not rest on itself, it is not it that can teach us what Being is; the essence is not *the* answer to the philosophical question, the question is not posed in us by a pure spectator: it is first a question as to how, upon what ground, the pure spectator is established, from what more profound source he himself draws. . . . We do not have the right to say that the essences we find give the primitive meaning of Being, that they are the possible in itself, the whole possible, nor to treat Being and the world as their consequence: they are only its manner or its style, they are the *Sosein* and not the *Sein*. . . . The pure spectator in me, which elevates things each thing to the essence, which produces its ideas, is assured that it touches Being with them only because it emerges within an actual experience surrounded by actual experiences, by the actual world, by the actual Being, which is the ground of the predicative Being. The possibilities of essence may very well envelop and dominate the facts; they themselves derive from another, and more fundamental possibility: that which is at work in my experience, opens it to the world and to Being, and which, to

be sure, does not find them before itself as *facts* but animates and organizes *their facticity*. When philosophy ceases to be doubt in order to make itself disclosure, explicitation, the field it opens to itself is indeed made up of significations or of essences—since it has detached itself from the facts and the beings—but these significations or essences do not suffice to themselves, they overtly refer to our acts of ideation which have lifted them from a brute being, wherein we must find again in their wild state what answers to our essences and our significations.⁹²

The Husserlian legacy is preserved. But it is preserved only at the cost of being modified, only at the cost of being brought back to the soil from which it departs. It is not so much a question of calling into question the legitimacy of the eidetic reduction as it is a question of reuniting it with the brute and primitive Being which it itself transforms. It is now a question of situating philosophy at the level at which, in asking about the “something” or the world that Cartesianism presupposes, I am not yet this pure spectator that I am about to become through the act of ideation. Before such an act, I am nothing other than a field of experiences. It is only through an active intervention—the eidetic variation—that such a field and the things encountered within it can be turned into their sense, their essence. The essence, as we saw, is precisely the in-variant in the variation, the kernel that resists the variation itself, thus designating the thing in its purity, that is, completely independently of the facts with which, in experience, it is always given. But is such an essence ever given? Can we ever be assured that, despite all our precautions, our careful methodology, something factual is not surreptitiously introduced in the essence itself, contaminating it from the start? Merleau-Ponty is doubtful, not simply for reasons that would be linked to the technical difficulty of the task, but for structural reasons. For, in his own words, such a pure essence

would require a spectator himself without secrets, without latency [a *pure* spectator, in other words]. . . . In order to really reduce an experience to its essence, we should have to achieve a distance from it that would put it entirely under our gaze, with all the implications of sensoriality or thought that come to play in it, bring it and bring ourselves wholly to the transparency of the imaginary, think it without the support of any ground, in short, withdraw to the bottom of nothingness. Only then could we know what moments positively make up the being of this experience. *But would this still be an experience*, since I would be soaring over it? And if I tried to maintain a sort of adhesion to it in thought, is it properly speaking an essence that I would see?⁹³

And to this question, this very question that transforms the phenomenological project in its very core, Merleau-Ponty responds in a way and in a tone which, for me, marks the possibility of a new beginning for thought. First of all, Merleau-Ponty responds by suggesting that such a

question can be properly addressed only *ontologically*. The sense of being that is presupposed here, however, marks a radical break with Aristotelian ontology, the remnants of which we saw at work in Husserlian phenomenology. Such an ontology, as ontology of the flesh, restates the demand, originally formulated most uncompromisingly by Scotus, that the sense of Being underlying it be univocal. Second, by referring implicitly to Bergson's notion of duration in his response, Merleau-Ponty is suggesting that the question of time be located at the very center of this renewed demand for ontology. But—and this, I believe, is where phenomenology runs against its own limits—if the sense of being is to be one and only one, common to both subject and object, if we need to hold on to a sense of univocity, duration itself will need to be shown as the very sense of being, as the sense of being that unfolds between things themselves, and between things and ourselves; not just time, but space itself, will need to be exposed as the fabric that is common to all things, as their very texture. In the process, ontology must become an ontology of the “between,” or of difference; it must begin in between things and ourselves, thus avoiding any form of dualism, thus avoiding the temptation to construct the world in our own image, of locating the human at the heart of being, as the measure of its unfolding. Such is the difficulty that Merleau-Ponty faces at the time of *The Visible and the Invisible*. He writes:

Every ideation, because it is an ideation, is formed in a space of existence, under the guarantee of my duration, which must turn back into itself in order to find there again the same idea I thought an instant ago and must pass into the others in order to rejoin it also in them. Every ideation is borne by this tree of my duration and other durations, this unknown sap nourishes the transparency of the idea; behind the idea, there is the unity, the simultaneity of all the real and possible durations, the cohesion of one sole Being from one end to the other. Under the solidity of the essence and of the idea there is the fabric of experience, this flesh of time, and this is why I am not sure of having penetrated unto the hard core of being: my incontestable power to give myself leeway [*mon incontestable pouvoir de prendre du champ*], to disengage the possible from the real, does not go as far as to dominate all the implications of the spectacle and to make of the real a simple variant of the possible; on the contrary, it is the possible worlds and the possible beings that are variants and are like doubles of the actual world and the actual Being.⁹⁴

At this point, and from within phenomenology itself, Merleau-Ponty criticizes Husserl's use of the category of the possible. In a way that is reminiscent of Bergson's own critique of that concept, Merleau-Ponty believes that the possible does not precede the actual as much as it follows from it. The possible as such never accounts for the world or the phenomenon given in its actuality. On the contrary: it presupposes such a givenness. There is, first of all, the real, and only subsequently

the possible, which is extracted from the real; and if the possible does indeed amount to this share of the real that I can detach from the real without calling it—or at least my experience of it—into question, then I can never quite transform the whole of reality into a possibility. The essential will only ever be a modification of the inessential, which is there for me from the start. Such is the reason why any genetic approach to the question of the world, or of experience, cannot begin with the question regarding its mere conditions of *possibility*, but must first and foremost look into the conditions of its actuality. In other words, the question is not: “What is the essence of X?” but “What are the real conditions of existence of X?” And if this question remains a transcendental one, it is only at the cost of a profound transformation of the meaning and the task of such an enterprise, and specifically at the cost of a shift from the question of essence, and of its possible variations, to the question of the *virtual*, and of its actualization in individual phenomena or systems. This is the entire difference between a thought that begins with already constituted phenomena, and allows them to vary through an operation of imagination in order to isolate their eidetic invariant, and the question of individuation, which arrives at the point at which Husserlian phenomenology begins (and I can only remind the reader of Husserl’s suspicion regarding the question of individuation), by envisaging such phenomena as the actualization of a virtual field of pre-individual singularities. This difference will become explicit in the second part of this work, as we turn to an analysis of the overcoming of this very opposition in the work of Deleuze. But it is already very much at work in Merleau-Ponty’s own thought.

Now, does the critique of the concept of essence, as we find it deployed in Husserl, and to a large extent inherited from Aristotle, mean that the concept of essence is to be abandoned altogether? Or can the concept of essence be deployed anew, in an altogether different direction, one that would ultimately remain more faithful to the fundamental experience of incarnate subjectivity, and that would not so much negate the facticity of the world as it would capture and render it originarily? But then, should facticity itself not be interpreted as providing the ground for a genuine understanding of facts themselves, not as opposed to essences, but as one with them? It is only when essences are brought back into their originary factual soil, back into the earthly origin whence they grow, that they are returned to their genuinely eventful being. It is only when essences are thought of in terms of events, and thus no longer in opposition to time, or to becoming, and no longer in terms of fixed, trans-temporal ideal kernels, that their opposition with facts is overcome. For a subjectivity that is incarnate, and this means not simply facing the world, opposed to it, but immersed in a world whose very fabric it shares, and to which it is attached by virtually every thread of its being, things do not present them-

selves as residual eidetic cores, but as events: this flower my gaze stumbles upon is encountered not primarily as flower in-itself, but as this flowering or this being-flower, this carnal and temporal reality invested with my own incarnate self. This unfolding, this flowering is essentially temporal, durational. It is an event, a strip of space and time *prélevé sur la texture de l'être*, which is neither subjective nor objective, but in between, common to both the *perceptio* and the *percipi*, older than the division itself:

[B]y renouncing the essence that is atemporal and without locality we would perhaps obtain a true thinking of essence. It is on account of having begun with the antithesis of the fact and the essence, of what is individuated in a point of space and time and what is from forever and nowhere, that one is finally led to treat the essence as a limit idea, that is, to make it inaccessible. For this is what obliged us to seek the being of the essence in the form of a second positivity beyond the order of the “facts,” to dream of a variation of the thing that would eliminate from it all that is not authentically itself and would make it appear all naked when it is always clothed—to dream of an impossible labor of experience on experience that would strip it of its facticity as if it were an impurity. Perhaps if we were to reexamine the anti-thesis of fact and essence, we would be able on the contrary to redefine the essence in a way that would give us access to it, because it would be not beyond but at the heart of that coiling up [*enroulement*] of experience over experience which a moment ago constituted the difficulty.⁹⁵

Thus, the very possibility of a thinking of essence as first and foremost opposed to facts, and to the facticity of experience, is no longer seen as inevitable. On the contrary: essence is now deployed anew in the very direction against which it was first pushed, in the direction of facts, or rather of the irreducible *facticity* of the world. And it is precisely because, in experience, such a facticity is, quite literally, irreducible, that is, resistant to the very operation of eidetic reduction to which phenomenology is to submit it, that it can no longer be seen as merely impure or contingent. Essence, if it is to survive as a concept, must henceforth be seen as unfolding not beyond experience, but at the very heart of it. And such a fundamental and decisive transformation of the concept of essence requires nothing less than a complete rethinking of time and space, insofar as, no longer standing outside of the spatiality of things and the temporality of the world, it can also not leave the very understanding of space and time as opposed to essence simply untouched. And so, it is not as if essence now simply coincided with the *hic et nunc* of a concrete thing. For the thing, in its very presence, carries with it more than its sheer presence as object. Indeed—and this is the point at which one begins to tune into the originality of Merleau-Ponty's thought—the visible always implicates the depth and the latency of my own visibility, which brings its own spatiality and its own temporality with it, investing things and the world

with its own carnal reality. At the same time, this reality itself is constituted from out of its encounter with the world of visible things, such that, in the end, the visible can be seen only by he who sees as the very continuation of its own sensible self, and himself as the very doubling or bending back of the visible onto itself, as the very coming to itself of the sensible:

[T]he visible thing is not in time and space, nor, of course, outside of them: there is nothing before it, after it, about it, that could compete with its visibility. And yet it is not alone, it is not everything. To put it precisely, it stops up my view, that is, *time and space extend beyond the visible present*, and at the same time they are *behind* it, in depth, in hiding [*en cachette*]. The visible can thus fill me and occupy me only because I who see it do not see it from the depths of nothingness, but from the midst of itself; I the seer am also visible. What makes the weight, the thickness, the flesh of each color, each sound, of each tactile texture, of the present, and of the world is the fact that he who grasps them feels himself emerge from them by a sort of coiling up or redoubling, fundamentally homogeneous with them; he feels that he is himself the sensible coming to itself and that in return the sensible is in his eyes as it were his double or an extension of his own flesh. The space, the time of things are shreds of himself, of his own spatialization, of his own temporalization, are no longer a multiplicity of individuals synchronically and diachronically distributed, but a relief of the simultaneous and of the successive, a spatial and temporal pulp where the individuals are formed by differentiation. The things—here, there, now, then—are no longer in themselves, in their own place, in their own time; they exist only at the end of those rays of spatiality and temporality emitted in the secrecy of my flesh. And their solidity is not that of a pure object which the mind soars over; I experience their solidity from within insofar as I am among them and insofar as they communicate through me as a sentient thing.⁹⁶

Such is the (seeming) paradox, then: if the visible is of such importance to me, if things in their presence are so overwhelming, it is not on account of presence and of the present itself, but on account of that which, in excess of it, sustains it and traverses it: such is the reality of “deep” space (or depth) and stratified or geological time, which, while always “announced” in the present or the visibility of the thing, are also at the same time “concealed.”⁹⁷ The influence of Heidegger’s own thinking of time and space, and his interpretation of presence as resulting from the strife relation between truth and untruth, is rather obvious.⁹⁸ Now, this reworking of time and space from out of what Merleau-Ponty calls the chiasmic structure of Being, in which the very facticity of things is implicated, no longer requires that we add a “transversal dimension of essences” to the “multiplicity of spatio-temporal atoms.”⁹⁹ Essences themselves are not so much opposed to the unfolding of time and space as they mark this unfolding itself: they emerge from

the very fabric or texture of the real, not as some atemporal invariant and not through the work of some faculty (the imagination), but as the very jointures or articulations of the real:

Fact and essence can no longer be distinguished, not because, mixed up in our experience, they in their purity would be inaccessible and would subsist as limit-ideas beyond our experience, but because—Being no longer being *before me*, but surrounding me and in a sense traversing me, and my vision of Being not forming itself from elsewhere, but from the midst of Being—the alleged facts, the spatio-temporal individuals, are from the first mounted on the axes, the pivots, the dimensions, the generality of my body, and the ideas are therefore already encrusted in its joints.¹⁰⁰

Thus, the intertwining of fact and essence is not merely empirical and contingent, but ontological. This means that facts, or individuated shreds of Being in space and time, are to be characterized in terms of their essence, or their “idea,” but in such a way that they themselves come to be seen as the very “how” (their *Sosein*) of their unfolding, in terms of their “style” or their way of being, and not in terms of their what, or in terms of their irreducible eidetic core. There is, Merleau-Ponty claims, in words explicitly indebted to Heidegger, no “individual” that would not be a “certain manner of being, in the active sense, a certain *Wesen*, in the sense that, says Heidegger, this word has when it is used as a verb.”¹⁰¹ This is the point at which philosophy, and phenomenology in its Merleau-Pontian interpretation, breaks with Aristotelian ousiology and its grounding oppositions in order to become a different kind of ontology, an ontology of the factual driven by the question concerning the how or the manner of being of beings, and no longer, as was the case up until (a certain) Husserl, an ontology of essences driven by quiddity. And it is precisely in doing so, in undergoing such a radical transformation, that philosophy becomes an ontology of difference, of the (in-)between or of the middle. And this middle, for Merleau-Ponty, is nothing other than that of life, or of the world of the sensible, at once factual and ideal, existential and essential, or rather unfolding prior to any such distinctions, allowing them and exceeding them at the same time.

And so, with Merleau-Ponty, and from within phenomenology itself, it seems that the differential turn of ontology is beginning to take place. Everything happens as if philosophy had managed to open itself onto the factual or the material without erasing the ideal altogether. The world can no longer be seen through the prism of a grounding opposition between fact and idea, existence and essence, contingency and necessity, difference and identity, non-philosophy and philosophy. For it is now seen as burgeoning from the midst of such oppositions, prior to them, in between their rigidly ascribed roles. Of course, the opposition was itself philosophical through and through. But philosophy now realizes that it

can be faithful to experience, and to the manifold of things it encounters therein, without necessarily becoming an empirical science. Its concepts can henceforth be mapped onto singularities, and not just generalities or irreducible eidetic constituents. The place of the human itself has been modified, insofar as the human is now entirely implicated in its relation to the world, and no longer in the position of a pure spectator contemplating the world from outside.

In this opening chapter, I have delineated the contours of classical ontology. It consists in a thinking of being as beingness, which is to say, as a reality common to the whole of what is and as the stable ground from which beings unfold. At the same time, it consists in an ontology of essence or quiddity, in that the question it privileges as regards beings as a whole is that of the *quid*. And this quiddity constitutes the core of being in beings, that which causes them to be what they are over and above whatever occurs to them in terms of accidents and events. Beings are, in fact, envisaged first and foremost as substrate or substance, which is the support that shares both their essentiality or form, and their accidentality or materiality, so that it is at once the same as and different from itself. Yet this difference itself only means anything when set against the backdrop of the identity which it continuously threatens but whose primacy it never calls into question. Since only the universal can be defined, there can, properly speaking, be no knowledge of individual beings. And as Ockham so clearly saw, the study of these individual-physical beings will, ultimately, fall to modern physics, reducing philosophy to the cataloging of universals, regardless of whether this leads to a metaphysics or a mere logic. It is also, ultimately, an ontology torn between the identity of essence-substance and the difference of “accidental” singularities, between the form to which the logos is as though naturally attuned, and matter, the chaotic expression of a world in motion in which thought loses its way; between being, envisaged as perfect adequation between an essence and its presence, and becoming, the site of a structural separation between essence and presence. As a result, ontology is divided between the physical world, reality in motion as mixture of potency and act, and the supra-physical world, the expression of perfection or of a fully actualized potency, to which physical beings, and humanity in particular, aspire without ever wholly attaining it. This is an ontology which is at once physical and metaphysical, but for which the physical is only properly understood on the basis of the metaphysical.

Absolute Identity

Modern metaphysics distinguishes itself from classical, Aristotelian onto-theology in that, while remaining at bottom a thinking of beingness as substance, or as substratum, it invents a new concept of the οὐσία-ὑποκείμενον, and, as result, a new sense of metaphysics. Beginning with Descartes, and in light of the decisive turn within the science of nature, for which “nature” is written in essentially geometrical terms, substance comes to be divided between material, extended nature, and thinking nature. To the twofold sense of the *subjectum* as designating, first, a thing in its individuality and concreteness (α τὸδε τι), as well as in its quiddity (its τί ἐστὶ), and, second, the subject of a proposition, or the logical subject, modern metaphysics thus adds a new one, which turns out to be the most decisive, in that it serves as the ground and foundation for the other two: the “I,” essentially interpreted as an “I think.” In doing so, metaphysics also introduces a dualism to which an entire tradition will remain committed, before attempting to overcome it. Decisive, in this new sense, is the way in which the *sub-* of the *sub-jectum* is interpreted in terms of a ground, of a power of grounding or foundation. “Thought” comes to be identified with the substrate that lies beneath material nature, thus immediately framing the latter in terms of its ability to be thought, and this means *known*, in the sense presupposed by the natural sciences. If, as a result, nature becomes ob-ject, it is only in the sense that it stands there opposed, as something that needs to be represented and brought out in its ideality and truth by a thinking thing. By way of example, consider the following passage from Schelling’s early essay entitled “Of the I as Principle of Philosophy, or on the Unconditioned in Human Knowledge” (1795), and still very much influenced by Fichte’s interpretation of Kant:

Kant was the first to have established the absolute I, never quite immediately, but at least mediately, as the ultimate substrate of the whole of being and of identity.¹

In the same text, and in a way that is rather exemplary, Schelling also speaks of the “I” as the *Urseyn* underlying all *Dasein*, as the primal and primordial being underlying all beings.² The “I” is thus elevated to the status of an absolute principle, which is precisely what Fichte wanted it to be: the unconditioned principle that conditions the edifice of knowledge, the undisputed and unshakable foundation on which that edifice is erected, the transcendental identity that grounds even the principle of identity *qua logical* principle. In this regard, this principle is directly indebted to Descartes, who sought to ground the possibility of knowledge, and this meant of natural philosophy as secondary and derivative philosophy, on the *cogito*, with which first philosophy, or metaphysics, was to concern itself. This, then, is the sense in which modern philosophy is still metaphysical: not so much in the sense in which it remains a theology, a science of divine being and the eternal motion of celestial bodies, but in the sense in which its object (the “I” or the subject) is the sort of thing that is presupposed by the very science of nature itself. If it still remains “first philosophy,” it does so now in the sense that it provides and secures the ontological foundations for the knowledge of nature as revealed in classical mechanics. And the “place” of this securing, the substance with which this theoretical foundation is identified, is human subjectivity, or human nature. In this respect, it remains consistent with the Aristotelian metaphysics of the οὐσία-ὑποκείμενον, which it interprets in a new sense. Philosophy now turns to the human, and to human reason in particular, as the onto-theoretical ground sustaining not just the knowledge of nature, but its very ability to be known, and consequently its very being and destination. The Cartesian moment is, in that respect, paradigmatic, even though the *cogito* turns out to be insufficient to guarantee the permanence of the world that it is destined to know and master, thus retaining the necessity of an omniscient, omnipotent, and omnibenevolent Creator. And when this “I” comes to be posited as transcendental, as the transcendental unity of apperception, as in Kant or Fichte, the transcendental comes to occupy the place that was once accorded to transcendence. Meta-physics becomes the science of the fundamental structures of the I think as providing the key to the conditions of possibility of experience and knowledge in general. Insofar as the primary object of philosophy becomes human nature as thinking substance, philosophy takes on a reflexive form: thought is thought directed back upon itself as constituting the very foundation of the real itself.

In what follows, I shall be concerned to trace what could be described as the last moment in the evolution of modern metaphysics, one already

announced in the words of Schelling I quoted just a moment ago. This is the moment of *absolute* metaphysics, or, better put perhaps, of the metaphysics of the absolute. In tracing this ultimate phase of the modern project, an engagement with Hegel is almost inevitable. Why is this moment of particular concern? And why call it the final moment, not just of modern metaphysics, but of Aristotelian metaphysics itself? Naturally, the answer to such questions will emerge from a somewhat detailed analysis of some of the key moves developed by Hegel. At this early stage of the proceedings, the following brief remarks will have to suffice.

From the point of view of the ontological problematic with which I am concerned here, the period in the history of philosophy ordinarily referred to as German Idealism amounts to a decisive turn, a turn, I might add, which is realized to the full in Hegel's speculative philosophy, and in the *Logic* in particular.³ Yet this turn was already underway in Fichte and Schelling and can perhaps best be summarized in the following way: if the essential connection between being and self-identity is indeed reinstated, if beingness as such is evaluated on the basis of a reinterpretation of the Aristotelian καθ' αὐτό, and thus still caught within the logic of substance, it is no longer simply opposed to non-being or to non-identity (or difference), as to an *other*, in what amounted to an irreducible tension or an unbridgeable ontological gap. Rather—and this is where the decisive shift takes place—it is indeed op-posed to non-identity, but precisely as to *its* other, and this in such a way that this otherness, or this difference, becomes the condition of its own positing. Identity (and by that we need to understand the identity of being and identity, or, as Leibniz put it, of *esse* and *idem esse*) is now a *posited* identity, and substance, essentially still defined in terms of its ability to exist καθ' αὐτό, or *propter se*, is a *self*-positing. In other words, the model of beingness as substance, or as existing *per se*, is that of subjectivity itself. But beyond the sole positing of subjectivity, it is being as such and as a whole that comes to be seen as self-positing, or as reflexive. In other words, this positing of identity is not simply *formal*; it is not simply a logical principle but is the positing of a *content*. As such, identity (or being) is identified with a *movement* and a *process*, and thus reconciled with the world of becoming (to which, remember, it was opposed in classical ontology). This, at least, is what emerges from the first few principles of Fichte's *Wissenschaftslehre*, and from their interpretation in Schelling's early essays.⁴ And this op-position, or this difference, which is at work within being and constitutes it in its positing, which transforms identity from a formal and empty principle into a concrete identity of content, is precisely what elevates being to the level of the absolute, or the infinite. The metaphysics of the absolute is onto-tauto-*thetic*. From a merely posited and presupposed identity, beingness is now envisaged as an identity that has *become* what it is, or as a self-positing identity *in the process of its own becoming*. The science of being thus understood can now, in

Hegel's own terms, assert itself as the science of "the identity of identity and non-identity."⁵ Yet this is only going to be the case to the extent that it enacts a transgression in relation to the classical concept of difference, only to the extent that, refusing to subordinate difference to the prior identity of a substance or of a genus, it takes it into the hitherto forbidden territory of contradiction. Remember how contrariety, not contradiction, characterized the highest degree of difference. Contradiction was simply *too* different, simply otherwise than being. The principle of non-contradiction was even the cornerstone of sense and logic. Now, though, contradiction is integrated into the very movement of the real and the very constitution of thought. This connection will be made most explicit when I turn to the section of Hegel's *Logic* in the "Doctrine of Essence" entitled "The Essentialities, or The Determinations of Reflection."

If the philosophy of the absolute, particularly in its speculative version, does indeed complete the auto-tauto-logical project of Aristotelian metaphysics, it is to the extent that it creates the tools to think being as movement, and specifically as *relation*—and no longer simply as substance, in the sense of both individual substance and essence. "Relation," in this context, is to be understood as relation to an other and as self-relation. It is to be understood as self-relation precisely *as* relation to an other. Needless to say, then, there is no self and no identity that could precede the relation itself: it is in and through the latter that the movement of identity is constituted, in and through the play of difference that being is interpreted as relational. If, in the end, we can actually speak of identity, it is only as a relational identity, or as a totality that is exhausted in the relations that it generates, and that Hegel summarizes with the term "concept." This self-relational unity is perhaps best expressed in the figure of the syllogism, which Hegel develops in his *Logic*, and to which I shall return. This is no mere logical figure, but the self-explication and self-characterization of being itself in the appropriation of its own content.

The aim of this chapter is twofold: first, to justify my claim that Hegel's speculative dialectic constitutes the completion of a metaphysical project first laid out by Aristotle; and, second, to show how this project, which I characterize as onto-tauto-logical, presupposes a profound transformation of the classical concept of difference.⁶ Ultimately, however, the question will be one of knowing whether such a concept is radical enough to satisfy the demands of an ontology of difference. The question will be to know whether difference, in what would amount to a twisting free of the metaphysics of the absolute, and to its Aristotelian background, can be wrested from *absolute* identity, from its status of opposition to a first positing within an absolute com-position—whether, in other words, being can be wrested from the metaphysics of substance and subjectivity altogether.

I. The Ontological Status of Hegel's Logic

In a sense, Hegel's *Science of Logic* takes on the traditional role of explaining the categories of thought: it is the science of the necessary forms of thought, or the "science of pure thought"—in a word: the science of thought explaining itself, "speculative" science, or the science of "seeing" by way of thought. As such, it is also "science of the *pure Idea*, that is, of the Idea in the abstract element of *thinking*."⁷ Its object, therefore, is thought itself in the absolute sense, what Hegel calls "infinite thought." In a science of logic, then, thought ought to be concerned with itself alone and present the determinations of the Idea in the purely atemporal element of the concept. Yet, in what amounts to a first decisive break with classical logic, the Idea which the *Logic* is to present, and the categories it implies, is envisaged as a *process*. If critical philosophy required us to investigate the forms of thinking and the validity of the concepts of the understanding, Hegel still wants to contrast it with speculative metaphysics on the following point:

Certainly, the forms of thinking should not be used without investigation; but this process of investigation is itself a process of cognition. So the activity of the forms of thinking, and the critique of them, must be united within the process of cognition.⁸

What this means is that, in this presentation, there can be no question of merely juxtaposing the categories in what would amount to an external or contingent order. The process is itself necessary, and this necessity is internal to the categories themselves. It is the result of contradictions internal to the Idea itself. Consequently, it is thought itself, in its very becoming, which differentiates itself and finds itself again in this alterity that becomes its own. Decisive, in that respect, is the role played by negativity, which constitutes what Hegel calls "the soul of the content."⁹ Negativity is that by which there is movement: "That which enables the concept itself to advance is the negative, which it has within itself; this is what constitutes the dialectical in its truth."¹⁰ And it is this very negating that Hegel identifies with "absolute difference."¹¹ Systematicity is itself subordinated to negativity: Hegel's project consists first and foremost in this attempt to reestablish conceptually the procedures of the negative. And therein lies its originality in relation to the ontological tradition.

So the two fundamental traits through which the dialectic, as the rational exploration of negativity, distinguishes itself from classical logic are (1) the fact that the laws governing thought are not external to the object at issue, and so cannot be viewed as empty rules awaiting to be fulfilled by an intuition, and (2) the fact that the movement of thought does not result from an operation that would come from outside; in other words,

this dialectic is not “the external activity of a subjective thought,”¹² but the very movement of the content. And the content unfolds through self-negation and opposition, this negation being its very determination. This dialectical movement, which is that of thought itself, is irreducible to merely abstract and formal categories and cannot be encapsulated within a given table, precisely to the extent that it is the self-movement of the content. Yet, precisely for that reason, its point of departure can only be the abstract: logical thought begins with the abstract determinations of the understanding, with the universal, only to reveal the process through which this universal is progressively particularized. In and through this passage into their opposite, the determinations of the understanding are negated. This amounts to the dialectical moment in the strictest sense, the moment at which the negation of a determination of the understanding turns out to be a step toward the affirmation of the rational: “reason is negative and *dialectical*, because it dissolves the determinations of the understanding into nothing [*in nichts auflöst*].”¹³ Yet since this opposition, and this negation, stem from the development of the determinations of the understanding themselves, from the point of view of reason itself, the rational moment and the moment of the understanding cannot be separated. In its truth, reason is the unity of the rational and the understanding, and this is what Hegel calls “spirit.”¹⁴ Reason, then, is not simply negative, or negating; it is also positive, or productive (by way of negation). This latter and ultimate stage in the dialectical process is characterized as “positively rational” or “speculative”: “It is in the dialectical as it is here understood, that is, in the grasping of the opposite in its unity, or of the positive in the negative, that *the speculative* consists.”¹⁵ The speculative, therefore, does not indicate the moment of abstraction, but the result, or the concrete, as the unity of its different determinations, or as the fully differentiated and fully articulated totality.

In a way that is perhaps more surprising, Hegel characterizes his logic as a “metaphysical or ontological metaphysics,” and sometimes as a “logic of the content.”¹⁶ What we need to understand, then, is how “metaphysical,” “ontological,” and “content” are synonyms for Hegel, and how speculative logic can be seen as the realization of metaphysics, or ontology. When Hegel speaks of “metaphysics,” what he has in mind is the sense that this discipline had in the minds of Wolff and Baumgarten. It coincides with “the *metaphysics of the recent past*, the way it was constituted among us before Kantian philosophy.”¹⁷ Yet it is only by turning to Aristotle, and to the Aristotelian tradition as I have described it thus far, that we can take the full measure of the gesture that enables Hegel to identify logic with metaphysics. The Aristotelian project, recall, consisted in the highly problematical and largely aporetic attempt to relate two different sciences, namely, a science of the being of those beings encountered in nature, and a science of those unmoved and eternal beings; in other

words, a physics (an ontology) and a metaphysics (a theology). Now, in order to understand the turn to “logic,” we must refer to Kant, whom Hegel saw as his precursor: “The critical philosophy had already transformed . . . *metaphysics* into *logic*.”¹⁸ The logic in question here is, of course, Kant’s “transcendental logic,” and not what had, until then, commonly been understood by the term “logic.” As Doz points out, Kant does not actually present his transcendental logic as a new form of metaphysics. Yet it is still supposed to reveal the source of metaphysics. And when Kant goes on to characterize this logic as containing “the rules governing the pure thought of an object,” and this means of every object *as object*, we can, without too great a stretch of the imagination, recognize a new formulation of the Aristotelian definition of ontology, so long, of course, as we grant the rules in question an objective validity, such that the rules governing the pure thought of the object are also the rules of the object itself.

Now, from a Kantian perspective, it is quite clear that it is not being as such that is directly thematized here, but thought itself. The rules governing the pure thought of an object do not all have an objective validity, but only those which, in securing the unity of phenomena, are to make experience possible. This does not mean that the other rules are unnecessary and of no use, but simply that they are devoid of *objective* validity. In order to characterize the part of the transcendental logic that deals with objectively valid rules, Kant consequently claims that it is only fitting that, in place of “the proud name of ontology,” which says far too much, given that the word “being” would also apply to the things as they are “in themselves,” we should use the more “modest title of a mere Analytic of pure understanding.”¹⁹ But this is also tantamount to saying that this analytic takes on the task of an ontology within the domain that befalls it, and this means an ontology for which beings are only *phenomenal* objects.

Yet, in addition to its negative or critical side, the fact that this ontology is described as a logic also has positive implications. This positive aspect has to do with the nature of finite knowledge, which draws together a non-intellectual intuition and a non-intuitive intellection. It is a well-established fact that, from a Kantian perspective, intuition relates *immediately* to its object. The “subject” of finite knowledge must intuit in order for something to be present to it. But this intuition is purely sensible, that is, receptive, and imposes on the subject a manifold in which it tends to lose itself; the imperative demand that the subject remain self-identical—an identity through which alone it can be an “I” (*Ich*) and a “self” (*Selbst*)—forces it to unite its own representations. This unifying function, which does not take place subsequently, but originally, characterizes pure thought. It takes place by way of judgment, which submits the intuition to the concept. The concept is a mediated representation in that

it not only refers to the object only by way of intuition but also mediates intuition. The object of experience is “that in the concept of which the manifold of a given intuition is *unified*.”²⁰ This means that thought, in unifying the object originarily, partly determines the very *being* of the object. In the Kantian account, therefore, ontology is *already* constituted as logic.

Following the path opened up by Fichte and Schelling, Hegel deepens the Kantian principle by overcoming the limitations of the critical philosophy. What he calls “thought” joins together the perfections that Kant distributed between thought and intuition. Naturally, Kant conceived the possibility of such a unity in the idea of an infinite and purely intuitive understanding. But such a unity was to take place on the side of intuition alone and was placed beyond the reach of human knowledge. Hegel, by contrast, sees the possibility of such a unity in an intellection that is *mediated* through and through. The terms “thought” and “concept” designate this very mediation. And so the concept, which is produced with the act of pure thought, designates the *being* of everything that *is*. There is a complete identity—albeit an identity in becoming—between thought and being, between concept and reality, between essence and presence. If such is indeed the case, logic, as the science of pure thought, will indeed constitute a new version of this “universal, for first” philosophy addressed by Aristotle. It is onto-theology, and can be so as the science of pure thought.

This is actually confirmed in the *Logic* itself. In relation to theology, first of all:

Logic is to be understood as the system of pure reason, as the realm of pure thought. *This realm is truth as it is without veil, in and for itself.* It can therefore be said that this content is the exposition [*Darstellung*] of God as he is in his eternal essence, before the creation of nature and a finite mind [*eines endlichen Geistes*].²¹

So logic coincides with the exposition of pure thought, or pure spirit, before any materiality or finitude (two traits Aristotle identified with natural beings) comes into play. It is the presentation of God in the sense Aristotle already ascribed to it, as “thought thinking itself”—and not, as Hegel puts it in the *Phenomenology*, “the intuition of the divine, but the divine’s intuition of itself.”²²

So far as ontology is concerned, let us merely recall that the first form of the concept, the movement of which the *Logic* is to present, is *being*. And that which gives this beginning its significance is the fact that “the *progress* away from that which forms the beginning is to be regarded as only a further determination of it, so that the beginning remains at the base of all that follows and does not vanish from it.”²³ In other words, the subsequent forms of the concept are only more developed forms of being. In addition, this development unfolds toward being in the genuine sense. This

is confirmed toward the end of the *Logic*, where Hegel presents the ultimate form of the concept, or what he calls the Idea. In its perfect or completed state, the Idea is the *absolute* Idea, that is, pure thought itself. This is the point at which God and being, the theological and the ontological come together, thus marking the crowning moment of philosophy as the metaphysics of the absolute: "*Being* has reached the meaning of truth, insofar as the Idea is the unity of the concept and of reality; thus it is henceforth only what the Idea is."²⁴ The Idea is "true being," that is, the fully developed form of the concept, or the initial, abstract form taken to its logical conclusion. Yet this conclusion is the most concrete, it is truth and life itself: "the absolute Idea alone is *being*, imperishable *life*, *self-knowing truth*, and is *all truth*."²⁵ It has become quite apparent that being is the first and last—although not the only last—word of logic. Logic itself does nothing other than ex-plicate what is im-plicated in being; it is onto-logy through and through. And if logic is also theology, it is so precisely insofar as it is ontology.

In short, the *Logic* is the genuine science of being *qua* being: it reveals the various ways in which beings can be said to be (the traditional role of the categories); at the same time, however, it reveals the fundamental unity of being, which is no longer simply of the order of the homonym, of analogy, or even of univocity, but of the self-unfolding of thought itself in the element of thought. In this way Hegel's *Logic* can be seen as bringing the Aristotelian project to a certain closure, for it is simultaneously the science of being *qua* being, and the science of the first and highest principle: it thinks the real in its totality and sets out to find out what it is that makes the real the real that it is.

Yet if philosophy is to think the real or being in its totality, it cannot hope to find the means by which the real can be accounted for outside the totality itself. Such means must stem from the totality itself. Being must account for itself on the basis of itself. This, according to Hegel, is what characterizes the self-realization of reality, which amounts to a "return" of being (in)to itself. We are now in a better position to understand the extent to which this conception of being as self-accounting totality amounts to a repetition and a reinscription of what the Greeks, and Aristotle in particular, called "substance"—with the significant reservation, however, that if the fixity of substance as essence indeed managed to account for the definitive and perennial character of that which is, it did so only at the cost of introducing an irreducible tension with respect to beings in their becoming. As a result, it became structurally impossible to present the real in its concrete expression. Hegel, on the other hand, understands substance in such a way that not only is it in a position to account for the real in its totality and its concreteness (and this means: as becoming), but that it alone can be thought to *be* this reality. Substance, therefore, totalizes the real, recapitulates it within itself, thus turning it

into a dynamic reality. The process of “accounting for” now becomes a dynamic, and coincides with the very dynamic of the real itself.

Now, it is precisely in order to denote this dynamic intrinsic to substance that Hegel characterizes it further as subject.²⁶ This characterization summarizes the whole of Hegel’s thought: the real as totality is nothing other than the self-moving substance, in other words the substance as subject. Subjectivity emerges only where and when it becomes possible to posit oneself with a view to oneself. And this is the operation that Hegel also describes as “reflection”:

In my view, which can be justified only by the exposition of the system itself, everything turns on grasping and expressing the True, not only as Substance, but equally as Subject. . . . [T]he living Substance is being which is in truth *Subject*, or, what is the same, is in truth actual only insofar as it is the movement of positing itself, or is the mediation of its self-othering with itself. This Substance is, as Subject, pure, *simple negativity*, and is for this very reason the sundering of the simple; it is the doubling which sets up opposition [*die entgegensetzende Verdopplung*], and then again the negation of this indifferent diversity and of its opposition. Only this self-restoring sameness, or this reflection in otherness within itself—not an *original* unity or *immediate* unity as such—is the True.²⁷

So the completion of Aristotelian metaphysics, as a metaphysics of substance, also signifies the completion of modern thought as the thought of subjectivity. As Hyppolite puts it, “speculative knowledge is indeed self-consciousness, but it is universal self-consciousness of being, and being is not an Absolute that lies beyond all reflection, but is itself self-reflection and self-thinking.”²⁸ It is being itself, as λόγος, that reflects and thinks itself. It is in and through reflection thus understood that the substance becomes a subject. Yet it is also the *absolute* subject, insofar as it is no longer bound to the limits of a given subject: it is reality as such that now possesses the structure of reflection, or of subjectivity. Logic has become the science of being as a whole, where “whole” signifies a totality that consists of nothing other than the reflection of being onto itself, as self-moving and self-explicating substance. And it is precisely this movement and this moment of reflection—which amounts not merely to a negating and a sundering but to a deepening and a relating—that Hegel captures with the categories of “difference,” “opposition,” and “contradiction.” Difference, then, far from designating that which is simply other than or outside identity, far also from designating a merely and purely logical concept of reflection in the Kantian sense, designates the very movement of being in the concrete process of its ex-position. Difference as opposition and contradiction captures the very process of reflection itself, the absolutization or the becoming-subject of substance. But how, exactly, is the metaphysics of substance to be transformed into and completed as

the metaphysics of subjectivity? How does Substance or Identity become absolute?

II. Hegel's Conception of Difference

It is with a view to answering these questions that I want now to turn to two different moments in Hegel's *Logic*. I realize the difficulty, and the somewhat abstract nature, of the effort of extracting moments from what effectively constitutes an organic totality, all aspects of which are held together by a series of necessary transitions. However, short of developing a monumental commentary of the movement of the *Logic* as a whole, I see no other way for anyone who wants to engage with Hegel than to risk a necessarily partial interpretation. Yet before turning to the detail of Hegel's analysis, let me situate "The Doctrine of Essence" within the overall economy of Hegel's text. These preparatory remarks will also serve to introduce the second set of analyses, related to the judgment and the syllogism in "The Doctrine of the Concept."

1. Situating "The Doctrine of Essence"

Hegel's logic allots a literally central place to difference. This is a determination which, from a purely logical concept in classical metaphysics, is turned into a value constitutive of being in its identity. In what way? In the way that this logic is a logic of content and this content is envisaged in the movement of its constitution, or in its logical process. Far from being a mere datum, then, being is its own unfolding, through which it comes to grasp itself as the being which it has become. It is not given, therefore, but *posited*, not through some exteriority, but in and through itself: it is a *self*-positing. How is this positing brought about? Not through some primary or initial immediacy in which being would come to posit itself as a formal and empty identity (this is what Hegel objects to in Fichte's "I am I"), but through a process. In this movement being returns to itself, and this returning is at the same time a moment in which it deepens itself and discovers the immemorial and timeless past that animates its own depth. In this way being, as the first moment of the triad being-essence-concept, passes into essence, which is nothing but being itself, albeit reflected back into itself. And it is precisely through this reflection into itself that, from simple substance, being becomes subject, thereby realizing the task that Hegel assigned to philosophy: to grasp the true not just as substance but also as subject is to ascribe to being the capacity to grasp itself on the basis of its own opposite, in such a way as to transform this other into the condition for its own identity. Until this point, in fact — and this is as true for the *Logic's* own movement as it is for the history of traditional ontology —

being moved from category to category, each time revealing itself to be something else, without its unity ever being grasped as a *relational* unity. In the logic of being, the different categories arise in the mode of immediacy and reciprocal exteriority. Doubtless, there is some kind of “passage” from one determination to the next. Such passages, however, take place as sudden transitions, and not as genuine relations between categories or, better still, as their mediation. Such is the reason why, despite the fact that there is movement and relation in the logic of being, the transitions themselves remain undeveloped and implicit. Moreover, the logic of being can only truly ex-pose or ex-plicit itself by coming out of itself, by negating its own immediacy. And this is why the essence of being will initially *appear* as something other than being, whereas, in the final analysis, this alterity will reveal itself as the alterity or difference of being itself, as its own content, as absolutely internal to being and identical with it. Accordingly, the realm of essence has to be understood as the *explicit* development and exposition of what remained *implicit* within the realm of being. Nevertheless, this explication and exposition of what was merely presupposed in being will paradoxically manifest itself as the internalization and reflection into self of the reciprocally external determinations presented in the sphere of being. Essence, then, is being revisited. In addition, although the determinations of essence will initially seem to be other than those of being, they will eventually turn out to be their hidden face or inner lining, the inner reality and truth of the externality that being itself will turn out to be at the end of the process of essence. As a result, the expressive categories found in the logic of essence will no longer be immediacy, positivity, alterity, and passage into the other, but mediation, negativity, positing, and reflection into self.

2. The Determinations of Reflection

I want now to focus on the series of determinations of reflection presented in the logic of essence, and so go to the very heart of the problematic with which I am concerned. I recall that, from an Aristotelian perspective, everything which, from the standpoint of being understood as substance, or as that which exists *καθ' αὐτό*, could be associated with difference, such as accidentality, materiality, becoming, etc., found itself in a state of irreducible tension with respect to that *of which* it was the difference. This difficulty remained central to an entire tradition, which attempted to confront it in various ways, and with varying degrees of success. Similarly, I recall that, from the logical standpoint, or from the standpoint of thought, the principle attached to the thought of substance was that of identity, a principle that found its corollary in the principle of non-contradiction. Substance was very much defined in terms of its non-contradiction with itself. Whenever and wherever some contradiction could be identified,

substance would dissolve into nothingness. Now it is this very assumption, and the metaphysics that it secures, which Hegel confronts head on and challenges. The move from the metaphysics of substance to the metaphysics of the subject, and so the absolutization of the former through the latter, is itself entirely a function of Hegel's ability to overcome the tension governing the Aristotelian conception of being. This he does by integrating difference, and difference as *contradiction*, into the very constitution of substance itself. Against the warning formulated by Aristotle, according to which difference could not go as far as contradiction but could only be contained within the prior and already given identity of the genus or concept, Hegel stipulates that the concept is self-identical only to the extent that it opens itself to that which is wholly other than it. Its capacity to *be* is only a function of its capacity to be *other*, its capacity to open itself to contradiction. By claiming that "all things are in themselves contradictory,"²⁹ Hegel divests the principle of contradiction of its hitherto unquestioned position. It is precisely to the extent that being is contradictory, that is, at once self-identical and different from itself, that we need to think of it in terms of a process, and specifically in terms of the process of reflection in which it constitutes itself as negative self-relation.

The "determinations of reflection" are the focus of the second chapter of the first section ("Essence as Reflection within Itself") of the Doctrine of Essence. The general movement of the chapter is as follows: Identity is the immediate determination of essence, insofar as it characterizes the self-sameness of reflection as "the manifesting of essence within itself" (*das Scheinen des Wesens in sich selbst*). This first category emphasizes the fact that essence is here apprehended in its self-relation, that is to say, immediately, yet according to an immediacy that is no longer that of being. Identity characterizes essence or reflection only in terms of self-coincidence. As such, the category of identity does not yet indicate any specific or actual determination of essence. This identity, then, is only unilateral and abstract, since it designates the whole of reflection, and not one of its differentiated moments.

And yet, in positing itself as such and in determining itself through the category of identity, the movement of reflection tends to transform itself into its very own moment, and to differentiate itself: it becomes subjected to a movement of "internal repelling" (*Abstoßen*) that takes up, deepens, and internalizes the movement of repelling that characterized the dialectic of being and its various categories. This is made possible by the fact that the self-identity of essence is a reflected determination, and not an immediate self-relation. In other words, it is a self-relation instituted through the negativity that characterizes essence. And whereas the propositions that correspond to identity presuppose a subject that can only be "*everything*, or an A,"³⁰ this self-repelling is indicative of a movement of self-differentiation within the category of identity itself.

Yet, unlike identity, the category of difference (*Unterschied*) displays a real complexity. It comprises various strata, various dialectically generated phases, which all stem from the self-repelling of identity. The various determinations of this process of differentiation are diversity (*die Verschiedenheit*), opposition (*der Gegensatz*), and contradiction (*der Widerspruch*). From the outset, then, not only opposition, generally thought to be the extreme and ultimate form of difference, but also contradiction itself is included within the process of differentiation, and so internal—and indeed *essential*—to the constitution of identity.

A. "IDENTITY"

Before I move on to a somewhat detailed analysis of the various determinations of difference, let me formulate the following two points regarding the category of identity. First, when envisaged as reflection within itself, identity appears as the categorial redoubling of essence in its immediacy, or, if you prefer, as the movement of absolute reflection through which being returns within itself. As such, identity does not quite attain the status of a determination of essence. Essence is, *at first*, simple self-relation, pure *identity*. This is its determination, yes, but as such it is rather the absence of any determination.³¹

But—and this is my second point—identity is still a determination of reflection. The identity of essence is indicative of the fact that being has returned within itself, and that its own determinations remain only as moments posited within the totality of essence. In other words, the movement of reflection within itself that characterizes identity in its immediacy is nothing other than the returning within itself, or the internalization, of the dynamic of negativity which animated being, subsequently externalizing itself in becoming and differentiating itself in *Dasein* and *nicht-Dasein*. This means that identity is immediately difference: it is absolute non-identity, in the same way in which difference is immediately identity. It is one and the same category, therefore, namely, identity, that designates the immediate coincidence between the return within itself, on the basis of which essence is an absolute totality, and the self-repelling, through which essence differentiates itself and posits within itself the sublated immediacy of being. In other words, the essentialities, or the determinations of reflection, are generated according to a process of self-determination on the part of essence. And if essence can determine itself in this way, it is by virtue of its "absolute self-mediation,"³² or by virtue of the movement of difference as pure negativity within it. It is this complex reciprocal belonging between identity and difference which traditional logic, as essentially substantialist and predicative, has consistently failed to grasp, covering over the negative, or neutralizing the difference constitutive of identity itself, systematically ascribing difference to the merely external and secondary position of the predicate. To

recognize the negative and difference as constitutive of the unity and identity of substance, however, is tantamount to generating a logic that is no longer predicative, but speculative, one that will eventually find its highest expression in the figure of the syllogism.

B. "DIFFERENCE"

There is no identity, therefore, that does not involve difference. The unity of identity and difference alone can produce a determinate proposition. Whenever identity is considered in isolation from difference, or difference in isolation from identity (in what amounts to a merely abstract externality), identity can be no more than an empty tautology, one that says nothing about essence, and difference no more than a universal predicate devoid of any determinate meaning. As a result, the immediate autonomy of the determinations is called into question.

Difference is nothing more than the unfolding for itself of the negativity within identity. And it is to this negativity, immediately present within identity, that Hegel now turns explicitly. Under the determination "absolute difference," he provides a categorial transcription of the mediating function of the negative. As such, the category is still somewhat abstract, since at issue in it is the pure concept of pure negativity. Regarding this first expression of essential difference, let me say this: When understood speculatively as reflection, essence testifies to the presence of negativity. The understanding—and therein lies its specificity—posits determinations by inscribing differences within identity. Yet the self-determination of essence, which generates essentialities, remains closed to it, since it can conceive of the positing of differences only from a position of exteriority. Now, essence is self-differentiation, or the difference "*of itself from itself*."³³ It is a self-mediated immediacy. The unfolding of the mediation, the negativity it contains, is the movement by which the essence gives itself an other that is "*its other*."³⁴ This other, then, insofar as it is *its* other, is a mediated expression of itself, a product of its own process. In that respect, difference isn't the category that characterizes the sense of essence once and for all, by simply reversing the privilege classical metaphysics once granted identity. For difference is a relation, internal to essence itself, and therefore constitutive of its own identity. In other words, with Hegel, difference is for the first time fully and completely integrated into the process of identity, as the very relationality and productive power belonging to essence itself. Yet difference can be such a power only to the extent that it is posited, or to the extent that it characterizes the gesture through which the essence is posited as such: "Difference as well as identity constitute themselves into the *moment* or the *being-posited* because, as reflection, they are negative relation-to-self."³⁵

The category of difference, however, involves a singular degree of complexity. Identity, as the identity of itself and its negative, carries out

autonomy and reflection-into-self first and foremost. Difference, however, as difference from itself and from identity, wrests itself from itself and becomes other than itself. "Diversity," for example, is characterized as "externalized reflection." All of this to say that the progressive stratification that characterizes difference endows it with a signification altogether richer than that of identity. This suggests that, even before it reaches contradiction, difference already expresses "the essential nature of reflection,"³⁶ which consists in the pure process of self-exposition through self-separation.

Slowly, then, but surely, what is emerging is a conception of identity and non-identity, not as autonomous determinations external to one another, but as constituting the terms of a single relation. Progressively, it is relation, or relationality itself, that comes to occupy center stage. Identity and difference are indissociable categories, each possessing within itself the reflection that structures the process of the manifestation of essence. Yet if they are not entirely autonomous, they are still *relatively* autonomous: this is even the extent to which they are determinations of reflection, and not simply abstract moments. Specifically, identity is this self-relation reflected within essential negativity. And absolute difference is this negativity insofar as it qualifies essentiality. Identity is nothing other than the identity of difference, and difference nothing other than the difference of identity. Identity and difference bear at once the mark of reflection-into-self (insofar as they are autonomous totalities having superseded their own presupposition) and that of being-posited (insofar as they are the moments of a reflection that posits them, and so do not have within themselves their ultimate ground).

The relationality of difference, and thus of essence itself, is further revealed in the category of opposition, itself born of "diversity." To be sure, diversity already involved a relation. That relation, however, was merely external; it consisted of a relation of comparison (between identity, or "reflection into-self," and difference, or "external reflection"), in which the terms remained outside one another: for being to be essentially diverse means that it is at once identical and different, yet in such a way that this identity and this difference remain external or "indifferent" to one another. Each is indifferent to the identity (or the difference) of the other. Between the two, there is indeed a relation, but it is a relation of mere comparison (*Vergleichen*), a relation of likeness (*Gleichheit*) and unlikeness (*Ungleichheit*): two terms can be declared "like" or "unlike" one another, but only if they are already constituted as such. Consequently, the act of comparing them does not affect them as such, and the kind of relation in which they are engaged remains merely external:

Now this external identity is likeness, and external difference, unlikeness. Likeness, it is true, is identity, but only as a being-posited, an identity that is

not in and for itself. Similarly, unlikeness is difference, but as an external difference that is not in and for itself the difference of the unlike itself. Whether or not something is like something else does not concern either the one or the other; each of them is only self-referred, is in and for itself what it is; identity or non-identity, as likeness or unlikeness, is the verdict of a third party distinct from the two things.³⁷

Diversity, then, does not amount to a full externalization of reflection, insofar as its self-enclosed moments remain indifferent not only toward one another, “but towards being-in-and-for-self as such.”³⁸

By contrast, opposition is the locus of a genuine relation between terms, that is, a relation in which the terms themselves actually relate to the reflexive process that posits them. Opposition, unlike comparison, is a genuine relation, in the sense that the terms involved are now free of the mutual externality that characterized them hitherto. With diversity, essence provided itself with a determination that remained indifferent to the process that generated it, or, to put it differently, with an immediacy that lies outside the process of mediation that produced it. With opposition, however, the movement of essence appears precisely within moments that amount to the dissolution of the presupposition of an immediacy ontologically distinct from its mediation. The emergence of opposition, therefore, is the emergence of a relation, still not developed for itself, that Hegel characterizes as the movement of *determinate reflection*.³⁹ As such, we can understand opposition as a response to the aporia that ran the whole length of diversity. And such is the reason why Hegel characterizes opposition as “the unity of identity and diversity.”⁴⁰

Likeness and unlikeness corresponded to the being-positing of reflection. Opposition, however, is the reflection into itself of this being-positing. And the reflection-into-self of both likeness and unlikeness in each moment of the opposition constitutes the unity of likeness and unlikeness. In other words, opposition reveals the extent to which likeness is actually what it is only on the basis of the reflection that compares the terms involved from the point of view of unlikeness; similarly, unlikeness is what it is only in and through the same reflecting relation in likeness. Each moment of the relation is thus the whole: each also contains its other moment within itself. Yet this can only be the case immediately; in other words, the other moment in the relation is present to the first only as non-being. The likeness and unlikeness of diversity, which seemed to implicate a relation to a third party, have thus undergone a transformation. They are now the “positive” and the “negative” sides of opposition: “This self-*likeness* reflected into itself that contains within itself the reference to unlikeness, is the positive; and the unlikeness that contains within itself the reference to its non-being, to likeness, is the negative.”⁴¹ The positive is positedness as reflected into likeness to itself, and the negative is positedness as reflected into

unlikeness to itself. In other words, opposition designates the self-relating of positedness, or its differentiation.

The two related terms are now the *positive* and the *negative*. This is what the moments of likeness and unlikeness have become. Whereas comparison, as an external relation, referred to a third party that took on the role of a founding origin, opposition is a *pure* relation: the positive and the negative are permeated by the relation that generates them, and their reflection within themselves coincides with their being-positing: “[T]o be an opposite is not merely a moment, does not stem from comparison, but is a determination belonging to the sides of the opposition themselves.”⁴² Reflection in comparison had indeed posited the determinations of likeness and unlikeness in a relation, but the unity of this relation lay with the act of comparison itself. Such is the reason why likeness and unlikeness retained an indifference toward one another. In opposition, however, the positive and the negative find themselves united from the start within a relation which, far from canceling out their difference, allows them to be thought on the basis of difference alone. As such, the positive and the negative are not merely *posited* terms (for this would bring us back to a disjunction between the act of positing and what it posits), but are a “*differentiated determinate self-reference* of positedness.”⁴³ It is now possible to speak of mediation as being intrinsic or *immanent* to the mediated moments. The “absolute self-mediation”⁴⁴ which characterized the global movement of the determinations of essence now really does take on its concrete and speculative sense. Insofar as the positive and the negative are pure relatedness, they coincide with the process of mediation itself. This, in turn, means that the moments of opposition are themselves relations: “[T]heir *positedness*, or the *reference-to-other in a unity which they are not themselves*, is taken back [*zurückgenommen*] into each [moment].”⁴⁵

Once again, Hegel is systematically trying to distinguish the proposition of the understanding from the speculative proposition.⁴⁶ The subject of the proposition of the understanding is determined only by way of predication, and the predicate only makes sense insofar as it determines the subject. Now the positive and the negative are precisely not preconstituted terms, but relations. Each pole of the opposition is the positive or the negative only to the extent that it includes the reference to the other within itself.

C. “CONTRADICTION”

With the dialectic of opposition, we witnessed the emergence of the positive and the negative. What this dialectic confronts us with is a situation in which the terms in relation are no longer merely external to one another or to the reflection that compares them, as was the case in the dialectic of diversity, but refer to the reflective process that posits them. And this process posits them as precisely *relative to* one another. Each term is at once positedness and reflection-into-self. This is why it becomes legit-

imate to designate them in terms of a *negative* unity (in the sense of negativity clarified earlier on). The positive and the negative belong to one another, which means that they presuppose and negate one another. In that respect, each testifies in its own way to the fact that it constitutes a whole or a totality, or that it is “the self-based *whole opposition* opposed to the self-identical positedness.”⁴⁷ It is this totality that Hegel characterizes further as “contradiction.” As such, the category of contradiction does not introduce an additional content with respect to the previous determinations of reflection. But it does exhibit a twofold specificity: first, it reveals the internalization of opposition within each term constituting it, and, second, it explicates the structure of the logical process leading from difference to the next major category, namely, “ground.” As such, it is a category of recapitulation and transition. In what follows, I will emphasize the first aspect only.

Contradiction appears as the completion (at least relatively speaking) of the movement of difference as diversity and opposition. Specifically, it appears as a movement of totalization, mediated negatively through the reciprocal play of inclusion and exclusion as internal to the terms of the relation themselves. This means that contradiction was already at work within the other determinations of reflection, although only implicitly. As such, it allows for a rereading of the chapter as a whole, in the course of which it emerges as the truth of the previous determinations. “Difference in general,” Hegel writes, “is already contradiction *in itself*.”⁴⁸ Consequently, we are now invited to think through the truly *speculative* significance of the positive and the negative, in which the negative and the positive appear as the expression of a single contradiction. Each term includes within itself the other that it itself is not. In excluding the other, each one excludes itself from itself. This is the extent to which the previous indifferent autonomy of the terms in opposition has been sublated. We are now faced with a twofold process of identification and differentiation within a single contradictory totality, and no longer with a merely dual or polarized relation. To speak of the identity of the positive and the negative is to emphasize the unity and simultaneity of this twofold process. Yet this is no *mere* identity, insofar as the positive and the negative are also different: “the positive is only *in itself* [or implicitly] this contradiction, whereas the negative is the contradiction posited.”⁴⁹ Indeed, the self-coincidence that prevails in the positive does not allow contradiction to unfold completely. In the negative, on the other hand, contradiction shows itself as a positing and sublating process. The positive posits itself as self-identity through the excluding of the negative, and so by being itself the negative of something; it becomes other than itself by excluding itself, but this alterity is presupposed. The negative, on the other hand, refers to itself only as to its other; it posits itself as self-identical by excluding identity from itself; it is *total* opposition, understood as a twofold process of identification and differentiation.

Throughout the chapter as a whole, Hegel points to the fact that every essentiality revealed in the course of the analysis is traditionally expressed in the form of a principal proposition, or in the propositional-principal form as such: principle of identity, of indiscernibles, of negative quantity, of the excluded middle. This series culminates in an analysis of the principle of non-contradiction, which, as we saw earlier, constitutes the logical corollary of the principle of identity and occupies an absolutely central place in the Aristotelian tradition, one which the *Logic* brings to a certain completion. From a speculative point of view, only a logic based on representation (on the understanding) can reject contradiction as the unthinkable pure and simple. Classical ontology, and by this I mean the pre-dialectical discourse on being, as well as its complementary logic of identity, lives on and off the exclusion of contradiction:

In the first place, contradiction is usually kept aloof from things, from beings [*dem Seienden*] and from truth generally; it is asserted that *there is nothing that is contradictory*. Secondly, it is shifted into subjective reflection by which it is first posited in the process of relating and comparing. But even in this reflection, it does not really exist, for it is said that the contradictory cannot be represented [*vorgestellt*] or thought. Whether it occurs in actual things or in reflective thinking, it ranks in general as contingency, a kind of abnormality and a passing paroxysm of sickness.⁵⁰

As we saw in our analysis of Aristotle, the most extreme figure of difference is not contradiction but contrariety. This is because difference is thinkable only as subsumed under, and derived from, the presupposed identity of substance, its genus or concept. Even here, difference remains external and accidental to the identity of substance. The predicate *qualifies* the subject but in no way defines it. Only its genus does that. Only the genus is of the order of *essence*, understood as quiddity. Black and white, hard and soft, wise and unwise are the most radical forms of difference, and are so only to the extent that they can refer to one and the same substance. But contradiction is simply irrelevant and doesn't even enter the logic of qualification, to say nothing of the logic of essence. It is this ancient edifice that Hegel's speculative thought shatters, or forces us to reconsider radically, by demonstrating the extent to which the identity of substance is only ever differentiated, or mediated, and that difference is only the fully explicated essence of identity. We saw the extent to which the classical commitment to a one-sided or unilateral identity, the identity of substance as self-identical (καθ' αὐτό), found itself in a sort of irreducible tension with the world of becoming or movement, and how reflection remained caught within the confines of a subjectivity indicative of the contingent poverty of a thought that fails to think things in their essence. In Hegel's own terms:

[I]t is one of the fundamental prejudices of logic as hitherto understood and of ordinary thinking that contradiction is not so characteristically essential and immanent a determination as identity; but in fact, if it were a question of grading the two determinations and they had to be kept separate, then contradiction would have to be taken as the profounder determination and more characteristic of essence. For as against contradiction, identity is merely the determination of the simple immediate, of dead being; but contradiction is the root of all movement and vitality [*Lebendigkeit*]; it is only insofar as something has a contradiction within it that it moves, has an urge [*Trieb*] and activity [*Tätigkeit*].⁵¹

Contradiction is a vital principle, or a principle of movement and reality. Here being is no longer opposed to becoming, but to “dead” or inanimate being alone, and this means to the purely self-identical, which, as it turns out, is simply illusory. Essence is not quiddity, not the eternal or atemporal reality within the temporal, not the abstract determination of a genus, but difference as such, that is, the twofold and unified movement of positedness and reflection, of identity and difference. The overcoming of the determination of essence as quiddity, and of substance as that which exists *per se*, is entirely a function of the recognition of the dynamic of contradiction that animates the logic of essence as only *seemingly* other than being. What representational thought is simply unable to recognize, then, is the constitutive, productive aspect of negativity, or its positivity:

[W]hen the difference of reality is taken into account, it develops from difference into opposition, and from this into contradiction, so that in the end the sum total of all realities simply becomes absolute contradiction within itself. The habitual *horror* which representational—but not speculative—thinking experiences before contradiction, similar to the one nature has in the face of a vacuum, rejects this conclusion; for in considering contradiction, it stops short at the one-sided *dissolution* of it into *nothing*, and fails to recognise the positive side of contradiction where it becomes *absolute activity* and absolute ground.⁵²

Thus, far from being the unthinkable, or the limit at which thought and sense cease, contradiction is absolute activity and absolute ground. Far from being a weakness or insufficiency of subjective thought, contradiction is a principle of actuality, the “indwelling pulsation of self-movement and vitality.”⁵³

What we are witnessing, then, is the full extent of contradiction’s decisiveness. Before being explicitly discovered in the logic of essence, it is implicitly at work in virtually every sphere of the *Logic*. It is omnipresent in the logic of being, as the very ground and still only hidden necessity of the transition or the *Übergehen* from one category to the next. Speaking of pre-speculative “ordinary thinking,” or representation, which he identifies with “external reflection,” Hegel writes:

[T]hough ordinary thinking everywhere has contradiction for its content, it does not become aware of it, but remains an external reflection which passes [*übergeht*] from likeness to unlikeness, or from the negative relation to the reflection-into-self, of the distinct sides. It holds these two determinations against one another and has in mind *only them*, but not their *transition* [*Übergehen*], which is what is essential [*das Wesentliche*] and contains the contradiction.⁵⁴

Übergehen, Hegel tells us in the logic of being, characterizes the apparently random move from one category to the next, as the following passage, devoted to the transition from being to nothing, testifies: “being passes over into nothing [*Nichts geht in Sein über*], but nothing is equally the opposite of itself, transition [*Übergehen*] into being.”⁵⁵ The logic of opposition, already in place here, is not yet seen for what it is, namely, a logic of *necessary* contradiction. But contradiction turns out to be the very foundation of the negativity at work in the category of becoming.

Similarly, “infinity,” the dialectic of which was exposed in the logic of being,⁵⁶ is now revealed as “contradiction displayed in the sphere of being.”⁵⁷ And, of course, contradiction is also to be found in the logic of essence, not just as one determination among others, but as the very truth of the essentialities themselves: “it is not to be taken merely as an abnormality that occurs here and there, but is the negative as determined in the sphere of essence.”⁵⁸ Finally, contradiction does not disappear in the subsequent logic of the concept. It can even be seen as prefiguring the process of the concept, in which truth cannot be seen to lie with the formal and abstract identity of a form and a content, but with the self-identity of a content that has arrived at this position through self-mediation or self-differentiation, and the form of which only exhibits its self-movement or self-production.⁵⁹ A content reveals itself in its truth only to the extent that it explicates itself as the negative of itself. In this respect, contradiction also designates the unfolding structure of which the concept will be the full and complete actualization, as the unity within itself of differentiated determinations. In actual fact—but this amounts to the same thing—the Doctrine of the Concept will exhibit the dialectical, and thus contradictory, unification of the two spheres of being and essence. Toward the end of the *Encyclopaedia Logic*, in the sections devoted to the Idea, Hegel, looking back on the logical process as a whole, laments the unilateral and one-sided approach of the understanding, which amounts to a form of theoretical blindness.⁶⁰ When the understanding applies itself to the Idea, it cannot help but notice that it contradicts itself: the subjective, for instance, “is merely subjective,” and thus *opposed* to the objective; the finite is “merely finite” and so “the exact opposite of the infinite.” Similarly, as Kant famously argued, being is something quite different from the concept, and thus “cannot be plucked out of it.” But what did the logical

process reveal? That the one-sided truths, the finiteness of the finite, the subjectiveness of the subjective, etc., are actually the untrue, and that their truth is precisely in their opposite. What we witness throughout the *Logic*, then, is the way in which these so-called truths “contradict themselves and pass over into their opposites.” Yet in this process of contradiction, it is truth itself that is constituted. But the understanding remains blind to the truth of the process it nonetheless witnesses; it remains blind to the truth of contradiction, or to truth as self-contradictory. For the understanding, truth is not being made, but *already* made, given from the start. As a result, there is truth, and untruth, whereas speculative thought locates truth as such as the relation between truth and untruth. For the understanding, untruth, as the negation of truth, is only that, whereas for reason, this negation is itself the truth, and the truth of a unique and single substance that negates *itself*. The understanding fails to see that this self-negation, as a relating-to-self, is not an external reflection, but a reflection that falls within the Idea itself. In other words, it fails to recognize that

[i]t is the Idea which is the dialectic that eternally divides and distinguishes what is self-identical from what is differentiated, the subjective from the objective, the finite from the infinite, the soul from the body. Only in this way is the Idea eternal creation, eternal vitality, and eternal Spirit.⁶¹

In the end, contradiction seems to have a very special status among the various determinations of reflection. If it is the *truth* of the previous determinations, it is precisely to the extent that it explicates their dialectical unity. As such, it is at work in the process of reflection as a whole, and, consequently, in the process of mediation of pure being that characterizes the movement of essence. It is not so easy, then, to assign it a place within the development of the Idea. Perhaps, instead, we ought to recognize it as the category that expresses the dialectical movement as such, the *Aufheben* that governs the self-unfolding of the Idea. Without constituting a determinate category, contradiction nonetheless reveals a specificity: it exhibits the truly dialectical moment of the unfolding of the Idea as a whole—the moment of difference or negation, as the following passage concerning “the absolute Idea” clearly indicates (in a way that echoes the section from the *Encyclopaedia Logic* I quoted a moment ago):

The second determination, the *negative* or *mediated* . . . includes its own other within it and is consequently as contradiction, the *posited dialectic of itself*. Because the first or the immediate is the concept *in itself*, and consequently is also only *in itself* the negative, the dialectical moment with it consists in positing in it the *difference* that it contains *in itself*. The second, on the contrary, is itself the determinate moment, the *difference* or relationship [*Verhältnis*]. . . . If then the negative . . . and all the determinations falling under this second

moment do not at once appear on their own account as contradiction and as dialectical, this is solely the fault of a thinking that does not bring its thoughts together. . . . [F]ormal thinking lays down for its principle that contradiction is unthinkable; but as a matter of fact *the thinking of contradiction is the essential moment of the Concept*. Formal thinking does in fact think contradiction, only it at once looks away from it.⁶²

Contradiction alone, then, enables a truly speculative interpretation of the relation (of identity) of identity and difference. Specifically, contradiction disavows any problematic of the origin, as well as any attempt to elevate a given moment to a position of absolute superiority: a given term, whatever it may be, is constituted as such only in and through the movement whereby, in opposing itself to an other, it reveals it as its own content and truth, and recognizes it as its own presupposition. This is the movement of self-relating negation, the movement of truth as unfolding within the always already mediated element that simultaneously sustains and sublates the unilateral affirmation of each determination.

3. *The Syllogism*

I would now like, by way of conclusion, to turn to a few pages from the *Doctrine of the Concept*, where the relational and central dimension of difference is asserted once again, and once again in connection with contradiction. The pages in question concern the figure of the syllogism and come immediately after those devoted to “the concept” and “the judgment.” With respect to the ontological problematic with which we are concerned here, the syllogism is exemplary in that it constitutes the fully clarified expression of being as absolute or self-differentiated identity. In relation to the determinations of reflection we have been dealing with so far (especially difference as contradiction), the syllogism does indeed mark a further step, in that it grasps and formalizes the unity or identity beyond the moment of difference (developed in the “judgment”), while retaining it completely *qua difference*. In what follows, I shall limit myself to general remarks on the judgment and the syllogism, and to the transition between the two. I shall not go into the detail of Hegel’s analysis, but would ask the reader to bear in mind everything that has been said regarding the determinations of reflection, and particularly that of difference.⁶³

The passage from “The Absolute Idea” quoted above serves as a useful transition. Indeed, before moving on to envisage the syllogism in its completed form, where being and thought are affirmed in their absolute unity, we must turn to the role played by judgment, which corresponds to the moment of difference or the sundering of being in its effort to express itself. What we have seen so far in relation to difference as a determination of reflection, and to the movement of essence as reflection of being within itself, also holds for the figure of judgment.

In what sense? In the sense that judgment (*Urteil*), if we consider the central position the copula ordinarily plays in it, signifies not so much the relating of two autonomous terms from an external standpoint as the originary self-sundering (*Ur-teilung*) of being, one constitutive of being itself, into a nominal singularity (the subject) and a predicative universality (the predicate). And it is precisely in the mutual recognition and the reciprocal articulation of these terms that being posits itself as concept. The entire operation of judgment, therefore, consists in revealing the subject as this “other” than itself which it itself *is* by way of the predicate. In other words, it consists in revealing the extent to which the subject *is* its predicate, and this in such a way that the copula can be understood transitively, and not merely inclusively. This transitive aspect of the copula alone allows us to establish the relation of identity between subject and predicate. In the end, then, the Hegelian conception of judgment takes on a meaning quite different from — if not altogether opposed to — that of classical logic: whereas it once marked the link between two terms originally separated from one another, it now designates the moment of difference or sundering within a single and founding relation, to the extent that the copula, while expressing the originary identity of the two terms, nonetheless constitutes a non-positing mediation. Yet it is important to note that this division or sundering is that of being itself, and that the judgment is in fact the originary self-sundering (*ursprüngliche Teilung*) of the concept itself. This means that the judgment is in no way external to the production of the real as totality. Rather, it is precisely because there *is* a real as totality that there is a sundering of the real, and this sundering is born of the necessity on the part of the real to explicate and express itself, and to do this according to the very form of its own totality.

Now, in Aristotelian logic the act of judging presupposes the position — the pre-supposition if you like — of the terms of the relation. These terms (the thoughts or concepts: νοήματα) are granted a certain stability and thus a certain degree of autonomy from one another. Indeed, for Aristotle, at the root of every discourse, there are fixed entities, “nouns” and “verbs,” which discourse alone, insofar as it involves affirmation and negation, can set in motion.⁶⁴ In themselves, these concepts, such as “man,” “white,” or even “goat-stag” do indeed signify something. Yet they cannot be used with a view to knowledge unless they are somehow linked together. Such is the task of what Aristotle calls the “proposition” (λόγος), and what the modern tradition has termed the “judgment.” Every proposition, Aristotle claims, “must contain a verb or the tense of a verb. The phrase which defines the species “man,” if no verb in present, past or future time be added, is not a proposition.”⁶⁵ For Aristotle, the judgment consists in linking these autonomous terms by way of affirmation or negation. What formulates or posits the judgment, therefore, is the mind, or λόγος as a

faculty. And while the operation of judgment thus conceived does indeed reveal the essentially relative character of the terms involved, it comes into play only at a time that is logically and chronologically secondary in relation to the terms themselves. As such, it remains in a position of externality with respect to the terms it brings into relation. With Hegel, however, the situation is quite different. For him, in a way, there is no such thing as judgment in the sense of an act of the mind binding together or separating pre-given concepts. Reality is not so much judged as it judges itself, and this means divides and separates itself structurally, revealing thus the richness and organic character it implies as a unified totality.

From an Aristotelian perspective, then, the judgment is nothing other than the connection drawn by the mind between subject and predicate. It consists, therefore, in an assertion that falls somewhere between the act of conceiving (which leads to the positing of concepts, whether as nouns or verbs) and the act of reasoning (which consists in assembling and ordering a series of judgments, for example, in a syllogism). Hegel, on the other hand, understands the judgment on the basis of a new conception of being, or, more accurately perhaps, on the basis of the movement of reflection of being itself. This is what allows him to envisage the figure of judgment as a moment of total reflection that shares in the reflective nature of being. As a result, Hegel ascribes a hitherto unknown position to the judgment, a position within being itself. From its classical, Aristotelian position, a shift has taken place, then: the judgment is no longer a matter for the mind and for its own laws, which decides of the truth or falsity of its operations; it is now a moment internal to the very movement of being itself in its effort to express itself. In that respect, the reciprocal play between subject and predicate depends on the determinations that belong to each one (respectively *singularity* and *universality*), and on the copula as the term that brings them together according to an economy of *particularity*. Now, these determinations are determinations of being itself, and it is precisely as *ontological* determinations that they intervene in the relation between subject and predicate. And, in order to show that what we are faced with here is indeed a movement of reflection, the predicate eventually recognizes its own universality as identical with the singularity of the subject, much in the same way that, in relation to the predicate, the subject eventually identifies with the universality of the predicate on the basis of its own singularity *qua* subject. This in itself is enough to show the extent to which, for Hegel, the connection between subject and predicate—introduced earlier on in connection with the ontological division between substance and accidents, identity and difference, being and becoming—is not to be understood in terms of the truth or falsity of judgment, but is rather an expression of the relation of identity in the truest sense that the real has with itself in the various moments of its total unfolding.

Whereas the judgment represents the moment of difference within a self-explicating and self-clarifying unity, the syllogism, which can no longer be identified with a mere “moment,” introduces a difference that coincides with the very movement of this unity. The most fundamental sense of the syllogism is the affirmation (or the positedness) of the totality as totality, or the affirmation of the identity of identity (the concept) and non-identity (the judgment). Far from reducing difference in its own identity, therefore, the syllogism in its unfolding follows the logical law according to which difference is difference as such only when grasped in complete unison with identity. This, consequently, means that the movement of the *reduction* of difference, carried out by the syllogism, consists not so much in the suppression of difference as in the suppression of the remaining *opposition* (in the very precise sense developed in the logic of essence) between difference and identity. Between the judgment and the syllogism, therefore, there is a continuity, a continuity revealed in the fact that in both there is a relation between three terms, and that in both cases the relation in question is a relation that generates a mediated unity. However, we must be careful not to see the syllogism as a more complex kind of judgment, and emphasize instead that the *quality* of the mediation is not the same in both instances. Indeed, within the economy of the judgment, it is the copula that carries out the connection and therefore sustains the unity. But this relating remains external to the terms it mediates, very much like “comparison” itself remained external to the terms it mediated in the economy of difference. In the syllogism, however, the middle term carries out and sustains the content as a whole from the very start: the middle term is there within the first two propositions (the so-called “premises”) from the outset, and it alone brings about the comparison and the reciprocal conversion between the great term and the small term (respectively, the subject of the major and the attribute of the minor, before these actually become subject and predicate in the conclusion):

[T]he very meaning of the syllogism is that it is not merely a judgment, that is, not a relation effected by the *mere copula* or the empty *is*, but one effected by the determinate middle term which is pregnant with content.⁶⁶

This marks another point of departure from the Aristotelian conception of the syllogism. For if the middle term in Aristotle does indeed provide the connection between the first two, it does so only *secondarily*. For Hegel, on the other hand, the middle term is the truly *mediating* moment, which means that the extreme terms appear only as presuppositions of the middle term, and not as terms given prior to and independently of the mediation itself. The middle term is the one that reflects the concreteness of the real, in relation to which the extreme terms are only

abstract and *formal* moments. It is entirely on the side of the *content*, and it alone carries within itself the complexity of the content of reality. If there is some kind of privileging in Hegel's thought, it is not that of the form, as was the case in Aristotle and in an entire tradition after him, but that of the content. But if the content is, in the Hegelian syllogism, at the heart of reasoning, if it constitutes the middle term in its mediating function, it is only to the extent that it encompasses the ultimate perfection of its completed form. Content and form cannot be distinguished, even if, at times, they do not coincide absolutely. Yet Hegel's thought is first and foremost a thinking of the concrete, one that is highly suspicious of all types of formalism. Yet insofar as the concrete is the unity of the rational and the real, of thought and being, it cannot be abstracted from the many ways in which it presents itself, least of all from the syllogism as its fully differentiated logical form. Such is the reason why, in the end, the completed form of the syllogism designates the identity of the real and the rational.

Hence, in the same way in which reality is unique, so too is its expression. As a result, the plurality of stages on the way to this expression does not reflect a linear unfolding, but the various layers constitutive of reality in its unity, and revealed in its depth. And if the syllogism manifests the rational character of the real, or the self-grasping of the real, as Hegel claims it does,⁶⁷ it is because the real finds in the syllogism the form of its own expression as unity. This unity is indeed an identity, but a wholly *mediated* identity—the identity of identity and difference. What is posited in the *Logic*, and in the very idea of the absolute in a Hegelian sense, is not so much the subsuming of difference under identity, or the suppression of difference in identity (as was the case in Aristotle, and in an entire tradition after him), as the unity of being *as* the relation between identity and difference, in other words as a relational totality. Being, then, does not designate a category superimposed upon the movement of what is. It is not a unifying principle, given from the start, that would organize the movement of difference from the outside. Rather, it designates the fluidity of a network of relations on the basis of which identities come to be constituted. And this is the extent to which being is one with the concept, which characterizes the relational aspect of the real.

As a result, the unity of the syllogism unfolds necessarily in the element of difference as difference; and difference, in turn, presupposes unity, in that it reveals the diversity and richness of the unity. At the ontological level, where being returns into itself, the ownmost character of difference is to overcome itself in order to reveal the richness of the unity that posits it. For the "return" in question does not amount to a turn away from the richness manifested in difference. On the contrary: it amounts to the gathering of this diversity in its original and

final unity. This is the point at which the movement of self-reflection of being comes to an end, in what amounts to an instantaneity and simultaneity of all its previous moments, which now all co-exist in mutual recognition. This is how we need to understand the structural instantaneity and simultaneity, at once fundamental and ultimate, in which the unity of being is reconciled with its own self-differentiation and dissolution within essence. This is tantamount to saying, as we have already established, that the unity of being is a unity of *contradiction*. Difference reveals the unity of being and testifies to it, not by relating to it as to something beyond and outside, but by discovering within itself what grounds it as such. As such, difference is a moment of transition, albeit a structural one. The tension it carries drives it toward unity. In its mediated reality, the self-identity of being is thus the identity of its original self-identity and of its self-differentiation, understood as a moment that is at once transitional *and* structural. In the end, when considered from the point of view of its transitional externality, difference is only a *moment* of the process as a whole—the moment when differences are progressively reduced and absorbed. And yet, at the same time, and as a close analysis of the economy of the syllogism would reveal, difference also expresses the movement of identity in its self-projection and constitution, and is therefore in a relation of identity with identity itself.

This, then, is how difference comes to be integrated into the very constitution of identity, and taken all the way to contradiction, hitherto considered to be the absolute limit of identity, or the wholly other than identity. This absolute limit of being is overturned and revealed as the inner limit of the Absolute itself. As contradiction, difference is wrested from its subordination not only to merely external identity, but also to its logical status as *differentia specifica*. And if it remains a *logical* determination, it is only in the sense in which thought, far from encountering the real on the basis of its already constituted identity, constitutes itself as such in and through this encounter. There is no longer a gap between logic and ontology, or between thought and being. Under the blows of the determinations of reflection, and of difference as contradiction in particular, the hitherto founding and sacrosanct principle of non-contradiction collapses and finds itself integrated into the movement of the concept itself, which eventually turns out to be none other than the self-movement of the real, or the Absolute. Contradiction thus comes to be identified with the very life and principle of being as substance, and thus with its becoming subject. If the *Logic* does indeed manage to overcome the gap separating being and becoming, substance and its accidents, it is through the recognition of a principle of contradiction as essentially genetic, and thus ultimately precisely not as a *principle*, insofar as the principle remains in a position of externality with respect to what it is supposed to ground. The

determinations of thought, and thus the articulations of the real itself, do not stem from a pre-given set of *a priori* concepts, but from the contradictions inherent to the initially abstract assumptions of thought itself, which infinitizes or absolutizes itself in the process. Thought is an experience, and its concepts are as many stages and rites of passage on the path to its absolute self-mediation, which means to its ability to free itself from its initial unilaterality or onesidedness. The absolute Idea contradicts itself in order to identify itself. This is the extent to which it is a concrete identity: as a unity extended to duality, as being within itself in being outside itself, and vice versa. This absolute identity is at once form and content, at once tautological and contradictory. This is the sense in which it constitutes the completion of Aristotelian metaphysics, as the metaphysics of substance and subject. Philosophy posits itself as onto-tauto-logy, or as the logos of (subjective genitive) being in its fully differentiated identity.

Yet it is precisely in integrating contradiction itself within the unity of substance that Hegel is eventually in a position to posit the real or being as the One substance, and no longer to set the identity, or the being καθ' αὐτό, of the substance against any residual difference. Contradiction, as *absolute* contradiction, is only a symptom of a speculative shortsightedness. Identity alone is absolute, and absolute only to the extent that nothing remains outside of it, as something absolutely other. Yes, Hegel pushes difference all the way (in)to contradiction. As a result, however, the ultimate form of absolute alterity, what Aristotle recognized as pure heterogeneity, becomes a pure illusion. Being itself, as the site of an aporia, insofar as it designated the possibility of an identity of all substances that would itself be neither a genus, nor *a* substance, is lifted and replaced with the one, absolute, and this means entirely self-differentiated substance. But where, I wonder, lies the illusion? With Aristotle, or with Hegel, with aporetic ousiology and classical logic, or with absolute ousiology and speculative logic? With both perhaps, insofar as a sense of difference yet unexplored, and an ontology yet unimagined, still remains to be considered.

PART II. ONTO-HETERO-LOGY: THINKING DIFFERENCE WITH HEIDEGGER

As far as philosophy is concerned, it seems reasonable to say that our era will have been marked, or stamped, by the question of Being. This is why it is dominated by Heidegger.

— A. Badiou, *Deleuze*
— “*La clameur de l’être*”

For us, the matter of thought is . . . being insofar as it differs from beings . . . For us, the matter of thought is, let us say by way of anticipation, difference *as* difference [die Differenz als Differenz].

Being in the sense of the over-coming that unconceals [*der entbergenden Überkommnis*], and beings as such in the sense of what arrives and is sheltered [*der sich bergenden Ankunft*], unfold thus differentiated from out of the Same, of difference [*Unter-schied*]. This difference alone grants and holds apart [*hält auseinander*] the Between, in which the overcoming and the arrival are held toward one another [*zueinander gehalten . . . sind*], are borne away from and toward each other.

— M. Heidegger, *Identität und Differenz*

Eventful Being: On *Ereignis*

Let me begin again, then, this time with this other beginning—at least with the possibility of such a beginning, a possibility which, we shall see, is intimately bound up with the *repetition* of this first beginning I have been busy tracing thus far. This repetition, however, is directed toward that which remains unthought and unspoken in that first beginning. In that repetition something new and decisive takes place. Let me begin again with what I take to be this remarkable new beginning for thought—one that has been hailed as such throughout the twentieth century by thinkers as different and influential as Derrida and Deleuze, Levinas and Foucault, Arendt and Badiou. Let me begin again by turning to the thought of Heidegger and, specifically, to the way in which it opens up the side of being I referred to in my Introduction as *epiphanic* and *poematic*. This is the side which is concerned with being in its truth (and not in its genesis), with language understood as originary saying (and not as mathematics). This is the side that phenomenology alone, in its most rigorous sense, can reveal. The sense of being that is presupposed, and with which being comes to be identified, is that of difference. But, we shall see, the sense of difference itself has shifted, and radically so, freeing being of ontotautology altogether. By difference, we must now understand the originary event in the unfolding of which the world takes place. The sense of being that is at issue here is entirely contained within the space of the ontological difference. The question, however, is precisely one of knowing how to understand the ontological difference, how to conceive of this space (and this time) in excess of permanence and actuality, when envisaged from its *truth*. This is the problematic that will henceforth govern the economy of this book, including its attempt to delineate thought's

complex position in relation to classical metaphysics and modern science. Although, in relation to the latter, I shall not exactly follow the letter of Heidegger's thought, finding instead grounds to reconcile thought with science (at least with aspects of it), I want now to emphasize that which, in Heidegger, remains uncircumventable. I want now to introduce the *differential* conception of being as the proper response and alternative to classical ontotautology.

Let me begin again with the question of being, with the question of its meaning, of the way in which it can be taken up so as to be given a new impetus, a new opening. Let me begin with the word "being" itself and raise the question regarding the kind of proposition, and this means the kind of question, which is suited to the matter. Let me do this in order to justify, at least in a preliminary way, the use of another word, which Heidegger will mobilize, if not in place of, at least as a supplement to the word "being" — *Ereignis*.¹ If, in what amounts to the first new stretch of this journey across being and its history, we turn to the thought of Heidegger, it is, once again, because in my view that thought constitutes the most daring and extreme attempt at liberating a sense of being, and of nature, that is simply other than the one I have described thus far. To be sure, such an attempt would not have even been possible without the breakthrough made by Husserlian phenomenology, as well as by certain developments in the arts, and in poetry in particular. For it is indeed the Husserlian demand that philosophy return to the things themselves, not as theoretical objects, but as phenomena, and this means as living realities that come to life on the basis of a life-world, which enabled Heidegger to provide a concrete meaning to the one philosophical question, inherited from Greek antiquity: namely, the question of being. It is Husserlian phenomenology, and the light it throws on the world, the light of what it calls the *earth*, that ultimately enabled Heidegger to revisit the nature of the artwork, of language, and of Hölderlin's poetry in particular. Behind or, better said perhaps, beneath every object, every representation, every physical or metaphysical ideality lies a phenomenon, which is the flesh and the blood of the world, the life that continues to live in and through being as it is represented in itself. This is being as it is *lived*. Lived by whom? By "us." But who is this "us," and what is this life? This is precisely what is at issue, what needs to be clarified: the meaning of this "us," for which being unfolds.

The event for which Heidegger's thought stands can be summarized in the following way: at the heart of being lies the following contradiction, which representational thought — metaphysics as *ousiology* — has continuously and consistently overlooked: being "is" not; it is, literally, *nothing*. Metaphysics represents this relentless attempt to turn being into a thing. In the eyes of metaphysics, only those things — those beings — that can be represented, only those beings with a minimal structure of identity and

permanence that allow them to be identified and recognized by way of nouns or substantives can be said to “be.” In one way or another, it argues, beings are substances, or derived from substances, or attached and attributed to substances. Yet, Heidegger objects, because “being” is not a thing, because it is no-thing, it is the most singular exception to the rule and the logic of substance, a rule and a logic that has come to permeate our use of language and grammar to such an extent that being itself has fallen prey to it: being has been and continues to be mistaken for a substance and for the essence of what is. And yet, being is not simply foreign to this law and this logic; it is not simply foreign to those things from which it differs essentially. If it “is” indeed nothing, it *is* at the same time everything: it is the very operation whereby the things themselves come to be, the very operation whereby “there is” (something rather than nothing). Being is only in and through its difference from beings. And this in such a way that we might wonder as to whether it is at all possible ever to speak of being “itself” or “as such,” that is, independently of those beings which come to be in its wake, independently of those things that can be identified by way of nouns. Can there ever be being *as such*, if being does not refer to an essence or a substance—a self-present and self-identical structure—and if, at the same time, the very operation for which this word stands always opens the field of beings as such and as a whole? Can we ever speak of being *itself*, if being escapes the structure of selfhood altogether? Further still: since it is neither an individuated thing nor an essence, neither a substance nor an idea, how could it possibly be treated as a noun, or made the subject of a proposition? How could it take the form of the classical “S is P,” and made the object of a judgment of predication, whether analytic or synthetic, or even speculative in the Hegelian sense? Any such proposition would presuppose and have decided in advance about that which is precisely at issue in the proposition regarding being: that being can have the status of subject in a proposition; that this proposition allows for a doubling of being as copula; that being can be predicated; that the matter for which the word “being” stands can be inscribed within an implicit understanding of language as propositional—all of this when the very operation of being is such as to resist any such subjectivization and copulation, and when the essence of language itself is addressed for the first time in and through this operation. This operation escapes the classical form of the proposition altogether, which understands being from a twofold perspective: first, and as its ontological presupposition, as the substrate, substance, or subject characterized by its permanence and identity beyond and despite the various transformations and changes to which it can be subjected (recall the first analogy of experience in Kant’s *Critique of Pure Reason*), and thus, ultimately, as the idea, the εἶδος, the essence or the origin and cause of such transformations; second, as the copula or the

purely functional link uniting subject and predicate. As a result, when, attempting to develop a discourse about being, we say, “Being is . . .,” we already give the impression that it is a matter of predicating Being (even when, as Hegel does, being is predicated with nothing), about which a fundamental decision has already been made, the decision according to which it designates something, first of all, like presence, or actuality (οὐσία), and second, something like an essence (εἶδος), or the being of a thing. We give the impression, then, that being refers to this twofold sense of substance — subject and essence first thematized by Aristotle. We have already inscribed the operation of being within the metaphysics of the οὐσία-ὑποκείμενον; we have already answered the question regarding the status of being before having had a chance to raise it. Yet, despite all these difficulties, if the word “being” is not the emptiest and most general of words, if something is really at issue in it, it will need to be made the object of a certain discourse and take the appearance of a proposition, albeit at the cost of a radical transformation of the very nature of the proposition. Yet this discourse will need to unfold from the very matter for which the word stands; the proposition will need to be *of* being; it will need to belong to being, in the strictest and most literal sense. What, then, is the proposition of being? What form must this onto-logic take? What sense must λόγος have, if it is no longer compatible with its classical conception as logical proposition?

To address this question, we need to take a further look at the word under investigation here: being. Or rather, perhaps, *Sein*. For the word “being,” as a present participle turned substantive, already takes us further in a direction which the German *Sein* only suggests, resists it a bit more, tarrying a while longer this side of metaphysics, before allowing it to slip into representation. Before being a noun, before having been reified by the inevitable and long since legitimized impulse of representational thought, *Sein* is a verb. And an infinitive. And verbs, particularly in the infinitive, refer to events, first and foremost. They refer to those events that are subject-less, those events to which belongs a certain anonymity, or rather, a certain pre-individuality — events, in other words, that refer to a certain happening, to something that we can say is taking place without this taking place being the effect or the doing of any thing or agent — an event, in other words, which isn’t the accident of a substance. Thus, being as event must be distinguished not only from οὐσία and *quidditas*, from essence in its classical determination, but also from the sense of *accidens* complicit with such a determination, in which an accident is seen as something that happens to a pre-given substance, a substance given entirely independently of the movement of accident that happens to it. The thinking of being as event will require a reversal of this order, so that substances themselves will come to be seen as happenings, as accidents as it were, of a primordial and forever recurring event, which

itself cannot be assimilated with another, more primordial and superior form of substantiality. Examples of pure events, with which the event of being would have some affinity, would be revealed in propositions such as “it’s raining,” “it’s snowing,” *es regnet*, *llueve*, *piove*, *χρή* (“it is necessary”), etc. In each case the verb is pointing purely to what is taking place, or rather to the taking place or the happening itself, which is entirely indissociable from that which is actually taking place. There is no subject withdrawn from or in excess of the taking place: the taking place is itself the subject: in *es regnet*, or “it’s raining,” the *es* or the “it” is not so much the subject of the verb as the doubling or the underlying of the verb-event (Spanish and Italian, Latin and Ancient Greek do not even have recourse to such semblances of subject). Here the subject is the verb, and the verb is pure event. Such, then, is the way in which being itself has to be heard and experienced: as an event, as something that is happening or taking place, yet not on the basis of something other than itself—a pure event, a subject-event. This is in direct opposition to Aristotle’s claim according to which the infinitive “to be” (or “not to be”) as well as the participle “being” indicate or signify a fact only when “something further is added.” In other words, they are in themselves “nothing,” but signify a “connection” or “copulation” (σύνθεσιν τινά) “which we can hardly conceive of apart from the things thus combined.”² Heidegger, however, will insist on thinking this infinitive and the event it shelters for itself, multiplying over the years formulations such as: *es gibt Sein*, *das Sein west*, *das Ereignis ereignet*, etc. In this regard, the event of being is no different from the event “rain.” And yet, in another sense, it is quite different from the event “rain,” insofar as it designates not so much a particular event, an event alongside other events, but the event of all events, or, more accurately perhaps, the eventness or eventuality of all events. To address the question regarding the type of discourse that is adequate to being, we need to go one step further and raise the question regarding the kind of question that is suited to events, and to the event of being in particular. For this question can evidently not be that question that so decisively shaped the fate of philosophy, the question with which, in the face of a thing or an object, philosophical enquiry says we must begin: *quid est*, What is it? Indeed, this question, the question that will have guided metaphysics throughout its history, is such as to point inevitably and from the outset in the direction of *essences*. It is a question that is adapted to a certain interpretation of being as οὐσία, and of οὐσία as ὑποκείμενον, in other words, as essence-substance. And, as Heidegger will have shown, in a way that is echoed in the thought of Deleuze, this type of enquiry inevitably and lamentably points to what is most general and most common among beings, and so to something ultimately seen as vague and empty, “general” in the most vacuous sense of the term. Events escape the grasp of metaphysics, for they are without essence: their very essence is not to

obey the law of essence understood as quiddity. Now, if Heidegger does indeed deploy anew the classical determination of essence (*Wesen*), rescuing it from its metaphysical appropriation, it is only at the cost of a formidable and daring transformation that equates the operation of essence with movement as such, verbalizing it, de-reifying it, allowing it to coincide with the very movement of unfolding, with being as such; it is only to overturn the notion of essence so that, from being the first and highest substance, it becomes a pure event, being as becoming or happening. Thus, the essence of a flower is not its εἶδος, but its flowering, much in the same way in which, in Perrault's tale, the grass is grasped in its essence as "greening" (*verdoyer*) and the summer sun as "dusting" (*poudroyer*).³ The essence of being itself is to *be*; it is the movement of essence as such: *wesen*. It is, in other words, the unfolding that is proper to the thing in its thinging, the event or the eventing of the thing. It is, if you prefer, the event of all events, or, more specifically still, the eventfulness of every event or *Wesen*. Essences, on the other hand, at least in their classical formulation as quiddity, are equated with the being of a thing precisely as the negation of the becoming or the eventuality that is implicated in the thing, which is then relegated to the status of contingency, accidentality.

What is the question best adapted to the event, then, if not that of its *what*? How does one qualify verbs, as opposed to substantives? What, if anything, is, if not the definition—since definitions can apply to essences alone—at least the formulation or the proposition of being? It is only when philosophy can no longer say that being is this or that thing, only when Being has been radically distinguished from any being, any attribute that would immediately assume the presence of a previously given substance, that formulations such as *das Sein ereignet*, *das Sein west*, *es gibt Sein* become not only possible, but indeed necessary. For such formulations suspend and neutralize the metaphysical operation of definition, attribution, qualification that belongs most intimately to the quidditative interpretation of philosophical discourse. Yet these formulations do not simply give up on qualifying the matter at stake. They do qualify *Sein*, if only verbally, emphasizing from the very start that, at issue in the issue of *Sein*, is precisely something like an *Ereignis*, or rather an *Ereignen*, a *wesen* or a *Wesung* (and not a *Wesen*), a *Geben* (and not some thing *given*). *Sein*, the noun *Sein*, is first and foremost a verb, a noun that is always qualified by way of a doubling of its verbal origin. With Heidegger, being can no longer be mistaken for a being, so long as we envisage being as the originary, always presupposed and always operative event within which every thing, every event, including the event of language itself and its metaphysical grammar, takes place. And so, if we want to extend these formulations, if we wish to go deeper and further into what is being designated in such formulations, we are going to need to shift the question-

ing from the *what* of metaphysics to the *how* of pre-metaphysical thought. For this is how verbs are qualified: not nominally, but adverbially. Adverbs address verbs in the *how* of their unfolding, *in terms of* unfolding. And so, the proper mode of questioning with respect to being will have always begun, for Heidegger, with the *quomodo*. *How* is being? *Wie west das Sein?* This, Heidegger tells us time and again, especially in *Contributions*, is the question with which the other, non-metaphysical, non-representational thinking begins. And yet, holding to this question, remaining faithful to the demand contained in the simplicity of the question, is a task that proves to be infinitely complex, a task that Heidegger himself will have found most difficult to achieve (and in a sense, the only thing that I want to do here is to show the way in which this difficulty persists in Heidegger's work, and the form that it takes). For thinking verbally (and adverbially), thinking from out of the originary event of presence, is an enterprise that runs against our entire tradition, our perhaps naturally representational tendency, our very grammar. *Wie west das Seyn?*, even before Heidegger formulated the question in precisely those terms, is the question with which he was concerned. And to this question Heidegger will have provided one answer and one answer only. To the question regarding the "how" or the being of being, Heidegger will have retained a single word, the meaning of which evolved, in ways that are not easily identifiable, and that I shall try to clarify: *Da-sein*. Moving away from addressing beings in their whatness, Heidegger addresses them in terms of their being-*there*, that is, in terms of the "there is" that exceeds the merely physical contours of the individuated thing, and that this thing *is*, retaining it, displaying it, as the dimension of its own virtuality, in the moment in which, as a thing, it also erases it. *Dasein* is the word—primarily an adverb—that will have served to capture the "how" of being, or being as the very "how," the style or the garment in which things wrap and present themselves. *Da-sein* will have designated this intangible, invisible, impalpable dimension at the heart of the tangible and the visible. It will have pointed in the direction of the "there is" that sustains and traverses every phenomenon, in the direction of the phenomenality of all phenomena, but with this remarkable characteristic that this phenomenality is itself non-phenomenal, beyond phenomenality. Heidegger's phenomenology is a phenomenology of the *inapparent*. The being of what is, and which never can be confused with its beingness, its presence, is the "there is" prior to all present beings. Being unfolds as "there" (*da*), or as the "there is" of everything that is: not as the "here" and "now" of a concrete being individuated in the world, but as the dimension, nowhere visible, never actual, yet always in place, virtually, whence beings emerge and tower up. Not a concrete *hic et nunc*, then, but the very opening up of space and time, the unfolding of the Open as such, the happening of the clearing in which things take place and a world is born. Every thing in its *hic et nunc*

is the crystallization of a pre-spatial locality and a pre-temporal moment, of a single dimension made of two co-originary sheaves (time and space). And it is as this primary dimension that Da-sein is the adverb of being. The adverb, and not the noun. Even if, and at the cost of some confusion, the consequences of which remain to be analyzed fully, in *Being and Time* in particular, but in his later texts too and chiefly in *Beiträge*, Heidegger will have never been in a position, or indeed even willing, to dissociate entirely the adverbial, pre-individual aspect of the *Seinsfrage* from the question of what, with the necessary caution, I would like to call the “subject” of being, thus pointing to the “who” of being. In other words, Heidegger will have never been in a position to separate completely the question of the *how* of being, which does not immediately call for an individual qualification of this how, from the question of man as the “proper” name of being. It is as if, as Heidegger explicitly suggests, being “needed” man, as if the being or the “how” of being were inevitably and necessarily drawn to selfhood, as if being came into its own and were properly only in being preserved in man. It is as if being destined itself to man. That being needs and opens up the domain of the proper is something that Heidegger will have assumed throughout. Could it have been otherwise? Does the thinking of being as event necessarily lead to thinking the event as appropriation? Does the thinking of being as *Ereignis* necessarily open onto this other humanism of which Heidegger speaks in his letter of 1946 to Jean Beaufret?⁴ And is this other, more primordial form of humanism not still a form of anthropocentrism? Can philosophy *as phenomenology* escape anthropocentrism altogether? In other words, if Heidegger’s later thought remains phenomenological, as I believe it does; if it radicalizes phenomenology by becoming a phenomenology of the in-apparent, and by leaving behind transcendental consciousness, and even ecstatic existence, as the horizon on the basis of which the phenomenality of phenomena is carried out, it continues nonetheless to involve the human as a privileged site from which it becomes possible to return to the things themselves. It continues to privilege human experience (as *Erfahrung*, and not as mere *Erlebnis*) as the “proper” access to the phenomenality of phenomena, or, in what constitutes a sort of reversed intentionality, as the ontical correlate of the essential unfolding or the “sending” of being. On one level, what I am formulating here is a critique: the “ontical” privileging of human existence, announced in the Introduction to *Being and Time*, and justified as the obvious and uncircumventable point of entry into the broader question regarding the meaning of being, is reaffirmed in the later work, albeit at the cost of some transformation. Even when, as we shall see, it becomes a question of moving the question of being further into the pre-individual, and thus further away from the ontical privileging of human existence, the link with the human, as the literally de-cisive pole in which the fate of being is played out, remains in

place. In other words, even the most radical practice of phenomenology remains bound to a certain humanism, a certain anthropocentrism. In that respect, phenomenology falls short of the more radical move into the pre-individual, such as the one we find in the transcendental empiricism of Deleuze. Yet this is precisely the extent to which the point I am addressing is also not a critique. As I have begun to argue in the Introduction, the ultimate value of phenomenology lies in its ability to retrieve phenomena as they are *lived*, in what amounts to a personal and collective experience of the world, before any theoretical “work” is performed on the world. The value of phenomenology lies in its ability to present us with the world as it is there for us, in its raw and primitive presence: in its being. And this aspect, this experience, is one which I see as incompressible. Phenomenology is the discourse that does justice to our raw experience of being.

This, then, will be my line of research and of questioning. I would like to suggest that, in the question of Da-sein, what will have been at issue from the very start and above everything else is the question regarding the *Wesung* or the truth of being, the question regarding the how or the unfolding of being as the question regarding its “there.” Yet I shall want to show that, in raising this question, in attempting to address it, Heidegger also immediately re-opens, and in a way that is thought provoking and entirely novel, the question of man as the proper name of the event of being. In this regard the work of the 1930s, and of *Beiträge zur Philosophie* in particular, constitutes a decisive development: on the one hand, Heidegger will be attempting to dissociate the question of Da-sein from that of this being that comes to be constituted in its being in this very event, and with which *Being and Time* equated it, namely, “man”; in other words, there will be a general movement away from the singularity of the individuated Dasein, a general de-centering of man, and *further* into the pre-individual: Da-sein will come to designate a field of individuation that is itself pre-individual—what Heidegger calls the *Zeit-Raum*. This is the movement I shall be concerned with tracing here, venturing eventually into two texts written immediately after *Contributions*.⁵ It is a movement that coincides with a substantial reworking of the early problematic of the ontico-ontological difference (*ontologische Differenz*) such as it appears, most explicitly perhaps, in *The Basic Problems of Phenomenology*,⁶ in terms of an an-original difference (*Unter-schied*), in the spacing and temporalizing of which beings open up and a world is being born. At the same time, though, a double operation is going to be taking place, as if the first move in the general direction of the pre-individual could only be neutralized, if not altogether annulled by a counter-move: first, the question of man is going to be reintroduced ever more forcefully, and the adverbiality of being is going to be immediately bound up with the question concerning

the place, and indeed the very individuation of the human in the event of being. Da-sein is going to be at once and co-originarily adverbial and nominal, anonymous and proper, pre-individual and individuated. The entire thematic of the proper is going to be given a new and further twist, when the event of being becomes the event of the proper and of ap-propriation. Second, the reconfiguring of the space of temporality that is characteristic of the *Da* of *Sein* is going to introduce at least two further terms (the earth, the gods), the origin and the place of which is perhaps even more questionable than the privilege initially granted to Dasein as the existing being.

The movement of the analysis is as follows:

The remainder of this chapter will provide a brief analysis of Dasein as it is first thematized in *Being and Time*, followed by a more in-depth analysis of the Da-sein in *Contributions*, paying specific attention to the ambiguity still present in that term—an ambiguity that will turn out to be a duplicity, and a highly traitorous one, which works to designate being both in its *how* (as adverb) and in its *destination* (as the human being). Chapter 4 will provide a more specific analysis of the adverbial sense (the “Da”) of Da-sein as implicating a novel and compelling ontological conception of space and time as *Zeit-Raum*. Finally, Chapter 5 will reveal how the latter reformulation of space and time forces Heidegger into a formulation of being as difference beyond and prior to the ontico-ontological difference, thus announcing the progressive erasure of being in favor of the concept of *Unter-schied* (or inter-stice) that first emerges in *Metaphysik und Nihilismus*.

I. The Initial Formulation of Dasein in *Being and Time*

Being and Time is the attempt to think the meaning or the how of being as time, the effort to wrest being from inert substantiality so as to recover its forgotten origin as pure becoming. Here, then, being is no longer opposed to becoming, or to time, but is shown to be one with it. “Being and Time” really reads: “Being as Time.” But time itself, pure becoming, must be distinguished from the time of the world and of actuality, the fallen time, as Heidegger puts it, in which things and events seem to succeed one another in what amounts to an understanding of time as chronology. Real time, on the other hand, is not the time of succession, this linear, actual time in which one event chases another out of the present so as to occupy the site of the present; real time is not the time of the eternally and absolutely present that events occupy for a while before vanishing into the past, itself nothing but a no-longer-present awaiting to be reactivated or brought back into the present. The present is only an *effect* of time, not its point of departure. And when understood on the basis of the essence of

time as rapturous or ecstatic time, the present appears as instant (*Augenblick*): unlike the present abstracted from its co-implication with past and future, or rather, with the future as that which is approaching from afar, that which is coming or arriving, and the past as that having been which is, the instant designates the coming together of these raptures, the joint or the binding of past and future, the fold where past and future touch one another and reveal the site of the present, no longer as moment, but as *topos*. The instant, then, no longer has anything to do with a measurable now: it is at once less palpable, less graspable, and infinitely more real than that—qualitative, as opposed to quantitative, an intensity, an electric charge more than the segment of a line. To think time from the present, then, is to think abstractly, for it amounts to taking the effect for the cause, even if no actual cause can be associated with the unfolding, or the temporalizing of time. It is also an abstraction insofar as it consists in extracting a strip from the fabric of time by way of a representation of time as a line made of points and segments, and to posit it as the very source or origin of time. Whereas, Heidegger insists, what needs to be thought in time is its verbliness: time is a temporalizing, the temporalizing of which is the very event or ek-stasis of being. How does time temporalize itself? Ecstatically, which, for the Heidegger of *Being and Time*, also means existentially.

Time, then, is the “meaning” of being; yet this meaning, far from being a construction of the human understanding, an idea of reason, an existential or practical ideal, coincides absolutely with who we are, that is, with a concrete individuality—with human life as such and as a whole, we could be forgiven for saying, if these terms were not such as to reintroduce a metaphysically overdetermined vocabulary which Heidegger is careful to avoid. For human life is normally understood as stretching between life and death, and thus as having a time span, what the German would call a *Zeitraum* (and not, as Heidegger begins to write it in the 1930s, a *Zeit-Raum*), thus revealing the inherently spatial and measurable nature of the ordinary conception of time. Life, we believe, takes place within time. But time itself, the origin of time, remains unquestioned. Heidegger’s concept of time, on the other hand, is precisely aimed at despatializing and de-reifying time in order to uncover its event-ful or ontological power. Time, he says, “is” not, but temporalizes itself; there is no such *thing* as time, only a temporalizing, and from out of this primordial and ongoing event everything takes place, finds its place, possibilities emerge, assemblages begin to constitute themselves; a world begins to take shape, worlds come into contact and create new worlds, the fabric of the world is slowly being woven. Time is not an initial explosion from which everything unfolds; it does not let out a bang, whether big or small; it is immaterial and incorporeal, yet absolutely concrete, absolutely real, with a potential that exceeds any actuality. Time is not a subject, least of

all a substance, but a verb; and so, therefore, is man: not an ego, not a subject, but a threefold ecstasis, a singular event, the site of the happening of being, an operation which, while coinciding absolutely with human life, forces us to rethink the essence of human life on the basis of the essentially ecstatic nature of time. It becomes a matter of rethinking man as the existent, and so of rethinking existence itself as temporalizing, and time as production. There is, after all, something poietic or machinic about Dasein. It temporalizes time. It times. Ek-sistence, then, as the event of being, is entirely outside: it is not an inside that goes outside, an interiority that externalizes itself, a tranquil bourgeois that ventures outside to return safely home in the evening; it is not the outside of an inside, but the outside as such, pure exteriority, pure throwing (pro- and retro-ject), rather than a withholding or a hiding. It has no inner life withdrawn from the world since, as the being that exists, it is nothing other than this being-in-the-world. Even its most intimate secrets, the riches of its so-called inner life, are a function of its being “out there” from the very start, thrown into the world. Existence is, to paraphrase Rimbaud, “ahead” (*en avant*) and outside. As being-in-the-world, Dasein is more akin to a web that is spun *as* events and encounters unfold or to a set of points distributed along different axes and connected to one another rather than to a fixed (or mobile) point in space, a thing extended amid the extension of the world. Dasein is world-constitutive; it constitutes its world, not unlike the way in which the spider constitutes its web, the difference being that its epicenter does not coincide with its mere physical contours, its hearth with its sole corporeal reality. Dasein is one with its world; it *is* this world. Its being is a being-*world*: Dasein-cosmos—an assemblage swarming with points, encounters, events, and other worlds. Simultaneously connected to all these points and events, Dasein irradiates, and the world is studded with its many stars. In the end Dasein is perhaps best described as an event-world, as a constellation or a stellar configuration: Dasein-star, Dasein-spider. Not an ego, therefore, nor even a consciousness, a *noesis*, but a triptych, at the joining of which a present, my present is constituted. And if I can say “I,” the ego in question is not an I-point, but an I-world, not a self-present ego, but an I-verb or an I-event.

One with its world, Dasein is not in it in the way in which water can be said to be in a glass. It is not contained in it. Rather, it *is* this world, it exists it. This means: it opens it as it opens itself to it. Yet it is nothing other than this opening, this spacing or clearing: Da-sein, or the “there” of being, its opening or its disclosedness. And it is with a view to designating this originary and ineliminable operation, this primitive and constant bursting open, that Heidegger reactivates the old and venerable word “truth,” *a-letheia*. To say that Dasein is in the world, that it exists the world, is tantamount to saying that it *inhabits* it. But not as proprietor. Only the bourgeois lives in the world in this way, only he

aspires to possess it. But only he who inhabits the world as truth-event, Heidegger tells us, inhabits it genuinely. To be in the world is not to be in the cozy interior of one's home. It is rather, and paradoxically perhaps, to be outside. Heidegger's Dasein inhabits the world as a wanderer and a seeker: it unfolds there and navigates it, it traverses it and roams within it. Such is the reason why Heidegger claims that man is primarily not at home (*unzu Hause*) in the world, and why what he calls the familiarity of everyday existence is precisely the covering-over of this originary unfamiliarity. But beneath the tamed world of everyday existence simmers the primitive beauty of raw existence.

Yet if Dasein coexists in all these points, if it is indeed dispersed throughout this nexus or this web that grows and moves in different directions in such a way that it has no actual physical center, Dasein is nonetheless not simply randomly disseminated, lost in this open and primitive landscape. For this space is not infinite. If the world of Dasein is indeed a horizontal plane, an incessant to and fro, a pro- and retro-ject and an irradiated world whose every point and line are rays of being, this world is not without a horizon and a closure. If Dasein is essentially nomadic, it is because, from the very start, it is swept along by this horizon, because it is from the outset there, on the horizon, unfolding and orienting itself from out of this horizon; it is there, on this line that is always to come, and yet so absolutely real, that the gaze of Dasein begins to settle, slowly bringing everything into focus from out of this originary distance. The world worlds, time temporalizes itself, being unfolds (*das Sein west*) not from a source point, the present, but from a horizon, a line of flight: from death. Why "horizon"? Why "line of flight"? Because, Heidegger insists, death is a never actualized possibility, fleeing ahead of us, even when we anticipate it; at the same time, though, death is this possibility that is always there, impending, imminent, even when it is not thought of. It is through death that time escapes the present, and that being exceeds chronology. The time of being, being *as* time, is not the succession of "nows" with which it is so often equated, because it unfolds from a possibility which is forever possible, a possibility which will never become actual and will never reintegrate the order of Chronos. Hence being unfolds primarily as pure possibility, in the form of a relation to a moment that is never going to be present, and for which Heidegger reactivates the word *Augenblick*, designating thereby the true point of contact between future and past. The instant is not the moment. The instant is only of being: it is the outside-time that is real time, pure future, *Zu-kunft*, to-come. Time is finite, Heidegger insists, thereby doing away with the idea of the infinite time of succession. And it is from this horizon, against which existence projects itself and from which it unfolds, that time unfolds as the otherwise than present. The meaning of being is not presence, or actuality, therefore, but pure possibility or virtuality.

On this originary temporality Heidegger grounds the phenomenon of history (*Geschichte*). History needs to be distinguished from the mere chronological conception of time that underlies our ordinary sense of history and of historiography (*Historie*); the time of the event of being needs to be clearly distinguished from the essentially successive time of "facts." Yet this is a very delicate and complex question. Why? Because, first of all, Heidegger's concept of history, as developed initially in *Being and Time*, is, as I have already suggested, itself subordinated to what he calls originary temporality, which designates the very event of being itself, and is perhaps best described in terms of becoming. If being, or Dasein, is historical in the ordinary sense of the term, if, in other words, events seem to take place chronologically within history, and if history can be seen as the succession of events that occupy time conceived as present, it is only on the basis of an abstract or fallen understanding of an originary historicity of time, characterized first and foremost by its ecstatic and finite nature. Chronology, and the *Historie* that articulates it, Heidegger claims, are only the visible side of a primordial historicity which, while always operative, nonetheless remains in excess of its actualization. Thus, the event of being is never fully realized or exhausted in the worldly events that unfold in the present tense. If history is indeed conjugated in the present indicative, historicity, on the other hand, constitutes this present that cannot be located, the present that unfolds between an immemorial past and an absolute future and that resonates with echoes of a manifold of coexisting epochs. The time of being or of becoming is not that of presence, but of subterranean and trans-epochal correspondences, the time of echoes that bounce off one another, to the point, perhaps, of constituting a secret history.

Yet the problem that Heidegger faces is that this temporalizing characteristic of the event of being is indistinguishable from existence as the very site of this happening. From this it follows that the vector or the carrier of becoming is existence, as the incarnation of being or the advent of the truth of being. And it is precisely in his effort to think history through to the end that Heidegger progressively turns away from ecstatic temporality to the time of being as sending and destiny. Things are further complicated by the fact that it is precisely in the context of this move from the problematic of fundamental ontology to that of the history or the destiny of being—being as destiny—that Heidegger introduces most forcefully that concept which can be partly translated as event, namely, *Ereignis*. And it is here that the history of being is granted a certain necessity: not a rational necessity, such as the one exposed by, say, Hegel, but an ontological or structural necessity, a necessity linked to the play between truth and untruth, or between concealment (*Verborgenheit*) and unconcealment (*Unverborgenheit*), in the very happening of being. Thought as sending, being is not turned back into or made to originate from a substance or

a thing. Rather, it is process, operation. Yet it unfolds, and this means that it sends and destines itself only by withholding and withdrawing itself; it means that it inscribes itself only by effacing or erasing itself. And it is this very hiatus, this very difference, that makes history by opening up its domain of truth. And this is why the question concerning the “meaning” of being becomes the question concerning the “history” of being.

II. The Duplicity of Da-sein in *Contributions*

Beginning in the 1930s, particularly in *Contributions*, Heidegger begins to hyphenate the word Da-sein, thus pointing ever more forcefully to the verbal presence of being in the word, and to the primarily adverbial function of that word. As a question, then, Da-sein is permeated by a certain duplicity or a twofold tendency that I want to trace and analyze. Even though I shall ultimately be concerned more with developing only one side of this twofold sense of Da-sein, I should emphasize from the start that they are coextensive and interdependent. Now, in what does this duplicity consist? As we have already seen, the term Da-sein refers not just to the adverbial, pre-individual quality of the event of being, but also and, at least in *Being and Time*, coextensively and coincidentally, to a specific being, that being which, in the words of Heidegger himself, has an ontical priority, one based not on some supposed superiority or on the possession of some extraordinary faculty, but on the fact that existence is the very ἀληθεύειν or disclosedness of being:

When we talk in an ontically figurative way of the *lumen naturale* in man we mean nothing but the existential-ontological structure of this being, that it *is* in such a way as to be its “there.” To say that it is “illuminated” [*erleuchtet*] means that *as* being-in-the-world, it is cleared [*gelichtet*] in itself, not through any other being, but in such a way that it *is* [and this “is” is to be understood transitively] itself the clearing [*Lichtung*]. Only for a being which is existentially cleared in this way does the present-at-hand become accessible in the light or hidden in the dark. By its very nature, Dasein brings its “there” along with it. If it lack its “there,” it is not factically the entity which is essentially Dasein; indeed, it is not this being at all. *Dasein is its disclosedness* [*Erschlossenheit*].⁷

It is this aspect of Da-sein that so often, and particularly among certain early French interpretations of Heidegger, became prominent and allowed *Being and Time* to be understood as a kind of existential philosophy or philosophical anthropology.⁸ But this misunderstanding was partly due to Heidegger’s inability—inherited, perhaps, from Husserlian transcendental phenomenology, despite all his efforts to break free from it—to distinguish what he will later explicitly identify as the “truth” of being from the mode of being of any specific being: “In *Being and Time*, Da-sein still stands in the shadow of the ‘anthropological,’ the ‘subjectivistic,’ and

the ‘individualist,’ etc. — and yet what we have in view is the opposite of all this.”⁹ In the 1920s, then, the adverbial, pre-ontical, pre-categorical dimension of the “there” of being coincides absolutely with the being that exists, that is, with this being for whom, in its very being, its own being is at issue. In other words, existence (*Dasein*) is the *Da* of *Sein*: existence is the “there,” the site or the truth of being — and it *is* so precisely insofar as it ex-sists, that is, insofar as, reaching out into the open, projecting itself into the future, it always comes back to itself as to what it has been, thus disclosing a present that is anything but a mere instant, a point stretched along the line of time. Similarly, being *is* or unfolds as this ecstatic clearing, as this operation of temporalizing that is simultaneously and coextensively a spatializing, an *Einräumen* or a making-room, the clearing of the space whence things emerge and a world is constituted:

What is primarily “true” — that is, uncovering [*entdeckend*] — is *Dasein*. . . . [H]ence only with *Dasein*’s *disclosedness* is the *most primordial* phenomenon of truth attained. . . . In so far as *Dasein* *is* its disclosedness essentially, and discloses and uncovers as something disclosed to this extent it is essentially “true.” *Dasein* is “in the truth.”¹⁰

In the 1920s, then, this two-sidedness does not yet have the character of duplicity. Rather, the two sides coincide to the point that Heidegger does not even envisage the possibility of their being a truth of being prior to and independent of not just beings in general, but existence itself as a privileged being. And yet, as §44 of *Being and Time* clearly indicates, what is at stake in the very use of the term *Dasein* is first and foremost the “there” of being, or the “how” of its unfolding. This is what, from the very start, Heidegger will have been after. As such, *Dasein* is not so much the origin of the question of being as it is its response. And if it can question in the direction of the truth of being, it is first and foremost because it *is* it.

Now, a decisive evolution takes place in the 1930s and, most significantly perhaps, in *Contributions to Philosophy*. On the one hand, Heidegger isolates the thematic of the truth of being from the sole existing of existence, doing so in an attempt to wrest philosophy from any residual anthropologism and from the mistaken view that the early attempt at formulating the question regarding the meaning of being amounted to a philosophy of existence. In other words, this first gesture is an attempt to secure the pre-ontical, pre-predicative, or pre-individual field of beings. The question of *Da-sein* becomes that of the *Daheit* of *Seyn*, of the “thereness” or the “truth” of *beyng*. And insofar as this “there” points less to a “here” and “now” than to a dimension, indeed, the primary dimension of the unity of space and time, Heidegger refers to it as the region of the “between”:

The first allusion to *Da-sein* as grounding the truth of *beyng* is accomplished (*Being and Time*) in pursuing the question of man insofar as he is grasped as

the thrower of being and thus is removed from any “anthropology.” This allusion could give rise to and strengthen the mistaken view that, if Da-sein is to be essentially and fully grasped, it is to be grasped only in this relation to man.

However, careful consideration of the *Da* as clearing for self-concealing (beyng) must already intimate how decisive the relation of Da-sein to beings as a whole is, because the *Da* sustains the truth of being. Thought in this direction, Da-sein—itself nowhere placeable—moves away from the relation to man and reveals itself as the “between” that is unfolded by beyng itself as the open domain where beings tower up.¹¹

In a way, my only concern here is to show how the question concerning Da-sein moves away from man so as to reveal itself as the “between” in which beings tower up, and how, ultimately, the “between” in question is understood as the originary rift, scission, or fissure that joins things together into a single world. At the same time, the being once equated entirely with both the adverbial and nominal aspects of Da-sein is re-instituted and re-interpreted in the light of this new sense of there-ness, as a *possibility* for humanity, indeed as the utmost possibility—this possibility through which, in Heidegger’s own terms, the there is itself grounded or instituted, preserved and sheltered:

Da-sein—the being that distinguishes a human *in its possibility*; thus Da-sein then no longer needs the addition “human” [as in “human Dasein”—a formulation occasionally used by Heidegger in the 1920s]. In what possibility? In its utmost possibility, namely of being the founder and preserver of the truth itself.¹²

In this latter sense, then, Da-sein becomes the *Wahrung* or the preserving of *Wahrheit* or truth, and not truth proper. Da-sein is the name that distinguishes the human in its *possibility*. Whereas, in the first and, I would suggest, most decisive adverbial sense of Da-sein, the emphasis is on the there or there-ness of beyng (on being-*there*), the second sense emphasizes the being of the there (*being-there*), where being is to be understood as grounding and preserving the there in a being.

Now, even though I shall mostly be concerned with tracing the detail and the consequences of the analysis of the first sense of Da-sein (*Da-sein*), I still need to offer a brief exposition of the second sense of Da-sein (*Da-sein*), if only because they are, for Heidegger, absolutely indissociable, albeit not identical. But before turning to this, I want to identify and situate the way in which the first sense of Da-sein comes to be developed for itself.

1. *Da-sein*

Much of the shift that takes place between *Being and Time* and *Contributions* is motivated by the question concerning the possibility of accounting

for a truth of being that would no longer coincide with any singular, privileged being, a truth of being that would be free of any ontical determinacy, or that would be absolutely pre-individual or pre-ontical, even if this truth happens or takes place only in and through beings, even if the operation of truth coincides with the advent of beings in the world. It is always alongside beings that truth comes about. What this does not mean, though, is that truth is a function of beings. This is the direction which, on one level, the reformulation of the concept of Da-sein seems to be taking in the 1930s in general, and in *Contributions* in particular. More specifically, this is the direction or the side of Da-sein that the fifth panel of Heidegger's polyptic, entitled "Grounding," is concerned to trace. The very movement of that fifth panel is one of deepening: it contains three headings ("Being-there," "Truth," and "Time-Space") and five sections ("Being-there and Projection of Beyng," "The Da-sein," "The Essence of Truth," "Time-Space as the Abyss," and "The Essence of Truth as Sheltering"). Under each of these headings, the same, initial problem is at stake; "Da-sein," "truth," and "time-space" cannot be seen as different things or problems, therefore, but as the deepening and the natural unfolding of a single problem. Such is the reason why, in pursuing this itinerary in the third part of this chapter, the section on time-space will constitute the highpoint of my own remarks. It is this direction that I shall want to analyze in greatest detail.

Da-sein, as Heidegger already made clear in the 1920s, is not to be understood as the old *existentia*, as designating the actuality of beings. Rather, it is to be understood ontologically, from within the ontico-ontological difference, as the very "there" of being itself, as the very way in which being is or unfolds, clears a space and a time for beings to emerge and assemble themselves in a concrete historical configuration. Far from designating a mere here and yonder, then, the *Da* means "the clearing of beyng itself, whose openness first of all opens up the space for every possible here and yonder and for arranging beings in historical work and deed."¹³ In short, the *Da* names the operation of truth understood originally, as the unfolding of the Open. And such an operation ultimately points in the direction of the origin of space and time, of the event of what, in *Contributions*, Heidegger calls the event of time-space. This is Da-sein in the sense of *Da-sein*.

In §214 Heidegger likens this openness to the emptiness of a jug. Not, however, in the sense in which it would be the negation or the absence of any particular thing, but in the sense in which this *Da* that is neither here nor there, nor even everywhere, is at the same time the "where" of all things, prior to any "here" and "now." As such, the "there" in question is not unlike the emptiness of the jug, around which the jug is gathered. The nothingness, the absence that characterizes truth is like the silent and invisible frame that sustains the walling of the walls and the edges of

the jug. These are merely the efflux of that originary open that lets its openness unfold by calling forth such a walling (the form of the container) around and unto itself. In this way the essential unfolding of the open radiates back into the enclosure. We must understand the essence of the openness of the there—the “work” it does—in similar terms, only more essentially: the encircling walling of the there is nothing thingly or extant; it is not itself a being, but it is *of* being itself—it is the trembling [*das Erzittern*] of *Ereignis* that echoes through the self-concealing. The *Da*, then, is this emptiness, this apparent void at the heart of things, this absence that is not the negation of presence, but the originary absence at the heart of presence, an absence, then, in the sense employed by Mallarmé when describing the word “flower” in the poem as the “absent of all bouquets.”¹⁴ It is less the absence or lack of beings than the medium or the milieu of beings, itself in excess of beings; it is, as it were, the air that beings breathe, their ether, the ground from which they spring, their invisible share that traverses and sustains their visibility. Truth is nothing other than the spreading of the air, the releasing of the ether; it is not a thing, a being, but pure essencing, the unfolding of its essence. Yet the *Da* is never without beings: in them, it is at once sheltered and concealed. As a power of clearing in which this power itself is concealed, *Da-sein* is always something other, that is, the coming onto the scene of the presence of some thing, in whose presence truth is at once concealed and sheltered; and in thus becoming a thing, the *Da* comes to take the form of self-hood, self-identity: it becomes a noun. *Da-sein* is not *just* a being, but it is *also* a being. Such, then, is the ambiguity of *Da-sein* that its adverbial form will have always already slipped into the nominal; the pre-individual or pre-ontical will have always already begun to transform itself into its opposite: the being of the there is at once the coming into being or the individuation of a here and now, of an individuated being the origin of which is, because of its non-apparent character, soon if not immediately forgotten. What is apparent, what appears, is only the visible side of the invisible essence of truth. Such is the reason why phenomenology, in becoming ontological, in being attentive to the truth of being and not just to beings in truth, becomes a phenomenology of the inapparent, a phenomenology of the invisible. Only then, almost inevitably, only when beings stand in the there, do they become re-presentable, does truth in the metaphysical sense (as correctness) become possible, if not altogether inevitable. As Heidegger himself suggests, “correctness is an unavoidable offshoot of truth.”¹⁵ Truth will have always already, structurally and inevitably, begun to slip into its own erasure. Metaphysics will have always already begun to take place, not as an error, but more as an illusion—the visible or physical illusion according to which the world begins with beings, and thought itself with the question concerning the beingness of such beings.

As for *Seyn*, it is now presented as this forever re-initiated, re-instituted strife between clearing and sheltering. As Heidegger himself insists, truth is not just clearing: it is the clearing in and through which something else, something equally originary, namely, un-truth or concealing, is sheltered. Truth, then, is this co-originary event, the event of the strife itself. And the history of *beyng* is nothing other than the history of this counter-resonance, of this echo that resounds from out of the strife itself. Now, on Heidegger's reading, this history has been unidirectional thus far: the balance has consistently tilted on the side of the clearing, of what Heidegger also calls "the world"—never encountered as such, for any such encounter presupposes that we also encounter the abyssal ground whence the clearing clears: *Verbergung*—and of what is being lit up and exposed amid its reign. The balance has thus far tilted in favor of evidence, of the visible, of *what* towers up from within truth, thus allowing metaphysics to unfold as the questioning concerning the beingness or whatness of beings. Metaphysics' gaze is saturated with beings, so imbued with and overwhelmed by the sheer presence and visibility of the world that it cannot "see" the invisible, which is, as it were, the other side, the lining of the visible. Metaphysics can see only what is true—what shines in the midst of truth—and so remains blind to truth itself, to the essence of truth as the clearing that shelters the concealing. But this does not mean that the balance cannot be made to tilt in the other direction, that thought cannot become alive to the invisible and shift its attention from the innerworldly to the origin of world, to earth. It doesn't mean that it cannot dwell in this in-between, in this immemorial struggle that sustains history and the destiny of thought. This is what the other beginning announces: an absolute and radical shift, a turning within the strife itself, such that not just world, and things within it, but earth itself is brought into the task of thought. By earth, we need to understand the pre-worldly origin of world, the origin of presence that is closest to presence, its reverse or lining that is absolutely different from it. Earth will have always exceeded world. Yet earth also always falls short of world. It is simply otherwise than world, only and always preserved and sheltered within it: the unfolding of the earth is the manifestation of world, and this manifestation, the coming about of the visible, is the eclipse of earth. Earth has always eclipsed itself before world, but the very shining of world itself has its source in the invisible light of earth. Thus, it takes a special kind of eye to see the light of earth radiating at the very edge of the world, intimating the presence, albeit infinitely discreet and non-visible, non-locatable *in* space and time, of a force of withdrawal whose retreat and refusal (*Versagung*) is far more decisive than any worldly event and far more potent than the force of world itself. At least this would be the case were this reverse side or lining not so much behind beings as between beings and ourselves; it is the originary between on the basis of

which beings and we belong, the medium that brings us together in a sort of ontological affinity:

The there is the open Between, clearing and concealing/sheltering for earth and world, it is the Middle of their strife and thus the place of the most intimate belongingness [*Zu-gehörigkeit*], and so the ground for the to-oneself [*Zu-sich*], the self [*Selbst*] and selfhood [*Selbstheit*].¹⁶

Likewise, if this dimension is not in space and time, it is because it coincides and this is something on which we will need to dwell further—with the happening of the there as the unity of time and space.

And so, for us, on the verge of the other beginning, it is a question of knowing whether we are able to relate to beings with the reservation and tentativeness that alone can do justice to the refusal; whether, in relating to beings in truth, we can simultaneously take over the concealing that echoes and reverberates through them, and thus transpose ourselves into its domain of appropriation, and thus become proper selves. But whenever we strike beings with the sole wand of subjectivity, they can only let sound the emptiness of a reified world present for us alone. If, on the other hand, prior to any thesis, we open beings as a whole to its silent, discreet origin; if we approach it with the sort of reserve that allows its lining to shine forth, then it becomes rich with the depth of a dimension in which we ourselves participate from the start and with an abyssal ground from out of which the clamor of being resounds. It is a question of knowing whether we are able to stand in truth thus redefined, to sustain the event of truth as the clearing that shelters an originary concealing, a question of knowing whether such a stance can be achieved in thought, in poetizing, in art and architecture, etc. This question can only remain open. No decision, one way or another, can be made for us. (And in this context, it is worth recalling that Heidegger himself quite obviously and quite problematically believed that such a stance had been achieved in Hölderlin's poetry, and in such a way that this poetry constituted a future or a promise for humanity, beyond the humanity and the humanism of metaphysics.)

The early formulation of truth—truth as the clearing for the self-concealing—can now be made more faithful to the essence of truth:

A clearing grounds itself for the self-concealing: self-concealing and self-sheltering of beyng in the clearing of the there. Beyng unfolds essentially through self-concealment. Ereignis is never open and evident, like a being, like what is present.

Er-eignung in its turning is made up neither solely of the call [onto Dasein] nor solely of the belongingness [to being], is in neither of the two and yet resonates deeply in both. And the trembling of this resonance in the turning of Ereignis is the most hidden essence of beyng. This concealing and sheltering needs the deepest clearing: Beyng "needs" Da-sein.¹⁷

Da-sein is not complete without *Da-sein*. It is in *Da-sein* that truth is taken up and preserved as such, in its full determination as *lichtende Verbergung*, as the clearing in which the clearing is at once sheltered and concealed in beings.

2. *Da-sein*

Having wrested the problematic of the truth of being from that of the being of a specific being, the ontico-ontological privilege of which was established as early as in the Introduction to *Being and Time*, having reopened the question of the “there” of being beyond and prior to the sole existing of existence, the question is one of knowing what becomes of this being hitherto characterized as the being that *is* or that exists being, as the operation of time that coincides with the event of presence. How are we to characterize this being that each and everyone of us *is*, if no longer in terms of the how of being as event—as its truth? The question is one of knowing what becomes of “man”—and, for want of a better word (unless this word, for the first time, were to find its proper meaning), the noun reappears—in his essence. Having to a certain extent, if not altogether undone, at least loosened the tie between truth and man, having begun to separate the “there” of being from the initial reinscription of man as the existent, Heidegger is now faced with the necessity of reintroducing the metaphysical name “man” to designate who we are. Yet a certain duplicity or ambiguity pervades in the use of that metaphysical concept. For, on one level, by “man” Heidegger means nothing more than metaphysical man, that is, man as understood and conceptualized by metaphysics. This is the man who, in a certain sense, relates to being, is still held within the grasp of being, but in such a way that, for him, the truth of being never comes into view. This is the man who is most distant from being, turned away from its truth, even though this turning away from truth presupposes truth, even though man is always in truth. To characterize this man, Heidegger forges a most evocative concept that counterbalances that of *Da-sein*: *Weg-sein*, or being-away. Metaphysical man is man as the “away,” the being who is farthest from truth, most turned away from what is most proper to it, the improper mode of being of man: “Being-away as denial of having been exposed to the truth of being.”¹⁸ On one level, then, “man” is the equivalent of the last man referred to by Zarathustra, that man who will never be able to overcome himself without undergoing a complete and radical transformation. The man of “the other beginning” presupposes the sacrifice of the “last man,” the man of the end of “the first beginning.” On a different level, and at the same time, “man” also designates this possibility, this future for humanity: *Da-sein* in the sense of *being* truth to the full. In this latter sense, man is

to be understood as a task and a goal, a problem, almost, and one that Heidegger expresses in the following terms: "How does man, becoming more being, place himself back into the Da-sein, thus grounding it, in order thereby to stand out into the truth of beyng?"¹⁹ In this particular sense, then, Da-sein names the site of a problem as well as the answer to the question regarding the possibility of *being* this Da-sein in which it is already situated. In this respect, Da-sein can be seen as a repetition of Da-sein, yet a repetition in and through which the "there" is made to be as if for the first time, and is thus grounded: "Da-sein is a way of being which, in that it 'is' the there (actively and transitively, as it were), is a unique being in accordance with and as this outstanding being [*Sein*] (it is the being that *is* the essencing of beyng [*das Wesende der Wesung des Seyns*])."²⁰ Da-sein, then, far from referring to the actuality of things, or even to the subjectivity underlying the possibility of the representation of things in their actuality, far, even, from being something we encounter before us or within ourselves, is something that we can only leap into. In the leap, the openness of the self-concealing is held open; it is grounded. We need to understand this paradox of a leap that is an operation of grounding. And yet, this leap is a leap into the already given and granted—given and held in reserve as a—indeed, the—possibility, indeed, the uttermost possibility for man. And so, in thus enacting the leap, what is one's ownmost is truly ap-propriated; it becomes ownmost. This leap is not a leap into something else, into something foreign, but a leap into the own and the proper. This is the leap Heidegger associated with the movement of resolute disclosedness (*Entschlossenheit*) in *Being and Time*, the leap of Dasein into that which, from the start, belongs most properly to Dasein, the leap in and through which, ap-propriating what is most proper to it, Dasein becomes its own self. Yet, onto-historically, the ownmost has become the most foreign, so foreign that the leap itself does not even come into question. At the same time, we must understand the extent to which this leap into the proper is a leap into the other to which we belong from the start. Only in thus returning to that to which he belongs from the very start does man become himself. Only thus is he a self:

Selfhood as the essential unfolding of Da-sein springs out of the origin of Da-sein. And the origin of the self is proper-ty [*Eigen-tum*]. This word is taken here in the same way as the word principal-ity [*Fürstentum*]: The reign [*Herrschaft*] of appropriation in the event of appropriation. Propriation [*die Eignung*] is at once ap-propriation [*Zueignung*] and trans-propriation [*Übereignung*]. Insofar as the Da-sein is appropriated to [properly given to: *zu-eignet*] itself as belonging to the event of appropriation [*Ereignis*], it comes to *itself*, but never as if the self were some thing merely objectively given, which thus far had simply failed to be attained. Rather, Da-sein first comes to itself when the appropriation to the belongingness [to *Ereignis*] becomes at the same

time a transpropriation over to Ereignis. Da-*sein*—standing fast of the there. Proper-ty as the reign of propriation is the occurrence of the joining together of ap-propriation and trans-propriation.²¹

Selfhood properly understood is never an “I,” but belongingness to the Da or the truth of beyng. Man *properly* understood is man understood as the proper-ty of beyng. As Heidegger repeats time and again: man belongs to beyng. But does this mean that man is the possession of beyng? In no way, for the reason that beyng itself is only to the extent that it destines itself to man, that it “needs” man in order to be properly *there*: man is the proper name of beyng. Man is thus indeed the proper-ty of beyng, but proper-ty is the event of truth, the taking place of truth in which beyng comes to be in truth only in turning itself toward man. The event of reciprocal appropriation is the event in which each term is what it is in being trans-propriated over to the other, in being ex-propriated for the other. Thus, if man is indeed destined or condemned to beyng, it is as if to its own freedom, that is, as to the realization of its ownmost and uttermost possibility, as to its own promise. Man is destined to beyng, yes, but to this beyng which will have been given to it from the start. And so, in a way, man has no other choice but to be this being: even when he is not it (when he is “away”), he still is it, only poorly, improperly. What man always and already is he can be poorly or richly, intensely or in sheer loss. But it is only in *being* beyng that man can be to the full—be a Da-*sein*. It is only when turned toward beyng and ap-propriated by beyng that man enters the domain of his proper-ness and finds his proper stance; for then Da-*sein* characterizes man as the being who stands firm within the truth of beyng, as a sustaining and a standing fast (*Beständnis*) of this truth. Only then does man truly ex-sist: he ex-sists only insofar as he in-sists, only insofar as he in-sistently sustains and endures the truth within which he has always already been thrown:

The there unfolds essentially; and, as that which unfolds essentially, it must simultaneously be taken over [*übernommen*] in a being: Da-*sein*. Hence: the insistent sustaining [*das inständige Ausstehen*] of the unfolding [*Wesung*] of the truth of beyng.²²

Primarily, therefore, Da-*sein* characterizes a stance: a stance similar to the one of existence developed in *Being and Time*, but not identical. In *Being and Time* existence designated the standing out into the open of this being who under-stood being; now man, and existence itself, are reinterpreted as a standing out within the truth of being, as standing into (*Inständigkeit*) that which has always already opened itself, and thus as an *Ausstehen* or a sustaining, a keeping open of the open. This stance that is a sustaining in and an enduring is further characterized as “grounding in creation.” And, throughout *Contributions to Philosophy*,

Heidegger mentions various ways in which Da-sein grounds and sustains this truth to which it is ex-posed: thinking, poetizing, building, suffering, sacrificing, leading, celebrating are all ways in which truth can be properly instituted.²³ It is only in grounding what has already been given, and is itself not a ground, as we shall see in the following section of this chapter, that *Weg-sein*, in turning to and re-entering, as if for the first time, that space that was already opened for it, becomes Da-sein. It is Da-sein brought to another power. Da-sein is nothing more than a repetition of truth, in which truth is there again, yet differently, and qualitatively so: this repetition makes all the difference. On one level, between *Weg-sein*—what Heidegger used to call *Uneigentlichkeit*—and *Da-sein*—what he used to call *Eigentlichkeit*—there is no difference. In the vocabulary of *Being and Time*, the latter is a “modification” of the former. And yet, on another level, there is all the difference in the world. For in this shift, which is best described as a leap, albeit a leap into that which has always already been opened up, a radical transformation takes place. As to whether it has already begun to take place, and how it might have taken place, Heidegger has a few things to say. But the important point here is to see how he is attempting to rescue a humanity based on the essence of man, an essence that consists in nothing more, but nothing else also than, an originary openness to the truth of being. He is attempting to rescue and invent a different humanity, one situated beyond the confines of that humanity which, unable to turn to the truth within which it is situated from the start, encounters only beings, and devalues them by representing, reifying, appropriating, packaging, and manipulating them—in short, by denying them the right to speak from the Open from which they themselves emerge. Metaphysics devalues beings precisely insofar as it cuts them off from their own ground, from this excess on the basis of which they will always be more than the mere objective presence to which they have been consistently and systematically reduced. Heidegger is attempting to reawaken a certain humanity, a certain history to this poverty, this defect that is nonetheless in excess of presence and of the reified representation of the world for which metaphysics stands. It is simply—but this simplicity harbors the greatest difficulty—a matter of uncovering, behind and beneath the economy of metaphysical representation and reification, itself also economy *per se*, that is, the economy of needs and artificially produced desires, an altogether different economy. This is perhaps the point at which we could begin to articulate a Heideggerian critique not just of “metaphysics”—for metaphysics, in Heidegger’s eyes, never was restricted to the texts of metaphysics, but referred to our history and our contemporary situation, to our age as the age of technics, the atomic bomb, unlimited industrialization, etc.—but of the much revered and nowadays simply unquestioned “global economy.”

This is the point at which we could begin to ask how economic priorities and social relations could be transformed, and radically so, on the basis of this no less radical and pivotal shift from the sheer presence and availability of a world reduced to the flatness of its visibility to the silent, invisible, and withdrawn, and yet, at the same time, absolutely decisive and even decisional depth of the world. Heidegger calls this depth "earth." The earth reminds us that we see *from* the invisible, an invisible that is not, therefore, simply the opposite or the negation of the visible, but the very shadow from which the contours of the visible emerge. The earth is everywhere where the visible itself is. Yet the earth withdraws in the visible. If there is a critique of Capital in Heidegger, this is where it would be found: like metaphysics, with which it is essentially attuned, capitalism wants nothing to do with earth. It wants unlimited access to the world. It wants things alone and dreams of absolute presence. So far as it is concerned, the world is only territory, its relation to things purely territorial. This is its connection with the world of animality. Its power to invest space is unlimited, its ability to territorialize without limits. And therein lies its force: it is the most formidable vehicle of metaphysics. In a way the question of Capital is the limit-question of and for metaphysics, since it accomplishes it. From this it follows that the fate of thought in the other beginning also implicates a critique of Capital. Now, such a critique of contemporary socio-economics could be envisaged only with a twofold restriction: (1) that it cannot be a question of opposing a rural, archaic, and pre-industrial economy to the metaphysical economy of "machination"; (2) that, in such an attempt, it cannot be simply a question of limiting ourselves to deconstructing *philosophical* texts; it must also be a question of analyzing and deconstructing specific situations.

Da-sein, then, as a modification of *Weg-sein*, names this possibility for man, this possibility that man really *is*. It is not just any possibility, but the possibility that designates man in his essence, in what the language of *Being and Time* would have characterized as his ownmost can-be or *Seinkönnen*. To characterize Da-sein as the ownmost possibility for man means that Da-sein no longer coincides with the there or with truth, but that that is what it *is* in a unique and singular way. Da-sein does not so much clear the "there" as take it up, repeat it, yet in such a way that, in this repetition, the "there," as what is most proper to man, is ap-propriated. This ap-propriation is a grounding and a sheltering of the proper to which man, from the start, is trans-propriated. And it is in this very movement that the essence, but this also means the transfiguration, of "man" takes place. The man that is being born in this event of appropriation is the other, future (*zu-künftig*) man, the man that is wholly different from that of metaphysics and its humanism, the man that has overcome the last metaphysical man. The future man, or the man to come, is not the man

who is announced, or promised, the man who *will* come. Nor is he, for that matter, the man whose coming is hoped for. Rather, he is the man who is already coming, approaching. Yet this future is not approaching from any present, albeit from a present that is not yet. Rather, it signals the “to come” within the human, the possible that is already there, yet the modality of which remains to be invented. Not some future awaiting man, then, some already secure present in the future, or even the possibility of this future present, but that which, in the present, comes to us from afar and ahead, intimating what we, as humans, are capable of. The future in question here sketches the contours of an altogether other history and other temporality, a history that is entirely heterogeneous to chronology, a future that in a way already was, and could coincide with, the present of the last man, with the possibly—and, I would want to argue, necessarily—endless history of metaphysics. A type, then, and a history that does not so much come “after” metaphysics as it interrupts it, abandons it, and opens onto other possibilities, those possibilities held in reserve in this excess or this reservoir—possibilities of thought, of action, of creation. But creation will be involved at every stage, as Heidegger himself recognized. Heidegger’s attempt to think the future, and the future as involving the possibility of a transformation, or a new beginning for the human, is remarkable and radical, in that it conforms to neither messianic nor eschatological time, neither to the time of a transforming event having taken place in time, nor to the time of ontological hope. And so, the figure in question here is neither Jewish nor Christian, nor even, for that matter, Greek in the classical sense formulated by metaphysics. The future is neither promised, secured in its promise by the figure of the prophet, nor revealed by the apostle as having already taken place. Despite Heidegger’s talk of “salvation” and “rescuing,” the temporal structure of this future is not messianic. Heidegger is attempting to delineate an altogether wholly different humanity, an altogether different set of possibilities. In this regard he remains profoundly influenced by Nietzsche’s quest for a sense of humanity beyond its metaphysical or Platonic-Judeo-Christian contours. Such is the reason why Heidegger, like Nietzsche, is so difficult to follow: can we even begin to think such possibilities, to think outside the space and the time ascribed to the human from the depths of our (Western) history? Similarly, and perhaps even more intriguingly, the god to whom Heidegger refers, in what constitutes an extension of Hölderlin’s own poetic and historical quest, is a god that is not reducible to any of its classical Greco-Judeo-Christian roots. Who can this god be? Can we still call god the “being” (but is it a being?) who has severed all links with the divine as it has been thematized throughout Western history? We shall return to this question, for it is only by rethinking Being as *Ereignis* that we can venture a response.

Now, as we have begun to see from the quotation I cited a moment

ago, the re-inscription of the essence of man as the grounding of the there and the preserving of truth also entails a reworking of being itself, in its co-belonging with man. For it is not just the human that occurs in the relation to the truth of being: this truth is itself turned toward the human; it addresses itself to it and calls for it. There is a certain reciprocity, indeed, a co-responsence between being and man. And man's responsiveness to being is also the measure of his responsibility toward it: man is responsible for being insofar as being addresses itself to man and, in thus addressing it, calls it forth. So, in the end, the event of being is not exhausted in the how of its being, in its modality. Rather, this event is qualified further as one of ap-propiation, and the how of its unfolding, the modality of its gift or its donation, is extended into the question concerning to whom this event is addressed. In other words, the adverbial side of the question of being—*wie west das Seyn?*, "how is beyng?"—is immediately extended into a nominal dimension, in which "man" comes to feature most decisively, as the being in and through which the truth of being is ap-propiated, brought into its own, preserved and sheltered as such—in short, as the proper noun or the *who* of being:

Who is man? The one whom beyng needs, to sustain the essential unfolding of the truth of beyng.

But as so needed, man "is" only man insofar as he is grounded in Da-sein, i.e., insofar as he himself becomes founder of Da-sein, in creating.²⁴

Da-sein, then, is at once an adverb and a noun, at once the *topos* or the site of the truth of beyng and its proper noun: the essence of man is to be the properness and the property of beyng. While Da-sein "belongs" to beyng, beyng "needs" man in order to unfold. The relation is one of reciprocal and co-originary implication, a relation of co-responsence. It is a privileged relation indeed. Heidegger describes man as the sole "intimator" of the truth of beyng, thus bringing him into a relation of intimacy with the truth of beyng, putting him in a unique and singular situation among beings, from which he is separated by an ontological abyss:²⁵

Does intimation [*Ahnung*] of beyng come only to man? From where do we know this exclusivity? . . . Man intimates [*ahnt*] beyng—is the intimator of beyng [*der Ahnende des Seyns*]—because beyng ap-propiates man to itself—and indeed in such a way that the event of ap-propiation first needs something that is its own [*ein Sich-eigenes*], a self [*Selbst*] whose selfhood man has to sustain in *that* in-stance [*Inständigkeit*] which, standing within the Da-sein, lets man become that being that is encountered only in the who-question.²⁶

Man, then, is the self of beyng, its subject: if the question proper to man is that of his "who," it is only and precisely insofar as he is the proper noun in which the event of being is extended and the place at which this

event arrives; if the question that is most adequate to the being of man is that of its “who,” not its “what,” it is because this being points to an essence that is not quiddity but *Wesung*, the essence of the truth of being, the event of presence, in which beyng destines itself and arrives at the status of selfhood in man understood as the *Wahrer* and the *Gründer*—in thought, in deeds, in art and poetry—of this truth. But this means that man has no self outside this being-self of an other; man has no proper self other than being the self of an event that exceeds him through and through: man is *of* the other. As for beyng, it is the other of man. Yet this otherness is what constitutes the essence of man. Conversely, beyng has no self outside the birth of man: the coming into its own of beyng is the coming into being of an other (man); beyng is only and fully in being an other. Being “needs” man, and man “belongs” to beyng—the two belong to one another, call for one another, and call each other forth: “Beyng needs man in order to unfold; and man belongs to beyng so that he can accomplish his utmost destiny as Da-sein” (251). *Ereignis*, Heidegger tells us, names this mutual and reciprocal relation: “*This counter-resonance [Gegenschwung] of needing [des Brauchens] and belonging [des Zugehörens] makes up beyng as Ereignis.*”²⁷ Now, this relation of *Gegenschwung* is not to be mistaken for one of op-position and ob-jectivity: beyng does not stand for man *gegenüber*, that is, as a *Gegen-stand*. Man is not a self-positing, self-standing, autonomous substance. Rather, man is ap-propriated by beyng understood as the event of appropriation and, in being thus ap-propriated, reveals himself as Da-sein, or as the utmost *possibility* for man, this possibility in and through which what it means to be human is for the first time envisaged in its essence, which is itself nothing human. This, then, is how man belongs to the event of ap-propriation: as to that which, far in excess of the human, nonetheless continues to reach (toward) it, as this gift which the human properly owns and which defines it in its ownness. The human is a self, is itself, only to the extent that, essentially open to that which exceeds it, and situates it, it grounds this excess, brings it to stand. In no way, therefore, is it a question of hailing the figure of the Creator (whether as Thinker or Artist, Statesman or Prophet), of perpetuating an aesthetics or a politics of the genius. Any such theory relies on a conception of the self as subject, as the absolute point of departure at the origin of the process of creation. In Heidegger’s conception, by contrast, the creator is sacrificed in the process of creation, effaced behind the work he or she “produces.” But it is precisely no longer a matter of production; it is now a matter of *gathering*, which is precisely the work of the work, or the deed itself.

Similarly, and reciprocally, in the event of ap-propriation as the relation of counter-resonance between man and beyng, beyng unfolds genuinely and properly only insofar as it ap-propriates the human, that is, only to the extent that it sends, destines, and gives itself to the human as to this

destination at which it arrives *as such*, in its truth. For this is where beyng is truly itself, its own self, where it unfolds essentially. This, then, is how we need to understand the fact that beyng “needs” man: not as a relation of dependency born of a structural lack, but as a relation of generosity born of an irreducible plenitude. Being approaches man not as a supplement that will fill up its own emptiness, but as the being that is open to the overflow of Being’s plenitude. Being *is* only to the extent that it is greeted and taken in; this greeting is a gathering: in it, being gathers itself; man designates this utmost possibility of gathering for being, *logos* in the true and originary sense of a word and a thought that gathers. This is the point at which the unity of the human and of language comes to be thought on the basis of the unfolding of beyng, thus redeploying the ancient definition of the human as the animal with *logos* in an altogether different direction. Like the human, of which it is the utmost creative possibility, and this means the genuinely historical possibility, language unfolds in the essential unfolding of beyng.²⁸ All originary language (as *Sprache* and *Dichtung*) and art, all creating as grounding, whether in words, works or deeds, is *logos*: a gathering of the essence of beyng, a site of truth.

In his “Der Spruch des Anaximander,”²⁹ from 1946, Heidegger will go on to develop his understanding of *brauchen* in greater detail, and to lift the ambiguities that are still surrounding his use of the word in *Contributions*. *Brauchen*, or rather *der Brauch*, he suggests in that text, is the German word that best captures the τὸ χρῆσθαι that opens the fragment by Anaximander interpreted by Heidegger. Leaving aside the question of the legitimacy of Heidegger’s “translation,” let us look at how Heidegger himself understands the verb *brauchen*, which ordinarily means to need, but also to use, use up, or find a use for. All these senses, Heidegger suggests, point back to one, common, and underlying sense, that of “letting something present unfold within presence as this present thing” (*etwas Anwesendes als Anwesendes anwesen lassen*),³⁰ of “handing its own essence over to something [*etwas seinem eigen Wesen aushändigen*] and withholding it in the preserving hand as this thing unfolding within presence [*es als so Anwesendes in der wahren Hand behalten*].”³¹ The *Brauch* is thus the gift of the proper, the gift of presence and of essence with which every thing is endowed. In this sense, and as *Contributions to Philosophy* makes quite explicit, beyng does not “need” just man, but all beings. And Heidegger brings the essay as a whole to a close by asking, “What if being, in its essential unfolding, *braucht* [this means: needs, but also hands over and holds within itself] the essence [*das Wesen*] of man? If the essence of man lies in thinking the truth of being?”³² These questions themselves echo what Heidegger wrote some ten years before in *Contributions*, namely, that the essential unfolding of beyng “needs us, not only as beings who happen to be objectively present, but insofar as we withstand the *being*-there by enduring it insistently [*sofern wir das Da-sein ausstehend inständig*

bestehen] and by grounding it as the truth of *beyng*.”³³ Yet, though mutual and reciprocal, the relation between *beyng* and man is not symmetrical; the counter-sway within *Ereignis* does not designate a face-to-face relation: *beyng* is indeed in excess of all beings, including man, and his “need” of man is a need made possible by its essence alone, a need which, furthermore, does not so much presuppose the space of the human as it makes it possible.

The human being is different from other beings only to the extent that it is not indifferent to being, that it is open to the very difference between things and the Open whence things unfold; only the human being can “see” the invisible that sustains and traverses the visible, only it can experience the silence and the emptiness at the heart of the buzz of the world. Language testifies to this possibility. Language, as essential language, is precisely that in and through which this silence speaks. Art, too, testifies to this possibility, to this reality in excess of actuality, to this longing and this calling in excess of need. And how could that be, were it not for the fact that this Open, truth itself, were somewhat given to man, directed toward him? How could man open himself to truth, were it not for the fact that truth itself had already opened itself to man? Which is the share of being that falls to the human? In what capacity does man partake of being? Time and again, Heidegger will reaffirm the sense of *logos* or language as gathering, and the sense of the human as the being that gathers or shelters the Open as such. Man is the being at the tip of being, the point at which being in its difference from beings lights up. Thus, in the end, it is quite obvious that *beyng* does not “need” man in the way in which it needs, say, dogs or rocks. For it does indeed need those:³⁴ every being is at once a sheltering and a concealing of *beyng*; every being, in its individuated actuality, retains the trace of the event of presence that brought it into presence, and which is itself in excess of presence and actuality. Yet, in and through language, the human being is exposed to truth itself. If there remains a trace, not of humanism, but of anthropocentrism, in the Heideggerian account, it is irreducible. Heidegger has taken the phenomenological stance to its limit, to the point where the human no longer designates anything like an intentionality, a consciousness, or a lived body, but a pure possibility, a future, and where language is bent almost to the point of rupture. But there is another sense of being, and another language, for which the human does not figure in any prominent, polar way. This is being as it is in itself, and its language, mathematics, is that of the universe. This is the sense I shall develop in relation to Deleuze, and in relation to modern physics. The poem and the matheme are two irreducible intimations of being.

It would seem, then, that *Dasein* is at once adverb and noun, at once pre-ontical and ontical. This ambiguity has developed into a tension:

while part of the movement of *Contributions* is to wrest the question regarding the truth of being from that of any concrete individuated being, while part of this movement is a movement toward the pre-individual or the pre-ontic, the question of man reappears, precisely as a question concerning the essence of man; having, in a way, neutralized or displaced the question in *Being and Time* through the identification of man with the “there” of being, Heidegger’s reopening of the question regarding the truth of being also means reopening the question of man, re-introducing man. On one level, this is a loss compared with *Being and Time*: man was simply a solved issue, for it coincided absolutely with the advent of being. But now the question of man re-enters the scene, and the privilege granted in *Being and Time* is not so much called into question as it is displaced. It is actually reformulated through the rearticulation of the question of being as the question of *Ereignis*, as a question regarding the event of truth as an event of ap-propriation. Between man and being, there is now a relation of co-respondence in which man, particularly insofar as he thinks, creates, and poeticizes, receives the truth of being, grounds it in a work, repeats it in such a way that this truth is now preserved, sheltered in the work, in thought, or even in sacrifice. Man is now not so much the site of *Wahrheit* proper as he is the *Wahrer* of this *Wahrheit*. Man is characterized in terms of his capacity for openness to the Openness of being, in terms of his ability to greet and receive the gift of being, as the gift of what refuses itself, or resists for itself the very movement of actualization or coming into presence which it allows for beings. In thus turning itself to the in-visibility of the visible, man is drawn into the essential unfolding or its divine side, of the god. Being, in turn, is completely in truth when, having turned itself toward man, having called him forth, it becomes properly itself, becomes a self. In and through this operation, man becomes the proper name of being, the subject of the sending of being. And man gains his essence in being thus summoned and called upon, in sheltering the Open within which he dwells. In this process, man becomes his own, comes into his own. All of this is to say that the analysis is pulled in two different directions, which are not incompatible by any account, but which lead to different developments. Let me now turn to the adverbial reformulation of Da-sein, or to the *Da-heit* (there-ness) of *Seyn* as the *Ab-gründung* or the abyssal grounding that is grounded or instituted in the creative work of Da-sein.

Abyssal Being: On Time-Space

The question now is one of knowing the extent to which the spatializing and the temporalizing identified with Dasein as existence in *Being and Time* are called into question, displaced, or perhaps simply reinscribed in the light of the reworking of the question of being along the lines of the essential unfolding of truth. Indeed, having severed the link uniting the pre-individual Dasein with the existing being, the analysis of time and space that was complicit with the understanding of the truth of being as finite, ecstatic, and horizontal temporality must now be reopened. In what does the operation of being consist, if no longer in the ecstatic making-room for things from out of a temporal horizon of finitude? The operation in question is still that of space and time. On this level, nothing has changed: Da-sein still refers to the pre-ontical operation of spatializing and temporalizing from out of which beings come into their own, come to be as the beings they are. Moreover, the different “dimensions” of time are still referred to as ecstasies or as raptures (*Entriückungen*). But the operation no longer coincides with the existing of existence. It no longer coincides with what Heidegger once considered to be originary time, namely, meta-physical time, or the time of the being whose being consisted in transcending beings toward their being.¹ Existence, or rather man, is now situated within this event that is “older” than it, implicated in it in a way that is quite singular. Nor is this operation made to coincide with the time of nature or of the cosmos, whether it be understood as the circular time of Ptolemaic and Aristotelian physics, the linear time of Newtonian physics, which Kant integrates as the condition of the phenomenality of all phenomena, or even the space-time of generalized relativity that Einstein tells us is inseparable from space and that, neither

circular nor straight and infinite, is actually curved and finite. The time in question is neither that of existence, nor that of the cosmos, neither the time of metaphysics nor that of physics. With what does this operation coincide, then? And what, exactly, does this operation entail that was not contained in the analysis of *Zeitlichkeit* and of the *Zeitigung* proper to existence? Two significant differences will need to be highlighted. First, time no longer stands in a privileged position with respect to space, but in absolute unity—which does not mean identity—with it. Second, the horizontality or finitude of time articulated in *Being and Time* is not so much abandoned as it is displaced and reinscribed as a trait of being itself. Time—in fact, time-space—is *of* being. Does this mean that, in *Contributions*, Heidegger fulfills the program announced, but never completed in *Being and Time*, namely, that of revealing time as the meaning of being?

1. The “There” as Time-Space

The event of being is the event of being as the there. The there of being needs to be understood in terms of the clearing from within which beings take place and find a place—in terms of truth. But truth is an event, an *ἀληθεύειν*: something takes place, something happens, not as a result of some agency behind it, not as an effect of some cause, but as the event that precedes any agency and any doing, any cause and any effects. What takes place is place itself, the “Da,” or the clearing whence things emerge and come to constitute a world. The event of being is the taking place of place. In this respect, it is a unique and singular event, the event of all events. As such, being names the eventness of events: that which, in all beings, pertains to the event; this eventness that belongs to every being, and of which metaphysics, insofar as it begins with beings in their presence (in their arrival), is most oblivious. Not *an* event; not something which, according to the common understanding of the event, takes place in space and time and subsequently vanishes, replaced and erased by another event, but as the coming or the happening of that which does not cease to take place, as the inexhaustible and never fully actualized event of time and space. To speak of the event of being, or of being as event, is to speak of the primordial and always operative unfolding of the dimension within which events take place; it is to return to the primordial origin of time-space whence time and space unfold.

But, as Heidegger discovers in the 1930s and insists in *Contributions*, the event of truth, or the happening of the “there,” is not just an operation of clearing or disclosure. It is not simply an *ἀληθεύειν*. Rather, the operation of disclosure also coincides with a certain closure, and co-extensive with this clearing is its counter-tendency: concealing. More specifically, truth is the co-originary event of clearing *and* concealing, and the “there is” is the region that is held open by the tension between these two. Now, this

dimension of originary closure was already operative in the context of the analysis of Dasein in *Being and Time*, where death, as the possibility of the impossibility of existence, turned out to constitute the horizon of closedness on the basis of which the clearing of being took place. Death was the condition of possibility *and* impossibility of existence, the absolute limit, and the impending end from out of which the world unfolded. Now, however, this horizon is displaced and reinscribed away from existence, as a trait of truth itself. Truth is, according to its full definition, clearing for the self-concealing, a clearing in and through the unfolding of which the originary concealing is sheltered. In other words, the advent of presence, in the sense of things present within presence, is at the same time the withdrawing of the movement of presencing as such. The event of presence is at once sheltered and concealed, inscribed and effaced in the phenomenal world onto which it opens. The German *Verbergung*, of which truth, as *Unverborgenheit*, is the negation, signals in both directions at once, and in such a way that we can never decide in favor of one over the other. Sheltering *and* concealing belong together in the very essence of truth. The economy of truth is equally and simultaneously one of inscription and erasure, of the mark and of the crypt, in short, of the trace and of writing, as Derrida has pointed out. And it is as arche-writing that it escapes the economy of metaphysics, which is entirely located on the side of presence, of speech and the voice as the ideal of truth's presence to itself. The "there is," then, needs to be understood in terms of a two-fold, antagonistic tendency in the strife of which a space is cleared and a time unfolds: the drive to presence and actuality on the one hand, the drive to withdrawal and refusal on the other. Such is the reason why, when properly understood, the "there" never refers to something that is *actually* there (one could say, however, that it is *virtually* there, that virtuality is the very mode of being of the "there is"): insofar as it points to the "there is" as such, it always implicates and retains what is never there *in* space and time, as a thing, but always withdraws in the thing, as its very in-visibility. Such is the reason why the phenomenon, and indeed the event of world, when properly understood, cannot be reduced to those things that are present in it; as world, it always retains the trace of earth as its counter-force. The event of the world is itself nothing worldly. If the world worlds and roams and unleashes its forces, it is always, in the very moment in which it unfolds as world, called back into earth, as into its silent and forever withdrawn origin, as to this dimension in excess of presence and actuality. If man himself happens in the unfolding of the world, if he is brought out into the rapturous, ecstatic time of the world, thrown and projected into its horizon, if he endures the world and with-stands it, he is also, at the same time, brought back into the "captivating" refusal of earth, in the wake of which belongs the distant, delicate, and discreet hinting (*Winken*) of the gods. So the *Da* unfolds "between" clearing and

concealing, world and earth, rapture (*Entrückung*) and captivation (*Berückung*), granting and refusal, men and gods. Truth itself, as the openness in which events and deeds take place, unfolds in the strife (*Streit*) between world and earth and in the en-counter (*Entgegnung*) between men and gods. As such, it is not so much a moment *in* time and a point *in* space as a region, a domain or a site prior to any objectification of space and time, prior to space and time having become the parameters for the representation and mathematization of nature. Heidegger calls this site the “between” or the “in-between” (*das Inzwischen*) of the turning. It marks the very emergence of time and space before any representation and mathematization; it characterizes the unity of space and time, the joint that joins together the tendencies in their strife encounter: “Ereignis is the temporal-spatial simultaneity for beyng and beings.”² As such, Heidegger characterizes it further as “the site of the moment” (*die Augenblicksstätte*): “The site of the moment unfolds from within *Ereignis*, as the strife of world and earth.”³ And if it coincides with the domain of decision (*Entscheidung*), it is insofar as it marks the space in which the fate of the world and of man is being decided: in other words, the space of history.⁴ Soon after *Contributions*, this *Entscheidung* will be reinterpreted as *Unterschied*: as dif-ference, or as the inter-stice at the crossing of the joust between two heterogeneous series, as the jointing or the adjustment (*Austrag*) of two series of oppositions—in other words, as the chiasm of being. And in the essay entitled “Möira,”⁵ this originary between or dif-ference will be interpreted further—in what amounts to an audacious translation of the Parmenidean τὸ ἕν, which, as Heidegger notes, is both verbal and nominal, referring at once and simultaneously to εἶναι and τὸ ὄν—as the “fold” (*Zwiefalt*) of being and beings. *Contributions* already hints in the direction of just such an understanding of *Ereignis* as originary dif-ference or fold:

[W]hat is called here de-cision belongs in the innermost unfolding milieu of beyng itself [*die innerste Wesensmitte der Seyn selbst*] and thus has nothing in common with what we call making a choice and the like. Rather, it denotes the very setting asunder [*das Auseinandertreten*] that separates [*scheidet*] and in the separating [*im Scheiden*] lets the happening of precisely this *open* come into play in the parting as the clearing for the still un-decided self-sheltering-concealing, lets come into play the belongingness of man to beyng as of the grounder of its truth, and the allotment of beyng unto the time of the last god.⁶

But at this early stage, Heidegger gathers the various determinations of the *Augenblicksstätte* in the following terms:

The site of the moment: uniqueness and assault of the greatest rapture [*Entrückung*] in the domain of the hint, out of the gentle captivation [*Berückung*] of that which refuses itself and hesitates, proximity and distance in the

domain of decision, the “where” and “when” of the history of beyng, clearing and concealing itself from within the occurring of the fundamental attunement of reservedness—such is the fundamental experience of the there and thus of time-space.⁷

Thus, time and space are thought from out of what emerges as their originary unity, from the “and” itself, that is, from out of the very movement of Ereignis. And the fourfold must itself be thought from out of this priority of the unity of time-space, as the institution or the setting into a work (an artwork, a poem) of the work of Ereignis. When understood not just on the basis of world and nature, but on the basis of the full operation of truth as involving a twofold movement of clearing and concealing, time and space emerge as the “where” and “when,” the site and moment of beyng in its historical unfolding. Needless to say, then, time-space is not something of which we can say what it is independently of the way in which it is, and this means of its specific historical configuration. There is simply no “essence” or “identity” of time-space outside its concrete spatial-temporal inscription. Time-space, as an event, always refers to a site—the site of a specific and concrete strife (*Streit*) between world and earth and encounter (*Entgegnung*) between men and gods, the site of a singular historical configuration. As such, history refers to this fourfold configuration as to the horizon of its own unfolding. Time-space is, as it were, framed, its field of action delineated by this fourfold horizon, in the unfolding of which comes to be decided what is possible and what is not, what is valued and what is not, what is necessary and what is superficial, etc.

At this point, leaving aside the question of the gods, to which I shall return briefly later on, I simply wish to note the fact that “man” is mentioned alongside world, earth, and gods as one pole or strip (*Bahn*) constituting the fourfold historical configuration of truth, which Heidegger will later on designate as the *Geviert*. This raises the question of the meaning of such a gesture, and of the place attributed to man in this reconfiguring of truth. For if, as was already the case in Heidegger’s early work, truth is indeed no longer either objective or subjective, or indeed a combination of both subject (*mens*) and object (*res*), it is also no longer simply equated with the disclosedness (*Erschlossenheit*) of finite existence, as in *Being and Time*. There, and in §44 in particular, Heidegger derived the concept of truth from the existing—and this meant, ultimately, from the temporalizing—of existence, essentially envisaged as the most originary mode of ἀληθεύειν. Yet man is not simply absent from the operation of truth as reformulated in the 1930s, even if truth is now *of* being. Truth is not *of* man, or even of Dasein, yet man is implicated in the operation of truth. In fact, he is the only being (*Seiende*) implicated in this operation (for neither earth nor world nor even gods are actual beings). Thus, in a way, man continues to be privileged in the new assembling of truth, in the

very moment in which truth moves away from man, and in the direction of the pre-individual and the pre-human. For truth, as the truth of beyng, is essentially *for* man. Such is the reason why, doubling the fourfold articulation of truth as it were, the very movement of Ereignis, as the turning or the oscillation born of the strife-essence of truth, is envisaged as the reciprocal appropriation and the co-responsiveness of beyng and man. In its turning, Ereignis turns itself toward man, in such a way that such a turning cannot take place without man. Thus, everything happens as if, while not actually at the origin of the unfolding of truth, man were nonetheless the most extreme point or end at which truth was gathered in its essence, the pole toward which truth was oriented from the start. And so the duplicity identified in the previous section is carried through to the analysis of time-space. Throughout, we see how man is at once preceded by, implicated, and called forth in the unfolding of truth as time-space.

The attempt to think the unity of time and space from out of the turning of Ereignis, and this means away from the classical geometrical conception of space and the linear or chronological account of time, is still more evident in the following passage, in which Heidegger derives this unity from the organizing axis or poles in the space of which Ereignis turns. In doing so, Heidegger remains faithful to the phenomenological demand that we return the problems to their original, pre-reflexive soil, and this means to the level that lies buried beneath our metaphysical representations and scientific constructions. But the question, from our perspective, is precisely to know the extent to which phenomenology, and Heidegger in its wake, does not mistake the pre-ontical for the pre-reflexive, the extent to which it is conceivable to articulate this pre-ontical zone of the between or the fold in a way that would not include the human as the being *for whom* it unfolds; in other words, the question would be to know the extent to which time-space, as the very there-ness of being, can be accounted for in terms of an event in the unfolding of which the human would find itself implicated while not being the recipient or the destinee of such a singular event:

Time-space is the ap-propriated fissuring open of the strips within which Ereignis turns [*die ereignete Erklüftung der Kehrungsbahnen des Ereignisses*], of the turning [*Kehre*] between belongingness and call, between abandonment by beyng and hinting (the trembling of the echo of beyng itself [*Das Erzittern der Schwingung des Seyns selbst*]!). Nearness and remoteness, emptiness and gift, echo and hesitation—all of this cannot be understood on the basis of preconceptions regarding space and time, but the other way around: in it lies the concealed essence of time-space.⁸

Ordinary spatial representations, then, such as nearness and remoteness, proximity and distance, are not envisaged on the basis of a pre-given, objective, and measurable sense of space and time. Rather, space and time,

in their originary unity, are thought from out of the play of remoteness and nearness born of the contrary tendencies of the truth of beyng, in the counter-play of which beyng unfolds as Ereignis. As the unfolding of this counter-play, Ereignis is simply the trembling or the echo of this strifely event. It takes place, literally, as the place of the encounter between proximity and distance, between gift and emptiness, or refusal and granting. It is itself this oscillation. Far from being the measure of events and deeds within the world, then, space and time can be genuinely understood only on the basis of that time and that space opened up and held open by a certain configuration of Ereignis, that is, by a certain configuration of man's belongingness to beyng and beyng's calling onto man, a specific and singular way in which the world worlds from out of its specific relation to earth. This, in the end, is what Heidegger means by "there": the concrete, historical place or site opened up and held open by a configuration of truth, the scene of the eternal strife between two tendencies or forces that oppose one another and yet reciprocally implicate one another—a space that is quartered between the contrary tendencies of truth, a place that stretches from within a differential: a differentiating time-space. The free space of time is thus indeed this gaping born of a differential rapport between opposed tendencies, and where a manifold of events and possibilities come to be inscribed, thus constituting the general landscape and the historical contours of the world. This gaping is precisely what Heidegger means by the *Augenblicksstätte*. Not the occurrence of something in a measurable instant and identifiable place, not even the vision of the essence of time and space in the sense of their *idéa*—something which, to a certain extent, drives the entire unfolding of Proust's *In Search of Lost Time*, a Platonic novel, indeed, for which "pure" time can only be outside time—but the occurrence or the event of time-space. The essence of time and space, in a way. Except that, here, essence can be understood only as the happening or the unfolding not of some essence that would itself not be entirely implicated in the happening, but as the unfolding or the taking place of a configuration of time-space, a specific and singular time-space assemblage, jointure, or articulation.

By "there," then, by the unity of time and space as the "site of the moment," Heidegger will have meant this taking place of place or this temporalizing of time as history. History does not so much take place in time as it is the happening of time-space, every time absolutely singular and unique. The event of time-space is the emergence of a historical configuration from out of a turning in Ereignis, that is, from out of a decisive reorganization or a new deal between world and earth in their eternal strife, and gods and men in their en-counter:

History is not the privilege of man but rather the essence of beyng itself. History is at stake solely in the between of the en-counter between gods and

man as the ground for the strife of world and earth; history is nothing other than the happening [*Ereignung*] of this between.⁹

And given that, for Heidegger, as far as the history of the West thus understood goes, there was ever only one such configuration, and one history only (thus allowing him, in his *Contributions* and other texts from that period, to talk of a “first beginning,” stretching from the Greek origins of Western culture to the twenty-first century); given the fact that, despite Heidegger’s talk of epochs, and his attempt to distinguish between moments “within” history still understood chronologically, despite, then, his inability to distinguish entirely between history and *chrono-logy*, Heidegger speaks of only one history, one moment or one, long, almost interminable beginning; given all of that, we can only come to the conclusion that the “other beginning,” toward which the work achieved in *Contributions* is only a “crossing,” has no choice but to be in a position of absolute rupture with respect to the history it is presumed to extend. But is this rupture a matter of temporal succession? Does the other beginning really come “after” the first beginning? It would seem that, in Heidegger’s notion of a “turning” within *Ereignis*, it is not so much a change of direction or heading *within* history, that same and very history from which it would depart, which is in question. Rather, it would seem that an altogether different move is announced: an unfolding of time and space that is entirely heterogeneous to history understood as the history of *Seinsverlassenheit*, an event that is incommensurable with any occurrence taking place in space and time, an event the repetition of which is not reducible to the succession of its chronological inscriptions. It is more something like the beginning of history as such, given the fact that, for that time, history would unfold, a site would open up, on the basis of the essence of history itself—that is, truth—having explicitly come to the fore. In that respect the other beginning is no different from the move traced previously in *Da-sein* from *Uneigentlichkeit* to *Eigentlichkeit*, or *Weg-sein* to *Da-sein*: it is a movement of repetition. Nothing “more” takes place in that repetition; history does not become the site of a “new” event. Rather, what takes place and, in thus taking place, constitutes an event of an unequaled and incomparable nature is the taking place of place itself (as *Augenblicksstätte*), the event of the event (of *beyng*). Would that be history, then, at least understood from this turning in which everything is transformed? Would this not amount to the *absolute* revolution? For it is the very soil from out of which we think, act, speak that would be radically, utterly, and irreversibly transformed. The Heideggerian revolution is uncompromising. It is not primarily a political revolution (although it tried to be that too, with the result we all know), but a revolution in the order of truth: a complete transformation in the meaning of truth. But revolution is probably not the most adequate word—

repetition is not revolution: it does not add anything, nor does it turn everything upside down; it only re-enters what is always already there, ap-propriates what is most proper, but also most withdrawn and hidden, and, in doing so, undergoes a radical transformation. The temporality of repetition is intriguing and complex: if, in the other beginning, that beginning that is to open onto, not yet another, epoch or moment in history, but an altogether different history, one does not turn away from the “old,” but turns to it as if for the first time, that is, turns to what is forgotten and abandoned in the first beginning, then, to a certain extent, that history of the first beginning can be said to linger on; to a certain extent, it remains intact, untouched. And yet, on another level, it is profoundly subverted—for it now relates to the world in such a way that the world speaks from its unspoken and hidden ground, from the abyss onto which it opens and which sustains it. In a way, then, I would like to suggest that the other beginning does not succeed the first beginning, and that the temporality that is at stake in the other beginning escapes chronology altogether. The “first” and the “other” beginning can coincide, for the simple reason that they respond to two entirely different temporalities: their relation is one of chronological coincidence *and* historical (in the *seyns-geschichtlichen* sense) disjunction. The time of the other beginning is the time that turns back onto the time-space of beyng as the presupposed and forgotten ground of the first beginning. It is the time that at once makes possible and exceeds chronological time, and this means the time of things and of the world—it is the time that is otherwise than worldly, or the time of the earth.

In the end, we can even wonder the extent to which, in connection with the possibility of the other beginning, it is still wise to speak of “history”: for will not “history” always carry a sequential, chronological connotation? Does Heidegger himself not fall prey to this temptation, time and again? For example, and this example is paradigmatic, when Heidegger believes he is identifying a pre-metaphysical “moment” in the so-called pre-Socratic thought, is he not falling victim to this illusion of a non-metaphysical thought that would coincide with an actual place and time? And does he not succumb to the temptation of constructing a narrative regarding the history of the first beginning, which progresses toward an ever-greater abandonment and forgetting of the essence of truth in favor of an increasingly representational and machinic worldview? Is he not inscribing in the order of *chronos*, chronologizing, as it were, something that is simply otherwise than chronological, and yet temporal through and through? We ourselves should not repeat this retrospective illusion in attempting to articulate the other beginning in terms of repetition: we should not equate the opening of a space and time “before” metaphysics with a post-metaphysical epoch, which would have simply erased the metaphysical. Heidegger himself suggests this when he talks of

a *Verwindung* of metaphysics, or return into metaphysics, as opposed to a mere *Überwindung*, or overcoming. If, with Heidegger, we assert that history is *of* beyng, then there is only one history, now and forever, and this history is the history of the becoming metaphysical of beyng. Structurally, as it were, history is shot through with metaphysics. And an “epoch” is nothing other than a suspension of beyng in which a configuration of presence is allowed to take shape, entirely independently of any causality and succession. But, then, is there still any point in talking of a “first” beginning—as if this first beginning could ever be followed by a second? Is there even still any real point of talking of history, of retaining this concept, which will always remain, bound to a certain temporal sequence? Should we not rather acknowledge that metaphysics would have always already begun, but that this beginning does not have a history that can be *told*? And should we not allow for the possibility that, at the same time, contiguous with this beginning, the interruption of it will have also always already begun? To say that metaphysics has begun, not here or there, not at that time or that time, but always already, does not exclude the possibility that, independently, on the side, quietly and solitarily, there are also other becomings: the becoming non-metaphysical of metaphysics through the appropriating repetition of its forever self-effacing, self-withdrawing origin. And do such becomings not open onto loci or foyers that are altogether heterogeneous to metaphysics? Perhaps we should begin to talk of “becoming,” instead of “history.” Perhaps the temporality of becoming is more faithful to the possibilities opened up by repetition. Perhaps the metaphysical edifice leaks from all sides, perhaps these leaks are the future of thought, lines of flight that we should follow. In so doing, we would indeed come to view the “history” of philosophy quite differently: no longer as the linear unfolding of a destiny, but as a structure or a matrix entirely permeable to transgressions, openings, becomings. We would no longer view “history” as decisive. Alternatively, we would need to redeploy the very concept of history so as to understand it on the basis of earth itself. For the earth itself has a history, which is not one of succession, but of superimposition, each geological stratum communicating with all the other strata, each “epoch” echoing the others.

2. *The Abyss of Time-Space*

In the previous section, devoted to the analysis of the Da-sein, we saw how the “human” side of the Da-sein was to be understood as a grounding of truth: In Da-sein, *sein* is to be understood as “grounding,” “instituting,” “creating.” And what is being thus grounded is the *Da*, the “there,” or the “truth” of beyng. But Da-sein is *one* word, and as such points to a single, yet originarily duplicitous event. It points at once and simultaneously to the operation of truth and to its grounding, to beyng and to

Da-sein. There lies the essential duplicity of Ereignis, and the difficulty to understand it. True, we can emphasize in turn the *sein* or the *Da*, the grounding or, as we shall see, the un-grounding, this *Ab-gründung* that is itself duplicitous, since it is indeed a lack of ground in the traditional sense (an *Ab-grund*), and, at the same time, this lack is itself a mode of grounding, an *Ab-gründung*. Yet we must never lose sight of the fact that Da-sein implicates both movements simultaneously. This means that we cannot say—in what would amount to a privileging of Da-*sein*, one that, given the massive importance assumed by the existential analytic, still governed *Being and Time*—that Da-sein is the ground and the origin of the truth of being. At the same time, we cannot say that truth simply precedes Da-sein, that is, that it could ever unfold as such without from the very start implicating this operation of grounding, for which Da-sein is needed. Da-sein happens only as the grounding of that which in and of itself is not a ground, but an abyss, yet an abyss that is itself grounding. Da-sein is the ground through which the abyssal ground of being is grounded, brought into its own. Yes, Da-sein belongs to being. But, at the same time, being calls onto Da-sein and needs Da-sein. Yes, Da-sein responds to being. But, at the same time, Da-sein can respond to being only insofar as being addresses itself to Da-sein. Between being and Da-sein, there is a relation of address and response, a co-response. If being indeed initiates the correspondence, Da-sein cannot be said to be outside the address that being launches onto it. Da-sein is and occurs only in thus being addressed. But, at the same time, from the very start, being addresses itself to . . . , gestures in the direction of . . . , its own grounding, through which it truly becomes itself, becomes a self. Were it not for this destinee, were it not for this reception, being would be without destiny and without history—a pure and random dissemination, an emission without transmission. Such is the reason why being “needs” man: like the transmitter needs a receiver in order to signal, like the call needs an ear to be heard. There can be no pure transmission or sending out without a receiver. And so, in a way, there is a certain precedence of truth over Dasein. But this precedence signals the fact that Dasein does not occur and unfold independently of the truth to which it is opened, that this truth is precisely the essence and origin of Dasein. Thus, the relation between being and man is one of mutual appropriation, and their domain is shared: it is a co-property or a con-dominium.

Now, insofar as the “there” in question is only taken up, repeated, and thus instituted in Da-*sein*, we need to ask about the status of the there prior to—a priority which, once again, is not chronological, but ontological—this grounding. We need to ask about this *Ab-gründung* that is the grounding that belongs to the “there” or the “Da” of Da-sein. This is the un-grounding that coincides with the event of time-space. Before moving into the detail of Heidegger’s highly complex and intricate analysis, allow

me the following preliminary remarks, simply by way of indicating how the entire analysis of time-space, and thus of the “there” or the truth of being, is as it were governed, only at this stage simply implicitly, confusedly, by at least three sets of motifs, three chains of philosophemes, which will come together in the texts immediately following *Contributions*, yet which Heidegger will also continue to unfold throughout the 1950s and 1960s:

- a. The un-grounding that is proper to the operation of time-space introduces, albeit only in passing, those motifs that will become central to the later texts, specifically “Die Sprache,” *Identität und Differenz*, and “Zeit und Sein.” Such motifs actually come together explicitly for the first time in the texts immediately following *Contributions*, to which I shall return in the next chapter. These motifs all revolve around the central and governing concept of the sundering, the section, the separation, the stice, the schism, or the schize (the *Schied* and the *Scheiden*, a motif which has already been referred to in passing, and which we find in *Entscheidung*, *Unterscheidung*, *Unterschied*, *Geschiednis* . . .) in its counter-effectual relation to the concept of oneness (*Einheit*), which Heidegger, already in his lectures on Hölderlin’s hymns “Germanien” and “Der Rhein,” but most significantly in subsequent texts, understands as a movement of gathering into *Innigkeit* or intimacy.¹⁰ This is what Heidegger writes of the *Ab-gründung* proper to time-space in §242 of *Contributions*: “Ab-grund is the originary oneness [*Einheit*] of space and time, that unifying [*einigende*] oneness that first lets them go apart [*auseinandergehen*] into their separatedness [*Geschiednis*].”¹¹ Thus, this operation of un-grounding, in which time and space are properly grounded, is seen as the origin that holds time and space together in their very separatedness. It is seen as a power of gathering or unifying that is simultaneously a power to hold apart: an originary rift or schize that is also conciliation, reconciliation, accord, and harmony: *Austrag*. In a way that is not yet explicit, this thematic anticipates that of the originary *Unterschied*, this inter-sticial difference, more originary than that of the ontico-ontological *Differenz*, which is to become central to Heidegger’s thought, not just in the 1950s, and in *Identität und Differenz* and *Die Sprache* in particular, but as early as 1938–39.¹²
- b. In a way that will be articulated explicitly only after *Contributions*, this first set of motifs around the notions of *Scheiden* and *Einheit* is introduced alongside the thematic of the *tragen*, already present in other texts.¹³ For what is ground? It is a *Tragen*, but understood as the “soaring through [*Durchragen*] of what is to be grounded.”¹⁴ Thus, the ground grounds by carrying—across, out, and through—the grounded, in such a way that it can in turn rise, tower through

within presence. To ground is to bring or carry what soars through to its term, to bring it into its own: *tragen* is *austragen*. But the ground itself remains withdrawn in what it grounds: it is the self-concealing (*Sichverbergen*) in the soaring-through. The question, of course, is to know how this *Tragen* refers to the *Scheidung* introduced above. Heidegger comes infinitely close to making the connection explicit when, still in §242, he reiterates the question raised above in the following terms:

Whence do temporalising and spatialising have their origin and their separatedness [*Geschiednis*]? Of what kind is the originary oneness [*Einheit*], that it is thrown apart into this separation [*Scheidung*], and in what sense are the parted ones [*die Geschiedenen*] as the unfolding of un-groundedness [*Ab-gründigkeit*] here actually at one [*einig*]?¹⁵

Such a question, Heidegger suggests, points not so much in the direction of a possible dialectical solution, as to the essence of ground, and thus of truth. Now, the essence of truth is *lichtende Verbergung*, the concealing that clears. Thus conceived, truth

receives Ereignis and, bearing it [*es tragend*], lets its oscillation echo through [*durchragen*] the Open. In thus bearing it and letting it echo through [*Tragend-ragendlassen*], truth is the ground of beyng. “Ground” is not more originary than beyng but rather is origin as that which lets this, Ereignis, rise [*erspringen*].¹⁶

Here, once again, we see how grounding has the sense of *tragen*, and how *tragen* properly conceived means something like carrying something to its term, bringing it into its own, allowing it to be or unfold according to its essence. Must we conclude from this that the oneness of time and space in their separatedness is intimately linked with the operation of grounding as *tragen*? What of the connection between *Scheidung* and *Tragen*? Even though such questions will eventually turn out to be inevitable, they are not articulated as such in the context of *Contributions*. It is only when introducing the thematic of the *Unter-schied* as *Austrag* that Heidegger will be in a position to bring the two series of motifs together and think of difference as a movement of carrying out, across, and through. In “Die Sprache” Heidegger will characterize the originary operation of *Unter-schied*, or of the inter-stice, in which things and world are grounded, as, no longer *das durchragende Tragen*, but *der durchtragende Austrag*, or as the accord or the adjustment that carries through. At this stage let us simply allow this motif of the *Tragen* to resonate in the various idioms that sustain the English language: let us allow it to echo the Greek root $\phi\epsilon\rho\omega$, and the Latin root *fero* as well as the Latin *portare* (difference, reference, transference, port, rapport, support, transport).

- c. Finally, through this question of the originary grounding of time-space, the connection with Ereignis is clarified further. For what does grounding mean, if not the operation by which each comes into its own? What is grounding, if not the granting (*Gönnen*) or the giving (*Geben*) of the proper, the originary operation of appropriation or owning? But, as we shall see, the ground grounds from within the attuning oscillation (*Schwingung*) of Ereignis. It is itself attuned to the essence of Ereignis: it is a chord of beyng. It unfolds in accordance with Ereignis. Between time-space and Ereignis, there is always a relation of concordance: an ac-cord.

Following these preliminary remarks, let me turn to the detail of Heidegger's analysis and follow its course. We have already suggested that the ground grounds only abyssally. But how does this translate? It translates into a "staying-away" (*Weg-bleiben*) of ground. The ground grounds, but, in so doing, stays away. How does it stay away? By refusing (*versagen*) ground. Yet this refusal is not nothing, or rather, it is not *simply* nothing, not simply the refusal of something, in the usual way in which, in refusing something to someone, one is simply not granting it. Such is the reason why this refusal is further qualified as "hesitant." For something is actually granted in this refusal. As Heidegger puts it, this *not*-granting is at the same time a *not-granting*. What is it that is being granted in the refusal? What is being opened up in this staying-away of ground? A certain emptiness (*Leere*): the emptiness of clearing. Thus, the staying-away of ground, the grounding that is proper to the abyssal ground of the "there" as time-space, is the advent of clearing, or the event of presence. Emptiness is here to be understood as clearing: not as an emptying, as if the emptiness were preceded by a plenitude, the content of which was to be withdrawn. Nor must it be understood as a mere absence of things extant within it, as a mere empty container, as a space that is simply left unoccupied. None of these determinations can do justice to the emptiness that is here in question. For, as we shall be in a position to realize only at the end of the analysis, it signals in the direction of the essence and the origin of space, with respect to which these determinations are only derivative. But with this emptiness, with this clearing, also comes a certain closure. For the clearing itself coincides with a concealing, with something that turns away and withdraws from ground. The ground grounds, and yet does not ground: it hesitates. Thus, the "there" is not just the site of a refusal, but also of a certain hesitation (*Zögerung*). It oscillates or hovers between the two; it is always the joining of the two. Yet it itself resonates from within Ereignis. The openness of the clearing of concealing is thus not the mere emptiness of not-being-occupied, but rather the attuned and attuning emptiness of the *Ab-grund*, which itself attunes in accordance with the attuning, and this means also joining hint (*Wink*), of

Ereignis. Throughout, then, the emptiness of the clearing resonates with the attuning (*stimmende*) and joining (*fügende*) voice of Ereignis, which is never locatable outside this resonance, outside the space that stretches between “call” and “belongingness.” Ereignis is itself nothing other than this oscillation (*Schwingung*), this perpetual motion and turning or switching back between that which, from the start, is always lacking, withdrawing, and, simultaneously, co-originarily, always approaching, impending. Ereignis is itself this *Wink* or this hint that moves freely between belongingness to beyng and call of beyng. As Heidegger himself puts it,

hesitating refusal is the hint by which *Da-sein*—that is, the steadfastness of the clearing concealing (*lichtende Verbergung*)—is hinted at, and that is nothing other than the oscillation [*Schwingung*] of the turning between call and belongingness, the *Er-eignung*, beyng itself.¹⁷

Now, we recall that *Da-sein* itself was envisaged as a modification of *Weg-sein*, of the being—or the turning-away from the truth in which men from the start find themselves. We now see how the being-away from truth is itself a function of the staying-away of truth. Truth stays “away,” withdraws, and, in this very withdrawing, grounds. It grounds precisely in withdrawing. Its withdrawal or staying-away is the uncovering of a ground, of a world in which beings emerge, proliferate. Thus, it is a grounding that always falls short of—but, once again, this lack is an excess, this poverty a wealth—anything actually and simply “there,” of presence as such. And yet it is not simply indifferent and unrelated to presence: it grounds it. This ground stays away in self-concealment. It thus amounts to a certain *not* granting the ground, to a refusal of ground. But this refusal, this *not*-granting is itself not nothing, for it is a manner of letting *be*, of opening up, yet in such a way that it is never exhausted in the process, that it always remains in excess of what it discloses. It is therefore not pure refusal, but a *hesitating* refusal. And from out of this hesitation *everything* takes place. *Ab-grund* is the “hesitant refusal” of ground. It is in this refusal that the clearing occurs, but in such a way that the clearing is never quite completed, definitive: never will full presence be achieved, never will there be things only, never will the reign of metaphysics be fully consumed. For to the clearing belongs the hesitation of its counter-tendency; it bears the trace or the memory of its origin, even when and where this origin has been “forgotten.” Thus, we must not mistaken the plenitude of emptiness (as abandonment by being) with the poverty of full presence (as a metaphysical ideal and goal): emptiness is indeed the “fulfilled distress of the abandonment by being, but this already oriented toward what is open and thereby related to the uniqueness of beyng and its inexhaustibility.”¹⁸ In that respect, the *Ab-grund* is

also *Ur-grund*: the originary grounding of the essence of truth. Now, the difficulty of the analysis lies in the demand to think this hesitation as marking the unity of the essence of truth, the belonging-together of clearing and self-concealing. And, in developing or analyzing one side of the operation, we must always bear in mind the other and see the two as ultimately coextensive and co-originary. We must ultimately come to understand the truth of *beyng* as hesitation, oscillation between two opposed tendencies, in the opposition of which presence unfolds. But this hesitation is not indecisiveness. On the contrary: it is the domain of the utmost decision, the domain in which history as such is being decided: whether truth will recede more and more into the open and the disclosed only, whether there will ultimately be only beings—whether metaphysics will ultimately triumph across the board—or whether a counter-movement will be initiated, in which the self-concealing itself will be brought to bear on thought, on culture in general; whether, in other words, philosophy will confirm itself as representation and machination from out of this horizon of pure presence, or whether it will be in a position to experience the ungrounding at the heart of ground, the absence that traverses and sustains presence. But one thing is certain for Heidegger: history, our own fate, takes place and is played out in the space of this oscillation. Everything that really matters takes place in the space of this “between,” in between clearing and self-concealing, and in the echo that resonates between both. Thus, this oscillation is not a default, but the historical in excess of actuality. And the temporality that is implicated in this oscillation is itself entirely in excess of the present of chronological time. It is the temporality of time-space, or of the *Augenblicksstätte*.

We need now to see how the operation of grounding as hesitant self-refusal implicates time and space; how, in other words, time and space unfold from out of this originary operation. Heidegger characterizes the relation as one of simultaneity and coincidence: “The abyssal ground as the primary unfolding [*Wesung*] grounds (lets the ground unfold [*wesen*] as ground) in the manner of temporalizing [*Zeitigung*] and spatializing [*Räumung*].”¹⁹ In other words, time and space are the manner in which the abyssal ground grounds. Or: the un-grounding that is proper to ground is the advent or the happening of time and space. But time and space are themselves thought verbally, and not objectively, since they are the very modality of the event of *beyng* itself.²⁰ Thus, they are not objective and purely formal dimensions, given once and for all and *a priori*. Rather, they mark a specific operation, a doing that delineates a concrete locus or site. In other words, Heidegger, in these pages devoted to time-space, does not set out to think time and space, as if these were pre-given, objective dimensions that one could decide to think. Rather, Heidegger reveals how anything like an object, and like thought itself, is itself a function of a peculiar, forever reinscribed event—the event of time-

space. And so, in the end, it would be a matter of asking how space and time as objective dimensions of nature themselves unfold from the originary unity of time-space as the “between” whence everything surges forth. And so, as Heidegger points out, to shift the terrain from the objective analysis of time and space to that of time-space does not mean that the objective knowledge of time and space (one can think here of the space-time of generalized relativity) is simply “false,” and to be replaced with this “other” conception of the unity of space and time as “time-space.” Such a move would be utterly meaningless, if not altogether preposterous:

The interpretation of space and time from within time-space does not intend to demonstrate as “false” the heretofore knowledge of space and time. On the contrary, this knowledge will be above all relegated to the naturally limited sphere of its accuracy.²¹

By “naturally limited sphere of its accuracy,” we need to understand the sphere of objectified nature, which operates on a level that is altogether different from the onto-phenomenological plane which Heidegger, in his own way and after his initial attempt at laying the ground for a “fundamental ontology,” shares with the phenomenological tradition and its demand that we recover the world as it is, in its primitive, pre-scientific, and pre-predicative state. It is in that context that what Heidegger, in that respect in a sort of complicity with Husserl, is attempting to think under the reciprocal appropriation of “world” and “earth” cannot be assimilated with the modern, scientific concept of “nature.” That being said, it is also not as if these two planes were entirely heterogeneous. For, at least on Heidegger’s reading, “nature” is first and foremost a metaphysical concept—the implications of which can be felt right through its scientific interpretation—one that is derived from a structural inability to let it speak from its non-metaphysical, foundationless ground. Against Heidegger, though, and following Deleuze, I shall try to show how the very horizon Heidegger seeks to identify and oppose to that of the natural sciences can actually be extracted from the sciences themselves. In other words, I shall try to show that there is an extra-metaphysical sense of nature implicit in contemporary science, but one that philosophy alone can extract, an ontological (and differential) horizon in mathematical nature, which philosophy must identify. As a result, the dividing line can no longer be seen to separate science (and “metaphysics”) from philosophy (and art); rather, it is to be located within science, philosophy, and art themselves.

Following Heidegger’s own analysis, let us now decompose this unity of time and space in both its temporal and spatial dimensions, bearing in mind, however, from the start and throughout, that this unity is originary, and that the following decomposition thus amounts to a certain

abstraction. What is true of the essential duplicity and simultaneity of *Da-sein* is also true of time-space. While it is virtually impossible not to clarify time and space for themselves, we must bear in mind that we can do so only from out of their originary co-unity. We must think the reciprocal implication of time and space, much in the same way in which we are made to think the reciprocal implication of *Da* and *Sein* in *Da-sein*. Thus, we shall have to see how, in the very temporalizing of time, space itself is implicated and how, in the very spatializing of space, time itself is implicated. How, in other words, the temporalizing of time is the spatializing of time and how the spatializing of space is its temporalizing.

Heidegger writes:

The self-refusal creates not only the *emptiness* of what is lacking and what is awaiting but also, along with these, the emptiness that is in itself enrapturing [*entrückende*], enrapturing in futurity [*Künftigkeit*: what is designated here is the very form of the future; not this or that future, but the measure for all futures, futurity as such] and thus at the same time breaking open something that has been [*ein Gewesendes*] [and continues to be—*is*—as having been: something that continues to have been], which bounces back from what is to come and constitutes the present as the entry [*Einrückung*] into abandonment, but as the entry that remembers and awaits.²²

In a way that is quite remarkable, then, the operation of time is characterized in terms of a certain *emptiness* (*Leere*), an emptiness that is itself rooted in the emptiness of the self-refusal: Heidegger characterizes it as the “originary gaping open in hesitant self-refusal.”²³ Time, therefore, and this means also the present onto which it opens, springs from a certain twofold absencing, the twofoldness of which nonetheless points to a single event: as hesitating self-refusal, *beyng* is at once this event that is forever withdrawing, thus opening up the past, and forever approaching, turned toward *Da-sein*, thus opening up the future. In other words, this absencing or receding points simultaneously in the direction of a belongingness to *beyng* and a call onto *beyng*, it is at once a drawing into remembrance and into awaiting. It is in the space opened up by this twofold orientation that the event of time-space occurs. Specifically, time-space is the very occurrence of this Janus-faced event, the very happening of a certain emptiness. Now, this emptiness should precisely not be mistaken for an empty *space*, that is, for a mere capacity to contain, a void awaiting to be filled by things and events. For such is precisely the way in which space, and even time, have never ceased to be thought throughout the history of metaphysics: as that *in* which things take place. Rather, what space and time themselves are can be thought from out of an originary understanding of *that* emptiness only. Furthermore, this emptiness is not synonymous with the rule and reign of chaos over cosmos. For the clearing and lightening

that occurs in the presencing of presence is not a “mere gaping and yawning open,”²⁴ but a certain ordering and configuring of presence. In other words, the fate of things and of the world at large is decided neither “here” nor “now,” in the present, but over there, in the “how” of a ground that recedes. Thus, the openness of the clearing of the concealing is originary emptiness, not in the sense of not-being-occupied, but in the sense of an *attuned* emptiness, and attuned from the refusing and hesitating chord of the self-concealing. This is tantamount to saying that the world is shot through with emptiness, that its fabric is woven with invisible and intangible threads, and yet “there,” giving it color and tonality, depth and texture. It is tantamount to saying that this emptiness, far from being a lack or a default, is rather an excess, a reserve, and thus also always to come (“the fullness of what is still undecided”);²⁵ it is the (virtual) plenitude of being, which must not be mistaken for the (actual) presence of beings. Finally, and closely related to the previous point, this emptiness is not a cause for lament and nostalgia, nor even hope in the straightforward sense of the term. For sure, this emptiness, when brought into view, opens onto a certain form of distress; but this is the distress born of the experience of the abandonment by being, the distress of “reservedness” (*Verhaltenheit*), and not neediness. It is the experience of a certain excess and a certain plenitude, yet one that is bound up with the experience of its unmasterability and reticence.²⁶

Thus, in the end, the dimension that metaphysics perceives as providing the measure for all other dimensions, the ideal that regulates its own economy and the ultimate goal that drives it, namely, presence, is here identified, in what amounts to an extraordinary inversion, with the site of a certain emptiness. At the heart of presence, at the heart of the determination on which the metaphysical edifice is built, Heidegger identifies a gap that cannot be filled, an absence older than presence itself. For the present is now envisaged as the “effect” of a certain withdrawal that is infinitely richer and fuller than those present things with which metaphysics concerns itself, of a certain twofold horizon in excess of presence itself:

But because this abandonment is originally remembering-awaiting (belongingness to being and the call of *beyng*), it is in itself no mere sinking and dying away in a not-having, but conversely, it is the present that aims at and is solely carried out into decision: *moment*. The raptures [*Entrückungen*] are moved [*eingerrückt*] into this moment, and this moment itself unfolds only as the gathering of the raptures.²⁷

The present is now entirely envisaged from out of the founding event, the event of being as *Ereignis*, which frames both past and future in terms of a belongingness to being, and of the call of being, as if time now stretched

between these two horizons, at once retaining the trace of an event forever past and, *at the same time*, tending toward that event as always to come. We must resist interpreting this turn toward past and future in psychologistic, even subjectivistic terms: it is the abandonment, the present itself that is structurally oriented in that way, even if such an orientation implicates man from the start and defines who he is; as a result, and insofar as grounding involves a turning toward that toward which one is always already turned, “remembrance” and “awaiting” must not be understood psychologically, as possibilities or faculties that would belong to man, but as the very form of grounding itself, in which man as such takes place for the first time (as *Da-sein*). Any grounding, whether it is in the order of thought, poetizing, creation, leadership, etc., amounts to a remembering-expecting. These determinations must be understood historically (*geschichtlich*) and not anthropologically. It is not that the present remembers and anticipates in an “intentional” — retentional and protentional — sense. Rather, the present comes to be constituted in this remembering-awaiting. The source of time is not so much the present as the twofold horizon of belongingness and call. As such, the present bears the trace of this event that is “before” and “after” it, and toward which it is extended, in a rapturous gesture, of which it is thus the remembrance and the anticipation. Time is as it were stretched out on the frame of being, toward which it tends as toward this past and this future, as this withdrawal that marks an irreducible event, and of which it is itself the trait. Time comes and goes, it stretches and returns, as in a bow or a hairpin turn (*Kehre*). In a way, we are faced here with something like yet another reworking of the Husserlian analysis of temporality, and of the tension (retention-protention) that characterizes it: with the significant difference that time is no longer so much constituted for and by a consciousness, or even by an ex-sistence, as it is temporalized from out of the twofold horizon of the event of being. It is there, in the between of this twofold event that the fate of time, and this means the coming about of history, is played out. Such is the reason why Heidegger, reinscribing the determination that characterized the “proper” mode of the present in *Being and Time*, prefers to designate the present as the “moment” (*Augenblick*), that is, not as an abstract point along the line of time, but as the gathering of the raptures of time, their point of convergence or intersection — their critical point, if *κρίσις* does indeed involve a sense of decision, a point at which an incision is inserted into the fabric of being. The moment is thus more a zone of intensity than a mere instant, a field of presence and individuation more than a singular point, the site of decision and of history, and not a mere “now” always about to vanish into the past:

The remembering-awaiting (remembering a concealed belongingness to being, awaiting a call of being) puts to decision the whether or not of the

onset of being. More clearly: Temporalising as this jointing of (the hesitant) self-refusal grounds the domain of decision, in accord with the abyssal ground.²⁸

It is this excess, this plenitude that is never present which translates into the emptiness of the present. Naturally, from the perspective of the present and the representational attitude to which it gives birth, the present alone is plenitude, and past and future lack, essentially negative, essentially *not* present. If the present is the site of an emptiness, it is insofar as its ground is essentially self-refusal, turning away from the present: both to come and past. Time as such is as it were framed by this self-refusal—at once always already past, always already having been, and, as such, always already to have been, always ahead, to come. But does this mean, then, that the present can only be the site of this absolute abandonment and desolation? In the words of Hölderlin, are the gods moving further away from the present, deserting it once and for all, moving deeper into withdrawal, fleeing into a past and a future of which we have no intimation, so that not even the slightest possibility of remembrance and awaiting exists? Has the ground withdrawn once and for all and definitively? Such would indeed be the case, were the self-refusal not also *hesitant*, were the withdrawing ground not also turned toward us, drawing us into its very withdrawal, allowing us to re-enter the present as the site, not of this initial mere emptiness, but of this emptiness shot through with the plenitude of the un-grounding that breaks it open. Such would be the case, were this most discreet of oscillations not to resound across the domain—the event of time-space—opened up by the unique en-counter between self-refusal and hesitation:

But with the enrapturing into the self-refusal (for such is the essence of temporalising), it would seem that everything has already been decided. However, what refuses itself refuses itself *hesitatingly*; and as such it offers [*schenkt*] the possibility of offering [*Schenkung*] and appropriating [*Ereignung*]. The self-refusal joins together the rapture of temporalising; as *hesitating*, it is at the same time the most originary captivation [*Berückung*]. This captivation is the enclosure [*Umhalt*] in which the moment and thus temporalising is held.²⁹

Whereas the operation of time that characterizes self-refusal is indeed that of a rapture into futurity and having-been-ness, whereas time is indeed ecstatic, torn between these two lines of flight, constantly threatened with infinite dispersion or dissemination (*Zerstreuung*), driven toward endless withdrawal and receding, the operation of space, with which time is essentially bound, consists in the inverse movement: not dispersion, but estrangement or alienation (*Entfremdung*), not rapture, or ravishing, this sense of being pulled or torn away, but captivation (*Berückung*), this sense of being held back, drawn into closure. Space

here, as the *Berückung* that brings back into an enclosure (an *Umhalt*), plays a role equivalent to the horizontality of death in the early existential analysis: it limits time. It holds the raptures of time back, brings them back from infinite dispersal into estrangement, inscribes them within a horizon of finitude, or closure. It is the force at the origin of the gathering of time into the moment, the counter-movement or counter-essence of dissemination. Here time is once again envisaged as finite, but with the following twofold difference: first, time no longer coincides simply with a finite being, the being who ex-sists being, but with being itself; it is the very finitude of being itself that is uncovered. Not as mortality, but as horizontality. Second, this horizontality is not simply and not primarily that of the future, nor even that of time in general, but that of space (in time): the horizon is now entirely circular, it is an *Umhalt*. As such, it is the delimiting and the spatializing of time, much in the same way in which time is the temporalizing, that is, the counter-, disseminating move of space. Both call for one another and need one another: every move (*Rück*) calls for a counter-move, so that each dis-placement (*Ver-rückung*), whether *Entrückung* or *Berückung*, comes into its own and unfolds only on the basis of its being met by a counter-move. This, I believe, is what Heidegger suggests when writing the following:

When rapture proves to be gathering and captivation proves to be enclosure, then there is each time therein a counter-turning [*Gegenwärtiges*]. For rapturing appears to be dispersion and captivation appears to be estrangement.³⁰

This counter-turning marks the originary unity of time and space: it is the movement that brings them together in holding them apart, that separates them by referring them to one another.

How does this take place? The counter-turning takes place within each “dimension”: rapture is first and foremost a tendency toward dispersion. Yet it is also gathering (in the moment). This is its counter-move or counter-turning. Similarly, captivation is essentially a tendency toward estrangement. Yet it is also enclosure. As such, enclosure is its counter-turning. But, in each case, the counter-turning could not occur were it not for the fact that time and space are not heterogeneous, were it not for the fact that, from the start, they are turned toward one another. Thus, gathering is the spatializing of time, the becoming-space of time, or space-in-time. Likewise, enclosure is the temporalizing of space, the becoming-time of space, or time-in-space. Such is the reason why, in the end, Heidegger can claim that “time spatializes” and that “space temporalizes.” Each has always already begun to become its other, is always already caught up in its *becoming other*. Each becomes itself only in becoming other. Every movement of owning is a movement of othering, every appropriation an ex-appropriation. The unity, or intimacy (*Einigkeit*, *In-*

nigkeit), of time and space lies in this counter-turning, in the becoming other of each: "This counter-turning is indeed what is essential and indicates the originary referral of both to each other, on the basis of their separatedness [*Geschiednis*]." ³¹ And so, it is on the basis of their being two counter-tendencies, one oriented toward dispersal, the other one toward estrangement, that each comes into its own. It is in their very separatedness, their very counter-orientation, that each is brought into its own essence and proper unfolding. But at no stage is this opposition dialectical, for both unfold, as counter-tendencies, from the structure of Ereignis itself, torn between—and this being-torn-apart, this quartering, is not the result of some indecision, some temporary state of hesitation, but designates Ereignis in its essence—belongingness and call. This primal and irreducible "event" is the forever-renewed origin of time-space, the very source of the spatializing and the temporalizing that is world configuring.

But in the end, what matters most is that this temporalizing and this spacing be that of Ereignis, understood as the unity of belongingness and call, as this singular and unique event on which the fate of man hinges. Ereignis, as the event of time-space, is thus the unity and co-originary of this movement of ecstasis and captivation, dissemination and alienation, in and through which time is from the start brought back into the hold of space, and space itself from the start carried away in the breaking out of time. History is nothing other than the state of equilibrium reached at any given time by this spatio-temporal economy. History is *of* time-space. It is the mark or the inscription of a particular configuration of the tension opposing time and space.

And so, were it not for this hesitation, and for the echo it releases; were it not for this oscillation, in the movement of which a world is opened up, and the earth sheltered; were it not for this un-grounding at the heart of ground, there would be no possible decision, and thus no history, for there would be no space for decision. Space is essentially of and for decision. Were I to use a visual metaphor in lieu of the auditory image of the echo that resounds in the space of the between (belongingness to beyng and call of beyng), I would say that the light of beyng is reflected in this between. But this is not a metaphor; nor is the vocabulary of the echo, of resonance, a mere "image."³² For this originary oscillation and hesitation is precisely the coming about of light, and of the visible. The visible, and thus any metaphor that draws on its resources, always follows from the share of invisibility that traverses it as its condition of visibility. In order for any such metaphor to be possible, the realm of the visible must have been cleared in the first place. Similarly, the hesitating refusal alone will have given from the start the measure for echo, for hearing, for it alone would have opened the space whence things can be seen as echoing their distant origin. The tone, the tonality, and what can and cannot be heard, what hearing means are the function of an echo that cannot be referred

back to the self-presence of a voice. Echo does not refer back to an origin or a site to which we could return. Rather, it characterizes a permanent and originary state. Echo is itself the origin. For the origin is the twofold event of belongingness and call, of self-refusal and hesitation. And it is in the space broached by this twofold and co-originary event that beyng resonates. So, in the end, Da-sein is not so much at the end of the transmission, a mere receiver and receptor, but at the very heart of the event of beyng, in its midst. Man is born in between, from within the between. Not at the origin, nor at the end, but between origin and end, between past and future, remembrance and awaiting. This is how we must understand Heidegger's reference to the "hint" or the "signaling" (*Wink*):

However, hesitating refusal itself receives this originarily unifying jointure [*Fügung*] of not-granting and hesitating from the hint. . . . But this *hint* comes to hint only in the echo of beyng, out of the distress of the abandonment by being, and only means further that the event of appropriation opens up neither from within the call nor from within belongingness but only from within the between [*Zwischen*] that echoes both. And it means further that the projecting of the origin of time-space as the originary unity can be enacted from within the abyssal ground of the ground.³³

Too often the hint is understood as a signal that one could only remember, as if preserved in some distant past, or await, as something that will come, but over which we have no power. And it is true that Heidegger's text is often elliptical, if not equivocal. Yet to wait (*warten*), Heidegger warns in *Gelassenheit*, has nothing to do with expectation (*ewarten*), that is, with awaiting for something that has been represented in advance.³⁴ In a way, genuine waiting presupposes that we do not anticipate that which is being waited for, that we do not know what it is that is being waited for. Waiting, therefore, does not have the sense of expecting and anticipating an event to come, a moment of redemption or salvation. Rather, genuine waiting entails the recognition that rescuing has already taken place and that the sign or the hint in question has already happened. For the hint is the very medium, the very between as which beyng unfolds: not some event to come, not some future, but the event that has already taken place, not as a past event, but as that which does not cease to arrive, as this inexhaustible approach, this venue that arrives only and fully in Da-sein. Thus, Ereignis opens up and unfolds neither from belongingness, from the past, nor from the call, from the future, but from between both; it is this oscillation, this echo, this to and fro, in the movement of which man is caught as the one for whom beyng echoes. And so, Da-sein itself, as founder and ground, is turned toward both past and future, equally so, in an attitude that is devoid of both nostalgia and hope, but that is not desperate or indifferent, *resigned* either. In remembrance and waiting alone is Da-sein in the present.

Heidegger is now in a position to gather into a final formulation the unity of time and space in relation to the question of the “there,” and of the way in which the latter coincides with a twofold operation of un-grounding and grounding. With this formulation, and from the point of view of my own analysis, we reach a certain culminating point, given the fact that, initially, it was a matter of understanding the duplicity or ambiguity at the heart of *Da-sein* (*Da-sein* and *Da-sein*) and of the event of being as *Ereignis*:

Time-space is the captivating-enrapturing gathering enclosure, the abyssal ground that is so articulated and correspondingly attuned, the essence of which becomes historical in the grounding of the *there* through *being*-there (its essential ways of sheltering truth).³⁵

Such, then, is Heidegger’s renewed attempt to think the event of time-space beyond metaphysics and physics, from out of the essence of truth itself. Such is Heidegger’s attempt to delineate this truth in terms of a “there is” that is the stage of a strife between clearing and concealing, grounding and ungrounding, and on the basis of which genuine grounding itself emerges, as the very sheltering of this “there is” in its essential duplicity. Grounding, returning from metaphysics, and this means from the forgottenness of the staying-away of truth, or the abyss onto which presence opens, turns onto itself and toward this un-grounding as to what is most proper to it, as to the decisive feature that needs to be grounded. This grounding can take the form only of remembrance and awaiting, since what is being grounded is itself never simply and fully “there.” There is an irreducible unfulfillment, an impossible closure, a hesitating that is intrinsic to *being*: It “is” always and at once as having been and as to come, never as (simply) *being*.

This is what metaphysics cannot conceive, what it cannot tolerate: it wants presence, full presence, absolute consumption, unlimited, unrestricted access to the world and things within it (the world, in its view, is nothing more than the sum of things to be found within it). It cannot grasp the fact that the world “worlds” on the basis of earth alone—an abyssal, unrepresentable ground, to be sure, but a ground nonetheless. This is the ground that resists the closure of world as a space of unlimited visibility. Genuine grounding is always an act of remembrance and waiting. It is always an act through which we are returned to what from the start happens and comes to us, and to which we are opened as if for the first time.³⁶ But where does “it” come from? From before and after, from elsewhere, yet from a place that is infinitely closer and infinitely more decisive than any “here” and “now.” To ground, to create, in short, to *be* the *there* always amounts to a form of dignity; it amounts to being worthy of what comes our way. This, perhaps, is where another ethics could begin

to be articulated: at the place, fragile and difficult to grasp, where man turns to what comes to him as to his own destiny. This is where its stance—its fate—is being decided. Thought itself, in its most primitive state, is a way of holding and comporting oneself, a form of dignity. In a sense, Heidegger's sole ambition will have been to return man to his "proper dignity" (*eigentliche Würde*).³⁷

Ultimately, space and time are no longer either objective data, mathematizable things for scientific thought, nor even *a priori* conditions of the subjective sensibility, but the event that takes place prior to any partition of the world between subject and object. In and through this event, the world takes place, along with its many *local* events. Yes, in the beginning was the verb, the pure event of being, but this verb is one with its flesh, one with the invisible depth and thickness of the world. This event, on the "basis" of which beings emerge, coincides with the jointure of time and space in a unique and singular time-space: not this space or that time, contiguous with others and isolatable, but the event of place and time itself, the "there is" that sustains things and traverses them. It is this movement of dissemination *and* gathering in which the world is given a figure, is configured. Nowhere individuated, and yet always "there," it is the very "element" or "principle"—anarchic, non principal—of all individuation and all actuality, of presence as such—a principle or an element that representational thought always takes for granted. At issue here is the truth of being prior to beings, prior to individuated things, prior to existence itself, and even prior to the very difference (in fact, the distinction) between being and beings. For what is now at issue is this originary "between," rich and manifold, inexhaustible, in the space of which beings in their ungroundedness proliferate. The fact that being now designates this "between" in which oppositions and differences burgeon, the fact that it now designates this primal, originary difference, testifies to the shattering of the old union between identity and being, originally celebrated at the altar of Aristotelian metaphysics.

Once this decisive shift has begun to take place, the way to Heidegger's so-called "later" thought is paved. By that, we need to understand the thought that goes back to the hidden source of the onto-ontological difference, which it unveils as the primal region of the between or the in-between—this inter-val or inter-stice in the "space" of which beings find their own place. This "later" thought focuses on this space of the middle that gathers as it separates, of the difference or the inter-stice (*Unterschied*) that is also a power of harmony and reconciliation. This is a thought that, ultimately, culminates in a complex yet highly evocative meditation on difference as "adjustment" (*Austrag*). My translation of the word—which I shall try to justify—suggests both a jointure and a joust,

an accord and a strife. This is the thought to which I shall turn in a moment, in what will amount to a final stage of my analysis.

In the reworking of the question of being, initially formulated in terms of its meaning, as the question now concerned with being in its historical eventfulness, being itself is posited as difference — no longer in its difference *from* beings (in what amounted to a residual dualism), but *as* originary difference. This, then, is the paradox: Heidegger recovers the thesis regarding the univocity of being, and its monism (Being is “the Same”), but only by positing being as difference, that is, by grasping it as the element or the dimension which, in its most extreme tension, in its fissure or its quartering, lays out or stretches out the canvas of the world onto which beings are gathered. Difference now designates this primal and forever recurring event, this temporalizing spacing that precedes every opposition, every distinction, and hence every identity. For the Same of difference is not the identity of the substance. Thus, in positing itself as difference, being severs the link between that which hitherto united it to the metaphysics of substance, and the monism onto which it opens breaks with the thought of the οὐσία ὑποκείμενον.

Interstitial Being: On Dif-ference

Differentiation [*Unterscheidung*] of “being” and “beings” — that beyng *distinguishes itself* [*sich abhebt*] from beings — can have its origin only in the essential unfolding [*Wesung*] of beyng. . . . The essence and ground of this distinction [*Abhebung*] is beyng as *Er-eignung*. Beyng moves itself [*rückt sich*] into this clearing as the Between that itself clears [*das lichtende Zwischen selbst*]. . . . Generally, stressing this “differentiation” can say something in thinking only if from the beginning it arises out of the question concerning the “meaning of beyng,” i.e., concerning its truth. . . . [Thus] “ontological difference” [*ontologische Differenz*] is a passage way that becomes unavoidable if the necessity of asking the grounding-question out of the guiding-question is to be made manifest. . . . Basically stressing the “ontological difference” hovers in indeterminacy. . . . This difference only names that which sustains the entire history of philosophy and *as* this sustenance could never be for philosophy as metaphysics what calls for questioning and therefore for naming. Ontological difference is something transitional in crossing from the end of metaphysics to the other beginning.

— M. Heidegger, *Beiträge zur Philosophie (Vom Ereignis)*

In the differentiation, that is, in all metaphysics, being stands on *one* side and is thus envisaged as what is dependent upon and ultimately what comes after beings. As Ereignis (the dif-ference or inter-*stice* [der Unter-*schied*]), however, beyng allows beings to step apart and thus to “receive” the clearing; yet the *accord/adjustment* [*Austrag*] is carrying out [*Aus-trag*] into being *as* God and man, as world and earth.

— M. Heidegger, *Metaphysik und Nihilismus*

The thematic of the ontological difference, initially equated with the *Sache* itself, is now seen as merely preparatory. The effort, in *Being and Time* and other texts from the late 1920s, to articulate the question of being in terms of the ontico-ontological difference is now seen as belonging to a transitional phase, as laying the ground for the crossing into the other beginning. This thematic is to be overcome by opening onto its own essence and source, by referring the difference back to the site where it unfolds.

The *Differenz* itself, and the differentiation or distinction (*Unterscheidung*, *Abhebung*) to which it leads, need to be replaced in the site of its origin — it needs to be experienced from out the essential unfolding of being as Ereignis. But — and this is the decisive ultimate twist — insofar as Ereignis is the originary site of the between within which the world, things, and events emerge, it is itself thought of in terms of difference. Not, though, as the difference “between” being and beings, or being and time, as if, in such a difference (which would amount to nothing more than a distinction), the two terms that are being distinguished were given in advance, independently of the operation or the movement through which they are distinguished. Rather, Ereignis is now envisaged as the very between or the difference on the “basis” of which being and beings unfold. “Older” than the ontico-ontological difference, then, difference (*Unter-schied*) designates the unfolding of the “between” that is the very ground for the *Differenz*. Prepared in *Contributions*, this decisive and ultimate turn is enacted in those two volumes of the complete works immediately following that text,¹ and written in the years 1938–39. Remarkably, these volumes pave the way for Heidegger’s later thought from the 1950s and 1960s, concerned with a thinking of “being as difference.”² It is this ultimate development that I now wish to trace, albeit briefly and schematically.

The first stage brings Heidegger to characterize further the space of the between — time-space itself, or the “there is” — as *Austrag*. Now, as we recall, this is a move that is prepared in *Contributions*, insofar as Heidegger identifies the unfolding of truth with the bearing or the sustaining (*Tragen*) of Ereignis, through which things were allowed to soar through (*durchragen*), come into their own, into the world. Already, in a way, the bearing in question had the sense of *austragen*, of bearing a child to the term, carrying it all the way over into the world. Also, we recall how such a bearing of world unfolded from out of a strife with earth. This means that the unfolding of truth is a joining, a coming and fitting together, and thus an agreement or an accord — an *Austrag* — yet, simultaneously, the site of an irreducible strife or struggle.

Now, the characterization of the between as *Austrag* presupposes the articulation of yet another conflict or strife, one which, thus far, I have mentioned only briefly: not so much the strife between world and earth as the retort or the en-counter (*Ent-gegnung*) between gods and man. This is a strife that is not so much in opposition to the strife (*Streit*) between world and earth as it crosses it. And at the point of their crossing or their joining is where a configuration of presence is articulated, where history unfolds. This point of crossing is what Heidegger calls the *Augenblicksstätte*. It is, once again, not so much a point as an epoch and a general field of visibility. The two sets of oppositions are thus far from being unrelated. Much like earth, to which they are essentially related, the gods point in

the direction of an experience of belongingness to that which, in excess of mere presence and things, is of the order of withdrawing and absencing, of a turning away and a refusal (*Verweigerung*: a term which, we recall, designated the un-grounding of truth). As such, the gods signify the counter-essence of the human, in the same way in which earth signifies the counter-essence of world. By counter-essence, we need to understand the counter-effectuation of an essence (*Wesen*), say, world, or man, in the countering of which the essence is itself enabled to unfold (*wesen*). Thus, what withholds the human within earth, and not just the world, what enables it to dwell in the world in such a way that it is open not just to the presence of present things, which revolve around the human as around their pivot, but to this absencing at the heart of presence, not just to the world as what can be represented, and subsequently appropriated, owned, and dominated, but also to the other side of the visible, this depth behind the flat surface of the world, is the more than human in the human, the over-human. In other words, the divine. Whenever and wherever “there is” a god, it is not a being, and not the dimension of transcendence in general — it is rather the god of the earth, this voice from beyond presence, from the otherwise than present, this light that radiates from the other side of the visible. But the otherwise than present is not otherwise than being. Precisely not. It is the very voice of being in its withdrawal, in its erasure. This is the way in which it hails and calls onto us: in withdrawing, in effacing itself. Such is the way in which we need to understand the refusal: as that which, in refusing itself, nonetheless leaves a trace and signals, albeit hesitatingly. More decisively still, refusal is seen as “the highest nobility of offering [*Schenkung*].” Thus, on one level, and insofar as the gods signal in the direction of the drive toward withdrawal within truth, of this reticence with respect to presence at the heart of presence, insofar as they point to the way in which earth resounds from within the world, it is not as if the gods could ever be encountered as present things. They have always already begun to flee and are always engaged in the process of their own withdrawal. When taking up the Hölderlinian motif of the flight of the gods, Heidegger points to something like a *structural* flight or turning away. Yet this fleeing, when held in view as such, is also an invitation to turn to the gods, an invitation to allow oneself to be drawn into what from the start, withdrawing from presence, draws us into it. And this turning toward that which, from the start, turns away, can only take on the form of a certain renunciation: the *Stimmung* or the attunement that characterizes the human in relation to the gods in their flight is what Hölderlin calls “holy mourning.”³

The divine in the human — which is most affirmed in this fundamental attunement of mourning — designates the *positive* possibility that is involved in renunciation, the historical possibility that is involved in a relation to what is given only in refusal and to what can be received in

remembrance *and* awaiting alone. To renounce the gods, to recognize the divine in its very flight, amounts, *de facto*, to holding oneself in the space of the holy (*das Heilige*) and to preparing oneself for a new encounter with them. Renunciation is a form of both readiness and availability, and the flight is also a promise. Renunciation in the form of remembrance and readiness points to the irreducibility of the godly as belonging to the dimension of the pure past and the pure future, experienced from out of the oscillation proper to the event of appropriation. The god is precisely the signal of this oscillation, the voice that speaks or the echo that resounds from a past forever past (the belongingness to *beyng* as having always already been) and, at the same time, from a future forever future (the call of *beyng* as always coming). It is the voice that is allowed to resonate from the essential strife between world and earth, between the two antagonistic yet inseparable forces of nature, namely, the drive toward the purest closure (*Verschlossenheit*) and the utmost transfiguration (*Verklärung*), the most gracious captivity and the most terrifying rapture — in other words, between the eternal conflict and harmony of space and time. Far from referring to anything like a transcendence, or a higher order, far from pointing in the direction of another world, the godly signals the excess of being within immanence, the earthly within the worldly. The most decisive effort on Heidegger's part, with respect to god and the divine, is to wrest it from any possibility of thinking it from within the present, as a being, as the highest being — fully present to itself and to us, entirely manifest, and creator of all things. In that respect the "last god" to whom Heidegger devotes the penultimate "panel" of *Contributions* can only be the "totally other over against gods who have been, especially over against the Christian God."⁴ It is the god of after the death of (the metaphysical) god. It is the post-metaphysical god or, better said perhaps, the god that is otherwise than metaphysical. For it is the god that is born of the other beginning, born of the thinking of the other beginning, and this means of the thinking as arising from the event of appropriation. But this is a transformation that cannot be simply declared:

Coming from a posture towards beings that is determined by "metaphysics," we will only and slowly and with difficulty be able to know the Other, namely that god no longer appears either in the "personal" or in the "lived-experience" of the "masses" but solely in the abyssal "space" of *beyng* itself. All heretofore "cults" and "churches" and such things cannot at all become the essential preparation for the colliding of god and man in the mid-point [*in der Mitte*] of *beyng*.⁵

It is only as such that the last god is not merely the end but "the other beginning of immeasurable possibilities for our history."⁶

And so, in the end, the decisive factor, the decision around which history revolves and turns, is not so much to know whether the gods have

fled (or not), whether the gods are coming (or not). For, when understood authentically (and no longer metaphysically), that is, from out of the event of appropriation, the god is the very figure of the turning away of truth, though also, and at the same time, the figure of the approach of truth. Rather, the question concerns the possibility — or not — of a relation to the gods or to god (and here questions of mono- or polytheism are irrelevant) as beyond and otherwise than merely present. The historically decisive “fact” — coextensive with the question of the Weg- or Da-sein of man — is to know whether this fleeing or this staying away of the god, which is its very manner of being, is itself retained and withheld in the way in which the human dwells amid the world; whether, in other words, the gods, in their very fleeing or withdrawing, in the very absencing at the heart of presencing which they name, are turning toward us, still signaling from their retreat, or away from us, surrendering themselves to the metaphysics of presence, abandoning us ever more decidedly in the midst of beings, which we inhabit as sole possessors, as this center (of organization, planning, control, and transformation) toward which beings as a whole are made to converge. In other words, is the human moving increasingly and ever more resolutely in the direction of a machinic relation to the world? Is it becoming increasingly technicized, increasingly involved in a relation to things and to other human beings that is primarily one of objectification, reification, and domination? A relation in which the things themselves, and even the human, have become mere “stuff” or “standing reserve” (*Bestand*)? A relation in which things no longer retain the slightest degree of autonomy or resistance in the face of the all-invasive, all-powerful will to will for which the human has come to stand? Or is the human somehow being slowly drawn into another relation to the world, one that would unfold from the earth itself:

What happens to nature in technicity, when nature is separated out from beings in the natural sciences? The growing destruction of “nature.” What was it once? The site of the moment of the arrival and dwelling of gods, when the site — still φύσις — rested in the essential unfolding of beyng.

Why does earth keep silent in this destruction? Because earth is not allowed the strife with a world, because earth is not allowed the truth of beyng. Why not? Because, the more gigantic that giant thing called man becomes, the smaller he also becomes?

Must nature be surrendered and abandoned to machination? Are we still capable of seeking earth anew?⁷

A world at the very *center* of which figures the human is a technicized world, a nature itself reduced to the readily available. There is no denying — and perhaps despite what Heidegger himself says here and there — that this dimension of violence is itself irreducible, that, from the very start, this relation of struggle of the human faced with the forces of nature

is inscribed in the very fate of the human. As Heidegger himself shows in his reading of the famous chorus from Sophocles' *Antigone*, man is τὸ δεινότατον, the most violent in the midst of the violence of nature.⁸ Man is from the start the technical animal.⁹ But while τέχνη does point in the direction of this violence, of this necessity to control and transform the violence of nature in order to dwell within it, while it designates the level of engagement of the human with the world only, it also and from at least the beginning of Greek culture¹⁰ (as the *Antigone* itself demonstrates, precisely to the extent that it constitutes a work of *art*) designates another possibility, another possible mode of relation to nature: not simply the relation of violent struggle born of necessity, but the relation of *poetic dwelling* born of the experience of the world from its strife with earth, and of the human in its en-counter with the discreet, reticent, almost silent voice of earth called god. What Hölderlin calls *die heimatliche Erde* (the homely earth) or *die Heimat* (homeland) is precisely the earth as this other possibility of dwelling, that is, the earth as it is visited by the gods and illuminated with the light of that which, in excess of presence, is nonetheless immanent to presence. In Heidegger's own words,

[t]he earth, insofar as it is homely, is prepared for the gods. Through this preparation it first becomes homeland, but it can also decline again as such and fall back to the level of a mere domicile.¹¹

Thus, the earth is truly inhabited only when it has become a place of so-journ for the gods — when it has become sacred. Only then do men themselves truly dwell on earth. But then, they do not dwell as possessors of the earth, as the bourgeois inhabits his domicile, or the technologized human being inhabits the world. Rather, they dwell *poetically*, as creators, as grounding in works, in deeds, in words the abyssal origin and counter-essence of the world. And so, much in the same way in which world has its counter-essence in earth, technics itself, as a mode of inhabiting the world, has, as its counter-essence, another mode of dwelling, namely, art and philosophy. Art is the counter-effectuation of technics; both are rooted in man's relation to nature as τέχνη. They do not so much exclude one another as they call each other forth, counter-balance one another from out of a single man-nature assemblage. But, chronologically at least, art has technics as its condition of possibility. To be more precise, it is only once life is no longer a question of survival only, when certain material conditions of existence have been secured, that nature itself can become this other, poetic dwelling for man.

And so, when Heidegger writes that "we move [*rücken*] into the time-space of decision of the flight and arrival of gods," we must understand that the time-space in question does not mark one moment, one episode of history, but the very space in which history as such is played out, the

arena within which it unfolds and is decided upon. If we recall all the movements and counter-movements (*Entrückung* and *Berückung*, and the *Gegenwendigkeit* within each) attached to this *rücken* that characterizes “us,” we see that it does not point to merely one epoch of history, but to its very essence. That space—between flight and arrival, between *weg* and *da*—is the whole and entire time-space of decision. We must come to understand that this space designates the very oscillation and turning of Ereignis itself, and not a mere relation between pre-given terms:

It is possible that the character of the “between” (between gods and man) might mislead into taking beyng as mere relation and as consequence and result of the relation of what is in relation. But Er-eignis *is* this relating—if this designation is even possible—that first brings those in relation to themselves in order to lay their needfulness [*Notschaft*] and guardianship [*Wächterschaft*] into the open of the ones en-counterred and decided [*der Ent-gegnenden-Entschiedenen*].¹²

So, once again, and from the perspective of the other beginning, that is, from the beginning that is otherwise than metaphysical and that repeats metaphysics nonetheless, it is not as if the gods had ever been fully and merely present (only for metaphysics was this ever the case, and so only metaphysics can lament over, or indeed celebrate the “death of god”). It is not, then, as if history were suspended in the expectation of their return to full presence. History is effectively suspended, only permanently so. This suspension (ἐποχή) is precisely what Heidegger means by “epoch”: if history is epochal, it is as the site of this ongoing battle, this *Kampfplatz*, which is also the site of a reconciliation (an *Austrag*, precisely) between two sets of strifes (the strife between world and earth and the retort between gods and men). This is the battle that is being played out time and again. Each battle is an occasion for a new historical configuration; every specific, singular, and concrete way in which these two sets of opposition meet amounts to a joining of history—an epoch in the more restricted sense. Thus, in being or enacting such a suspension, it is not as if history unfolded as a spatial and temporal vacuum, as a mere emptiness marked by a traumatic event (the flight of God) and by the hope of its reversal (its redemption through God’s return). In the light of this reworking of what it means to relate to a God, the historically decisive question (around which the possibility of another beginning turns) becomes to know whether “we” shall ever be in a position to experience history as the site of this de-cisive struggle between the retort (of god and man) and the strife (of world and earth), in which each term is separated (*geschieden*) from its other, and at the same time brought into relation with it; whether, in other words, history will ever be experienced as this arena or this field of irreducible tension in which everything is brought into its own, and this includes ourselves, as the being who with-stands and

under-stands such a de-cision (*Ent-scheidung*); whether, in other words, we shall ever be in a position to experience history as Ereignis, or as the turning (*Kehre*) between the call (to the one belonging) and the belonging (of the one who is called):

History alone is in play in the between of the en-counter between gods and man as the ground of the strife of world and earth; history is nothing other than the appropriating of this between.¹³

And for Heidegger, ultimately, the *Gründung* in which the fate of this originary event, the space of this de-cision is played out, the place in which the question is first opened up is Hölderlin's poetizing. There, for the first time, history is explicitly articulated around the time-space of Ereignis. For the first time, the fate of history is taken away from beings themselves and relocated in its essence or its originary source (*Ur-sprung*): Ereignis, understood as the event of the reciprocal appropriation of belongingness and call, of which all events (*Ereignisse*) are but thrusts (*Stöße*).

At this point, and before moving further into identifying the "there" or the truth of beyng as *Austrag*, one can only pause and wonder at the extraordinary historical role with which Heidegger invests Hölderlin's poetizing. There is much at stake in Heidegger's turn to poetry, in his readings of Hölderlin, and in this motif regarding the flight of the gods, which he proposed as an alternative to the Nietzschean account of the death of God. But why the need to retain the divine, the holy, albeit as a non-metaphysical motif? And why grant poetry this destinal task? To be sure, Heidegger's extraordinary reworking of this overdetermined motif allows him to integrate a god that is not transcendent, but that emerges from within the oscillation and echo of Ereignis itself. To be sure, this god is perhaps ultimately closer to that of Spinoza, that is, absolutely immanent to everything that is. But if this god is not a being, nor being as such, if it is not a god to whom one prays, which one invokes, if it is a god that is altogether detached from anthropology and metaphysics, why still call it god, why still insist that there be a dimension of the divine and the holy? Does the thinking of beyng as event, does the question regarding the time and space of beyng inevitably lead us into reinscribing the religious, the divine, the holy, albeit radically reworked and envisaged anew on the basis of the essence of truth itself? Could we not envisage a configuration of truth that would not sacrifice to the essentially Greek intuition of an ongoing opposition and confrontation between gods and mortals? As Heidegger himself showed in *Being and Time*, the mortality of man does not necessarily imply the immortality of the divine, and man is no more significantly separated from—and this means also related to—the divine than from the animal realm, or from any other form of life. The motif of God could, in my

view, be dispensed with. It could be dispensed with without, however, dispensing with the *question* it indicates. This is the question of the trans-human and concerns the possibility of inventing for the human another future and another destiny. It is, in my view, the same question as the one Nietzsche posed. Naturally, to make such an assertion, we need to work Heidegger against himself, although only up to a point. We need, for example, to minimize declarations such as “Only a God can save us” and indicate that the reference to God—if it is to be maintained—can have nothing to do with the thematic of rescuing and redemption. That being said, it can and must have everything to do with liberating another humanity, a different sense of the human, one that would be neither inner-worldly nor extra-worldly, but simply other-wise than worldly: earthly. It has everything to do with the possibility of thinking the human beyond its metaphysical confines, beyond the confines of humanism, of good and evil, and of setting it free for its own belonging to the earth and being.

Leaving this question open, let me return to the trajectory Heidegger sketches toward the end of *Contributions* and pursues in subsequent texts. We have just seen how the initial strife between world and earth, or between clearing and concealing, is supplemented by a further opposition between gods and men—how, in other words, man is seen as drawn toward the world, as if “naturally” captivated by presence and beings in its midst, yet in the wake of a relation to an originary absencing and calling of the gods that amounts to a counter-tendency. The space of presence—the there of being, the between—will hitherto be understood in terms of this quadra-polarity, which Heidegger will eventually designate as the fourfold (*Geviert*), as if the field of individuation remained horizontal, yet multiple, delineated by horizons and counter-horizons, tendencies and counter-tendencies.

Now, the move to the further characterization of the between in terms of conciliation or accord (*Austrag*) is perhaps best announced in the following passage, in which we can already also decipher the discreet presence of the *other* difference (*Unter-schied*). This move is motivated by the necessity to bring together—which does not mean reduce—all the oppositions constitutive of the between, to reveal the oneness or intimacy that unites them together in their very struggling, not as an addendum, but as their jointing or their originary articulation:

The between is the simple bursting open [*die einfache Sprengung*] that appropriates being to beings, which until then are held back from their essence and are not yet to be named beings. This bursting open is the clearing for the concealed [is truth]. But the bursting open does not disperse [*zerstreut aber nicht*], and the clearing is not a mere emptiness [*keine bloße Leere*].

The between that bursts open *gathers* [*versammelt*] what it releases [*rückt*] into the open of its strifing and refusing belongingness [*verweigernden Zuge-*

hörigkeit], gathers it *unto the abyssal ground*, out of which everything (god, man, world, earth) returns to its unfolding [*zurückwest*] and thus leaves to beyng the unique decidedness of ap-appropriating.¹⁴

The between, the “there” of beyng as time-space, is thus identified with an event of a definite violence: it is an originary and forever renewed *breaking* open. Were it not for such a clearing, for such an originary blast or cracking open, beings would never come to be; what they are, where they are, is a function of this originary breaking open, through which they are allowed to unfold, in which they find their place. Thus, out of this originary chaos comes order and harmony. For such a blast is not pure dispersion, unlimited dissemination. The *Sprengung* is simultaneously a *Versammlung*, and the ex-plosion a gathering. What is released into the open is gathered in intimacy with that from which it is separated and kept apart in struggle and strife. And so the “there” is characterized by this tension between dispersion and gathering, time and space, in which the twofold strife that frames the event of being is quartered. It is the split that gathers, the hyphen of world and earth, men and gods. From this primal quartering, the framework of being originates. From the start, then, beyng is torn apart, quartered. But this quartering is its essence. And if, some years later, Heidegger writes “being” under erasure, it is to mark the crossing for which it stands, this chiasmic structure on which it is stretched out.¹⁵ This cross is nothing other than the mark of being in its dehiscence, the site of its most strifely gathering, the intimacy of its greatest tension.

Here one cannot help but remember the closing of Hyperion’s very last letter to Bellarmin, which reads:

The discords of the world are like the disputes among lovers [*Wie der Zwist der Liebenden sind die Dissonanzen der Welt*]. Reconciliation unfolds within strife [*Versöhnung ist mitten im Streit*], and all that was separated [*alles Getrennte*] finds itself again [*findet sich wieder*].¹⁶

These lines, in turn, echo the famous fragments in which Heraclitus unites together the thematic of the accord and the harmony on the one hand, and the discord and the disharmony on the other.¹⁷ As Marcel Conche judiciously notes in his commentary of Heraclitus’s fragment 8 (Diels-Kranz),¹⁸ ἁρμονία designates not so much, or at least not primarily, the musical accord, as the technique of assemblage, such as the one used in carpentry. Musical harmony is thus only an instance of the technique of assemblage of opposites. The primary image is that of a piece of wood carved in a way that is contrary to that of another, so as to allow them to fit into each other—mortise and tenon, for example. This, I believe, is what Heidegger means by *Fug* and *Fügung*: the assembling of opposites in a single fit or joint. To assemble, from the Latin *adsimulare* (*ad* + *simul*,

together) means not only to fit or put together the parts of some artifact, but also to gather into a group, to collect. As a power of gathering, of bringing together, the assembling is also a power of reconciliation: *Versöhnung* and *Austrag*. Now, with a view to what, or with what result, is such a jointure carried out? With the result that a solid sup-port (συμφέρον) for something is constituted. Hence, the carved-in-opposite-direction (ἀντίζου) helps to sup-port or sustain, and this means to gather or bring together in a single gesture. Such is the reason why those forces that go in opposite direction fit best together and lead to “the most beautiful assemblage” (καλλίστην ἁρμονίαν). The most beautiful assemblage is the one that unfolds on the basis of τῶν διαφερόντων, on the basis of those forces that differ from one another. But, of course, here we must think the δια- of the διαφερόντων and the συμ- of the συμφέρον together, as the twofold operation of a single φέρειν, *tragen*, or sustaining and bearing: συμφερόμενον διαφερόμενον, gathered-separated, as Heraclitus puts it in fragment 10. Such is the reason why, in a way, Heidegger’s *Austrag* “translates” Heraclitus’s ἁρμονία, and why it is not, in its ordinary sense of conciliation or reconciliation (the *Versöhnung* Hölderlin himself speaks of, and which Heidegger refers to as one meaning of *Austrag*) simply opposed to the other mode of *tragen* or φέρειν, the διαφέρειν of difference. Such is the reason why, ultimately, *Austrag* is the same as *Unter-schied*. The image of ἁρμονία developed by Heraclitus is that of Ereignis itself: it is the crossing or the chiasm of Ereignis, the coming together of opposites in a single *Fug* or jointure, the assembling or the adjusting of beyng itself, the cross that stretches the field of presence and sustains beings in its midst—its armature. This joining or jointing is at once the dis-junction of differences. The φέρειν that sustains and carries through the All is at once a gathering into a joint of opposites, and the inscription of these opposites in their difference. This motif is taken up again in fragment 51, where the theme is more explicitly musical: “They do not understand how that which differs from itself is also in accordance with itself: joining through opposite directions, as with the arch and the lyre.” Of course, what is at stake in these fragments is a thematic that Heidegger will be concerned to tease out in detail—that of the sense of being as difference, as the dis-porting that sup-ports and trans-ports, as the unfolding of contraries, or the quartering of truth, in the event of which every thing comes to find its place, is adjusted in the jointing of opposites. Ἀρμονία designates the unity of what opposes itself to itself and what, moving away from itself (διαφερόμενον), comes back to itself, is in accordance with itself. The contraries are the two sides of a single thing: the whole separates itself in its two sides and, in and through this sundering, carries out its self-adjustment. Ereignis is itself like the bow or the lyre: it too is a string instrument, it too resonates and vibrates with the tension of contraries that quarter it. Its oscillation and its echo are not so much the sign of a distant and weak-

ened force as the optimal expression of contrary tendencies in their encounter. Like Heraclitus's ἁρμονία, *Austrag* designates this state of equilibrium or reconciliation that gathers within it the most extreme tension, the convergence of opposed forces. Such is the reason why I suggest we translate *Austrag* with the words "assembling" or "adjustment." For the word "adjustment" even retains the French origin of the *juste* and the derived sense of justice (we recall here that, in "Der Spruch des Anaximander,"¹⁹ Heidegger translates δίκη, justice, by *Fug*, joint or jointing, that is, by a word that points in the direction of an originary fitting or bringing together) and has at least the twofold sense of fitting or changing so as to fit, and the sense of resolving or bringing into accord, as when one adjusts differences. The *Austrag* is precisely the unity of the δια- and the συμφέρειν: it adjusts differences, it brings them into accord, but only by allowing them to be or unfold *qua* differences, only by bringing them together in their greatest differential power, in their strife. Such is the reason why the *Austrag* is itself the greatest and most primordial strife, why the old French root of the *jouste* (joust) continues to prevail in the adjustment. In the joust differences cross one another, and this crossing is their most intimate gathering. Where the differences meet is where the joust is. The most precious accord, the most beautiful adjustment, is also the most intense joust.

This is how, in a text written immediately after *Contributions*, Heidegger formulates yet again the historical "decision" around which our fate is being decided:

Whether the machination of beings overpowers man and abandons him to the limitless essence of power, or whether beyng grants the grounding of its truth as the distress whence the en-counter [*Ent-gegnung*] of god and man crosses [*kreuze*] with the strife of earth and world. This crossing [*Durchkreuzung*] is the struggle of struggles: the event of ap-proprietation, in and through which beings are first properly transferred over to their belongingness to beyng [*in dem Seiendes erst wieder seiner Zugehörigkeit zum Seyn übereignet wird*]. War is only the uncontrolled machination of beings, peace the apparent suspension of this uncontrolledness. But *struggle* [*Kampf*] is the counter-play [*Widerspiel*] of the gift of essence from within the gentleness of the majesty of refusal [*Verweigerung*]. Here, "struggle" is thought on the basis of the stillness of the unfolding of essence [*Wesung*]. "Struggle" is the all-too human name for the event that is withdrawn from the human: the "event of ap-proprietation." Beyng is ap-proprietation [*Er-eignis*], adjusting appropriation [*austragsames Ereignis*]: *Aus-trag*.²⁰

Here we see how Heidegger subordinates the possibility of a historical turning—that is, the possibility of a *Verwindung* or a turning back onto the forgotten and abandoned essence of metaphysics—to the possibility of locating man—his thought, his deeds, his work, and his art—at the crossing between strife (of world and earth) and en-counter (of man and god).

Crossing, here, once again, must be understood in the twofold sense of the crossroad (the junction) and the crossing of swords, in the twofold sense of an encounter and a joust, of the adjustement of the differing forces, or of a discordant accord. This crossing (*Durchkreuzung*) is itself designated as the struggle of struggles, that is, as the originary event in and through which each term of the relation is brought into its own by being brought into conflict with its other, carried over into its own essence by being trans-propriated into its counter-essence. This is the extent to which the relation of appropriation is also one of ex-propriation. Similarly, every articulation presupposes a dis-articulation, every joining or junction a dis-jointure and dis-junction. In other words, the field of presence, the “between” is envisaged as the originary *Kampfplatz* onto which the same, yet always different battle is being fought. Heidegger is here quite clear: if Ereignis must be thought as this originary event, or relating, in and through which each comes into its own by being transferred over to something that it is not, to what is most *not* itself, if Ereignis is the originary struggle (*Kampf*) out of which strife and retort themselves cross one another and configure a field of presence, *Kampf* is not war, and *Austrag* is not peace. War and peace happen in the world only and concern beings only. War and peace are only two aspects of machination.²¹ *Kampf*, on the other hand, designates the originary quartering of being, through which beings themselves, in their gatheredness, come to unfold according to their essence. *Kampf* is *Austrag*, joust is adjustement. Like the God of Heraclitus, *Austrag* is “war-peace”.²²

Adjustment assembles (in struggle), in a crossing [*Durchkreuzung*], the self-clearing en-counter and its en-counter (godity and humanity), with the self-opening strife and its opened (earth and world).²³

How is this adjustment carried out? Precisely in the form of a *tragen*, a carrying, a sustaining, and a bearing, which retains the trace of the φέρειν previously encountered in the δια- and the συμφέρειν of the Heraclitean fragments, thus allowing the theme of the *Austrag* to maintain an essential connection with the διαφέρειν of difference. But this is a dimension which, as important as it may be, cannot be conveyed in the English translation of *Austrag*. It is probably in his essay entitled “Die Sprache” that Heidegger is most explicit about the various senses of *tragen* and *austragen*. Such is the reason why I would like to turn to this essay, or to only a few pages within the essay, in order to circle back upon the texts from 1938–39, in what will amount to a sort of retro-reading.

In the opening essay on language from *Unterwegs zur Sprache*,²⁴ taking his lead from Trakl’s “A Winter Evening,”²⁵ which, on Heidegger’s reading, poetizes the relation between world and things from out of their originary middle-ground,²⁶ Heidegger suggests that, in their thinging,

that is, in their essential unfolding, things carry out world [*tragen Welt aus*]. *Austragen*, Heidegger goes on to say, is to be understood in the old high German sense of *bern*, *bären*, to bear, which give rise to the words *gebären*, to bear, carry, gestate, give birth, and *Gebärde*, bearing, gesture. Thus, “thinging,” the things gesture and gestate world. World, on the other hand, grants [*gönnt*] things their essence. This means that world and things do not simply subside alongside one another. They penetrate each other, in such a way that they traverse a middle. In it, they are at one [*einig*]. Thus at one, they are intimate [*innig*]. The middle of the two is what Heidegger calls “intimacy” [*Innigkeit*]. Another name for this middle is the between, which the Latin *inter*, and the German *unter*, designate. The intimacy that is at issue here does not amount to a mere fusion of world and thing, however. Nor does it amount to their mediation. Rather, the *inter* presupposes that what is intimate—world and things—divides itself clearly [*rein sich scheidet*] and remains separated [*geschieden*]. In the middle of the two, in the between of world and thing, in their *inter*, the scission, the stice prevails [*waltet der Schied*]. Thus, the intimacy of world and thing unfolds in the schize or the stice of the between, in the inter-stice [*im Unter-schied*]. *Unter-schied* designates this difference that is prior to anything like a distinction performed by the human logos, prior to the canonical conception of difference as dividing and articulating a kind in its various species. This is precisely the point at which the thematic of the stice, the scission, the separation comes together with that of the assembling, the adjusting, the bringing-together. Both amount to the same, inasmuch as they constitute a movement of carrying, bearing, and sustaining—an originary $\phi\epsilon\rho\epsilon\upsilon$. “The intimacy of the difference,” Heidegger writes, “is the unifying element [*das Einigende*] of the *diaphora*, of the dis-junctive adjustment [literally: of the carrying out that carries through: *des durchtragenden Austrags*].” The difference carries out world in its worlding, carries out things in their thinging. Thus carrying them out, it carries them toward one another, transports them into one another, in such a way that, in this very transporting, each comes to be its own: trans-propriates them. The difference, now understood as difference and middle for world and thing, ap-propriates things into bearing a world and world into granting things. Thus, the difference does not emerge as the relation of world and thing. Rather, it is the very dimension or space, prior to any distinction, any difference and any space, the original and originary middle from out of which world and thing are turned toward one another, handed over to one another, are for one another, and yet decisively turned away from each other, separated from one another. The difference holds worlds and things apart and together, dis-joins them as it articulates them. In Trakl’s poem, Heidegger suggests, the threshold, with its strong wooden beam bringing the inside and the outside together, yet delimiting them, is the motif around which world and

things are brought together into their separation, and is best captured in the poem with the word “pain.” What is pain? asks Heidegger. It is the rift [*Reiß*]. It does not tear apart [*zerreißt*] into dispersive fragments, however. Pain indeed tears asunder [*reißt . . . auseinander*], it separates [*scheidet*], yet so that at the same time it draws everything to itself, gathers it to itself. Its rending or *Reißen*, as the separating that gathers, is at the same that drawing [*Ziehen*] which, like the pen drawing of a plan or sketch, draws and joins together [*fügt*] what is held apart in separation [*im Schied Auseinandergehaltene*]. Pain is the joining agent [*das Fügende*] in the rending that divides and gathers. It is the joining [*Fuge*] of the rift. And the joining is the threshold. It adjusts the between [*sie trägt der Zwischen aus*], the middle of the two that are separated in it. Pain joins the rift of the difference. Pain, Heidegger concludes, is the dif-ference itself.²⁷ In this double yet simultaneous gesture, world and things are trans-ported into one another, and in this trans-portal, they become what they are — they are trans-propriated. What they are, they are from out of the operation of dif-ference. For the world to world and the thing to thing, for their essence to unfold, for every world and every thing to *be*, the dif-ference must unfold. It is always against the backdrop of dif-ference that world and thing, being and beings come to be, against the backdrop of dif-ference that presence unfolds, that “there is.” Were it not for this operation of dif-fering, which is nothing other than the spatializing and temporalizing of beyng, no thing could ever be. And if, in the end, the thought of originary dif-ference, or of adjustment, coincides with that of Ereignis, it is because the operation whereby things and world are brought to be what they are and are mutually ap-propriated, calling and addressing one another, is identical with the operation whereby they are separated from one another, always at one with each other, intimate, yet never simply one or merely identical.

As *Austrag*, then, the *diaphora* is also *symphora*; it is the middle that sustains and sup-ports world and things by trans-portaling them into one another, or the originary rift, crack, or fissure that brings them together in keeping them apart. In other words, it is the tearing asunder that gathers, or the most intimate fold of being. It is *the* originary dimension, the unfolding of time-space, at once syntopic and diachronic, gathering and dispersal: the gathering rift, the *inter*. As the unity of time and space, as the event of time-space, the in-between of the there designates the twofold oneness and intimacy of *inmitten* (in the midst) and *unterdessen* (in the meantime). This is how beyng unfolds: amid and meanwhile. It unfolds “between” being and beings, world and thing, world and earth, gods and man, yet in such a way that these poles, and this fourfold in no way precedes the unfolding of beyng itself. The in-between is originary.²⁸ It designates the spatial-temporal clearing, the dimension in which “strife and retort cross each other’s paths, and above radiate, invisible, in the clearing.”²⁹ It denotes the realm of the “inter” or the *Unter*, in which *inmitten*

and *unterdessen* are gathered. Once again, if Heidegger conceives of time-space as the site of de-cision (*Ent-scheidung*), it is because it harbors the opposites (world-earth-gods-men) onto which beyng is diffused, holding them together in their very separatedness (*Geschiedenheit*). In and through this twofold struggle, each is brought into its own by being carried over (*übergetragen*) into the other. The *Austrag*, Heidegger tells us, means the *Auseinandertragen*, the reciprocal carrying of retort and strife in the crossing of their essence.³⁰ *Austrag* brings together (in struggle), in a crossing, the self-clearing en-counter and what is there en-countered (godity and humanity) with the self-opening strife and what is there opened up (earth and world). The “adjustment” is the intertwining or the interlocking (quite literally, the carrying into one another: *das Auseinandertragen*) of en-counter and strife in the crossing or chiasm (*die Kreuzung*) of their essence. This intertwining carries out (*trägt . . . hinaus*) the intimacy of the chiasmic counterplay (*Widerspiel*) in which the history of the Da-sein is played out.³¹ The there or the truth of beyng is thus the site of an originary intertwining, of an assembling of contrary forces, the very disjunctive interlocking of which amounts to the spatializing and temporalizing of history. This is made even more clear in the following passage, in which the thematic of the *tragen*, on the one hand, and of the *scheiden*, on the other, are woven together so as to constitute the fabric of beyng itself:

Truth is clearing “of” the adjustment [*Austrag*], that is, of the event of appropriation. Clearing “of” the adjustment means: the enrapturing [*Entrückung*] and spatialising [*Einräumung*] of those bound together [*Entbundenen*] in their separation [*Scheiden*] as the self-allocated ones [*Sichzugewiesenen*], a rapture and spatializing appropriated in the event of ap-proprietation [*in der Er-eingung ereignete*], sustained and endured in the adjustment [*im Austrag zugetragene und ertragene*].³²

From that point on, and until the very end, it will become a question of thinking “being as difference.” What does this mean? It means that we need to think being no longer on the basis of a distinction between being and beings, no longer as *Differenz*, but as *Unter-schied* and *Austrag*, that is, as the very “between” within which being and beings unfold. It means that we need to think being as the originary rift or crack that gathers together what it separates. If the thought of the “later” Heidegger is indeed placed under the authority of dif-ference (*der Unter-schied*) and of the adjustment (*der Austrag*), in what amounts to a deepening and an overcoming of the initial problematic of being in its difference from beings, it is, I believe, as a result of the work achieved in *Contributions* and other texts from that period. It is only by thinking the source of this distinction (*Differenz*) as Ereignis that Heidegger is able to think being as difference. Indeed, Ereignis names nothing other than being,

but being in the movement of its own difference, which is nothing other than the birth or the coming to presence (the gestation, the *Aus-tragen*) of that which is not it, in which it inscribes *and* effaces itself, gives itself *and* refuses or withholds itself. Being unfolds (*west*) as this cracking or this fissuring open that teems with beings, as the temporal site for a manifold of events. Thus, in thinking being, one always ends up with the other than being (which is not otherwise than being), in which being withdraws—with time, the human, the world, and their counter-essence or counter-effectuation (space, the god, the earth). And in this other, which is joined and jointed with being, in this jointure or this articulation, Ereignis unfolds.

In this context we can wonder the extent to which being, in the movement of its difference, in the stretching out of its essence as the free space of time, ever allows itself to be nailed to the sole four corners of the four-fold, ever limits its domain and reign to the sole assemblage world-earth-man-gods. We can wonder whether the thinking of being as difference presupposes *that* structure in the shape of a cross, *that* specific skeleton or framework, which always brings us back to two series of poetic motifs, the phenomenal validity of which remains to be verified. After all, does the event of time-space not open onto the totality of beings? Can the field of individuation be limited to the fourfold, to the essentially poetic rule of the *Geviert*? Should we not, precisely in the context of a discussion regarding time-space as the event of truth itself, question the role that language (as *Sprache*) and poetry (as *Dichtung*) are made to play? It is, of course, not a matter of saying that language, as poetic language, has nothing to do with the advent of truth. On the contrary. But it could be a question of wondering whether it is really this privileged site of truth Heidegger wants it to be. It is a matter of asking, if only for a moment, about the meaning of the gesture through which Heidegger grants *Dichtung* and art a historical power simply unheard of. In wanting to dissociate thought absolutely from any form of representation, from the philosophical concept or the philosopheme (in the end necessarily metaphysical for Heidegger) as well as from the scientific matheme, does Heidegger not precipitate it too quickly and one-sidedly into the arms of the poem and of art, assuming that they alone are equipped to take up the challenge of the other beginning? Can thinking, in the most fundamental and genuine sense, not unfold also on the other side of nature, the very side or interpretation of nature which Heidegger, and phenomenology in general, identifies with the reign of metaphysics, and of machination: in science, and in this other language that sustains it?

PART III. ONTO-HETERO-GENESIS: THINKING DIFFERENCE WITH DELEUZE

Always extraordinary are the moments in which philosophy made the groundless [*le Sans-fond*] speak and finds the mystical language of its wrath, its formlessness, and its blindness. . . . This is the fundamental problem of “who speaks in philosophy?” or “what/who is the ‘subject’ of philosophy?” . . . As for the subject of this new discourse (except that there is no longer any subject), it is not man or God, and even less man in the place of God. The subject is this free, anonymous, and nomadic singularity which traverses all men as well as plants and animals independently of the matter of their individuation and the form of their personality.

There is therefore an entire physics of surfaces as the effect of deep mixtures—a physics which endlessly gathers the variations and the pulsations of the entire universe, enveloping them inside these mobile limits. And, to the physics of surfaces, a metaphysical surface necessarily corresponds. Metaphysical surface (transcendental field) is the name that will be given to . . .

—G. Deleuze, *Logic of Sense*

Physics beyond Metaphysics?

Having shown how Heidegger's thought constitutes a step toward the deconstruction and overcoming of classical Aristotelian ontology, and the retrieval of a sense of Being as difference *for us*, I want now to return to the question of science in order to show how it too calls into question some of the central concepts of metaphysics, concepts which were also those of science itself for a while. In other words, and against Heidegger himself and most phenomenologists (from Husserl to Merleau-Ponty), I would like to argue that science paves the way for a conception of matter that is simply irreducible to its classical philosophical conception. Ultimately, this is a task that will lead me into the thought of Deleuze, envisaged here as having provided the ontological materialism suited to our scientific modernity. Eventually we shall be in a position to reveal how ontology belongs also on the side of mathematical nature, how the language of mathematics indeed discloses nature as it is in itself, and so, in the end, how philosophy finds itself equally and simultaneously distributed between the two sides of nature.

This chapter aims to identify the critical value of science in relation to ontology. Chapters 7–9 will extract the positive ontology science presupposes.

As we have seen, it is with Aristotle that philosophy is revealed simultaneously as physics and metaphysics, as ontology and theology. While “physics” designates the science of the laws and principles governing sensible beings in motion, metaphysics points to a motionless world in which beings are not subject to the erosive effects of time. It is concerned with those first principles and highest causes which themselves partake of a logic of unmoved being. Between the two sciences, there is a relation of

precedence and grounding. This is a direct consequence of the nature of the relation between the two worlds they describe, namely, a relation of imitation, and thus of (greater or lesser) resemblance—a relation of identity. In the seventeenth century, a decisive shift begins to take place: physics becomes subject to an irreversible process, in which movement comes to be understood purely *locally* and *mathematically*. As an immediate consequence, the central *ontological* concepts of Aristotelian physics are either transformed radically or simply discarded. With Galileo (and subsequently Newton), physics becomes a mechanics and is progressively freed from its earlier subordination to metaphysics as first philosophy—even, I would suggest, and as only a detailed engagement with Hegel's philosophy of nature would reveal, from metaphysics as rethought in the *Logic*, that is, as involving a *dialectical* conception of change and becoming. Ultimately, it is over the question of nature and of natural science that Hegelian thought stumbles. At the same time, modern metaphysics itself undergoes a profound transformation: while still envisaged as first philosophy or as the science of all sciences, it locates the principle or the ground of all knowing, and of nature in particular, no longer in some divine entity, or in some transcendent principle, but in human reason alone. It is still the science of foundations, but the ultimate ground, the substratum, has now shifted from the object (which could not be envisaged as such until then) to the subject, from the substance as a mixture of form and matter to the "I" as a thinking thing. With Hegel, this dualism is overcome, not insofar as thinking moves beyond subjectivity, but to the extent that the real is entirely identified with the reflexive structure of subjectivity, and so with thought itself, while the subject itself, as the *ego cogito*, is in turn identified with the movement of being as such and as a whole.

In the light of its Aristotelian impetus, philosophy thus understood is at an end. The "end" of metaphysics is, to my mind, the end of that onto-theological project. By "end" I mean the following: (1) The completion of natural philosophy in physics, understood as *mathematical* physics, today increasingly statistical and post-Euclidean. (2) The crisis of "foundations," or of the subject as the ultimate substratum, evidenced in the Hegelian text, which signifies simultaneously the completion of the metaphysics of subjectivity and the dissolution of the "I" as the absolute foundation on which knowledge is erected. On the basis of such a diagnosis, we can hardly *not* raise the question of the timeliness and purpose of philosophy: what can it do, of what is it capable, once its initial project has been "completed" thus, at once actualized and overcome? Of course, philosophy can always turn itself, as it began to do with Ockham, into a purely formal science, or a "logic." It can also become philosophy of science, in what amounts to a reversal of the classical order between first and second philosophy. In this sense it is still meta-physical, but in the

literal sense of coming *after* the science of nature, which it can only presuppose, and over which it can make no fundamental claims. Yet can it ever again take on the proud title of the science of being? Can it do so in an entirely new way, one that would mark an entirely new departure? Can it remain ontology, and even philosophy of nature, without being inscribed in the metaphysics of substance and essence?

Before attempting to answer such questions, already broached in connection with Heidegger, I would like to justify the claim I have just made regarding the completion of the originally Aristotelian project of a science of nature in contemporary physics. So far, and especially in the Introduction, I have made a number of references to physics, and to the conception of nature that emerged from within that field. Those remarks were all made in the context of modern physics, and this means the physics of Galileo and Newton. This is the science which, from Descartes to Kant and Hegel, philosophy as meta-physics was intended to ground. Yet the question that needs to be addressed here is one of knowing whether contemporary physics has not moved beyond its classical delimitation to such an extent that it would force a new conception of the metaphysical and of ontology. This question will quite naturally lead us back to the issue of what we could tentatively and quite literally call a post-modern metaphysics. In what follows, and with a view to preparing the ground for an encounter with Deleuze's take on that question, I would like to show how contemporary physics, particularly in relation to quantum theory and thermodynamics, enacts a twisting free of the metaphysics of substance and subject inherited from classical ontology, a metaphysics, I might add, which still governed much of classical mechanics.¹ Where metaphysics thought essences, contemporary physics thinks events. Where metaphysics thought permanence, contemporary physics thinks evolution. Where metaphysics thought substances as self-identical substrata onto which accidents were added, from the outside as it were, physics celebrates the reversibility of substance and accidents, and thus the end of substantialism. In this context "thinking" always means thinking by way of mathematics: movement, contingency, chance, chaos are concepts that are no longer simply ontological, no longer simply integrated within a pre-mathematical physics, but entirely and completely mathematical. They now correspond to mathematical functions and equations. And it is even in this mathematical totality or in the "all mathematical" that, according to Gaston Bachelard, "the new scientific spirit" consists:

It is the failure to give due credit to the role of mathematics in scientific thought that gives rise to the belief that scientific consciousness basically remains the same in kind despite the most profound rectifications. The idea that mathematics is a language, a mere medium of expression, has been endlessly

reiterated. It has become customary to consider mathematics as an instrument at the disposal of a reason that is conscious of itself, the master of pure ideas endowed with a pre-mathematical clarity. A segmentation of this sort might have been meaningful at the origins of scientific consciousness, when the initial images of intuition possessed a suggestive power and helped in the constitution of theory. For example: if it is admitted that the idea of attraction is a clear and simple idea, it becomes possible to claim that the mathematical expression of the laws of attraction merely specifies particular cases, that it merely strings a few consequences together, such as the law of surface areas, which also have a clear and direct meaning in our initial intuitions. But in the new doctrines, by distancing itself from naive images, scientific consciousness has, in a sense, become more homogeneous: from now on, it is entirely present in the drive to mathematization. Better still, it is the drive to mathematization that constitutes the axis of discovery, it is mathematical expression alone that enables us to think the phenomenon.²

In what follows, and precisely through this mathematization of the problems inherited from metaphysics, I want to argue that it is contemporary natural science that constitutes the consummation of metaphysics. How does this consummation take place, and what does it mean? It takes place through a radical dislocation of the fundamental concepts of metaphysics, one that goes as far as—if not farther than—the most radical *philosophical* critiques of such concepts. So, on the one hand, the natural sciences overcome and step beyond classical metaphysics, forcing us to review the most fundamental concepts with which it operated. And yet, at a deeper level, it is only to the extent that they share a common origin and a common battleground, and partake in this battle of giants over being (γίγαντομαχία περὶ τῆς οὐσίας) with which Plato once identified philosophy, that the natural sciences can replace metaphysics.³ It is in that respect that they mark its consummation or its completion. Science is our new metaphysics, or, more accurately perhaps, the contemporary state of our metaphysical destiny. But how are we to understand “destiny” here? Simply as the way in which our relation to nature as such and as a whole has been decided within the space of questioning broached by metaphysics, and this means through a questioning of nature with respect to its essence. As a result of this consummation, an essential ambiguity of science, and of metaphysics itself, comes to the fore. By invalidating or neutralizing the fundamental concepts of metaphysics, science overcomes it. Yet insofar as it unfolds within the space initially broached by metaphysics, it completes it. There is thus an essential and irreducible ambiguity of contemporary science, which holds itself on the edge of metaphysics. We need to ask whether, because of this ambiguity, and because of the way in which it brings it most manifestly to the fore, contemporary science does not *also* open onto an outside, a beyond, which it remains unable to think as such. It is precisely at the moment

when science consumes metaphysics, thus confirming it and establishing it firmly, that it also points beyond it, toward this excess or this horizon off which it lives.

Let me be very clear: it is not a question of shifting the terrain of “rescue,” from the “gods” to the sciences. It is not for me a question of saying: it is not the gods that can save us, but the sciences. Scientific positivism too is imbued with a metaphysics of progress and emancipation that must not be allowed to take the place of the more openly eschatological (or messianic) origin of Western religion and politics. Too often, science, and technology perhaps even more so, are experienced as a form of salvation and turned into objects of faith, if not worship. And even when they are opposed to the “irrationality” of faith, they often perpetuate its most stubborn presuppositions, such as its quest for eternity, permanence, and identity. After all, was Newton himself not celebrated all over England (and the Western world) as the “new Moses” who had been shown the “tables of the law?” And in the following verses, written by Pope as a proposed epitaph for the scientist, we witness the elation linked to having discovered the language which God Himself allowed nature to speak:

Nature and Nature’s laws lay hid in night:
God said, let Newton be! and all was light.⁴

In contrast to the positivist and often pious celebration of physics in the eighteenth and nineteenth centuries, therefore, it is, for us, a question of bypassing the vocabulary of saving and rescuing altogether: we do not need to be saved, for neither have we sinned nor have we been abandoned. In the same way in which philosophy (and, I would suggest, poetry itself) must become resolutely atheistic, so too must science. It cannot be a question of declaring the “end” of philosophy simply in order to reinvest the sciences with the same metaphysical presuppositions. What it can and must be a question of, however, is acknowledging the extent to which some of the most decisive developments in contemporary science actually pave the way for a philosophically renewed conception of nature, at the center of which lie the concepts of difference and event. In an almost paradoxical way, contemporary science brings us to the very edge of a genuine thinking of difference, even if and when it remains unable to think it *as such*. Philosophy alone thinks difference from within difference itself, difference in and for itself. So long as this concept of difference is not clarified, everything I have just said remains abstract. But before I do this, I must progressively introduce the way in which twentieth-century physics has radically altered the metaphysical conception of nature inherited from Greek antiquity (Aristotle and atomism in particular) and modernity (from Descartes to Kant). In so doing, I hope to show that a decisive shift takes place from a substantialist, static, and exclusively

spatial (extended) conception of beings to a conception of beings as systems and as events, a shift, furthermore, which paves the way for the more genetic approach to ontology that we are going to see at work in Deleuze's work. This shift amounts to an overcoming of metaphysics within metaphysics itself. Contemporary physics—and by that I mean all sciences of nature—is, in a way, a meta-metaphysics.

I want to show two different ways in which the fundamental concepts of metaphysics, and the assumptions they carry with respect to nature, have been radically called into question and dislocated by contemporary physics. To each cluster of concepts corresponds a particular area of physics, namely, quantum mechanics and thermodynamics.

In a sense, Heidegger was right to claim that Newtonian physics reflects a certain ontological decision regarding the world. The undeniable results and theoretical and experimental successes of Newtonian physics should overshadow neither its origin nor what we today know to be the specific, and actually limited, nature of its objects. This is a physics that is, in a sense, human in its dimensions. It is limited to what can be seen by the human eye and holds for middle-sized objects only, those very objects that are part of our environment and daily lives: the stars and planets within our solar system, falling bodies, simple machines with reversible, purely mechanical movements—in other words, idealized systems that know nothing of the laws of thermodynamics. And yet, at the same time, and directly related to the first point, the world for which such a physics holds is a world that does not take the full measure of the fact that it is seen from within, the fact that the human inhabits it. It is an ideal world, one in which the position of the human in the very act of observing and calculating is not taken into account. Of course, within the ambit of Newtonian mechanics, and this means within the parameters of a physics concerned neither with the infinitely small nor with quasi-infinite speeds and distances, the “human” factor is a negligible one and so can be disregarded altogether. But the result of this is that the standpoint of the human, as a “pure” observer of an objective reality, is elevated to that of the divine: the world of Newton is seen as if with the eyes of God, that is, from the outside; as such, it remains a very Christian world, albeit one that perhaps no longer needs the hypothesis of a Creator. The world presented to us by Newton is a world of eternal and simple trajectories, a world without friction or loss of energy, a world still untouched by the brutal reality of thermodynamics and the work of time: a world of pure, eternal, and permanent being. It is also a world still untouched by the intrinsically “uncertain” or “fuzzy” comportment of matter and energy at the subatomic level, or, indeed, by the relativity of time. Finally, it is a world whose simplicity and predictability lends itself to a purely deterministic calculation, and so to the possibility of an unrestrained domestication

and domination on the part of man. With Newton, the Cartesian dream of becoming “master and possessor” of nature seems to be at long last attainable, if not already attained. It is, in other words, a metaphysical world. And yet, it is this very world, a world most of us still associate with the scientific enterprise as such, which, to a large extent, will be changed fundamentally and radically by the emergence of quantum theory and thermodynamics, in what amounts to nothing less than what Bachelard called an “epistemological rupture.”

1. Quantum Theory

Now, there are certain actualities [*actes*], which we call *corporeal*: magnitude, figure, motion, for example, along with all those that cannot be thought of apart from extension in space; and the substance in which they exist is called *body*. We cannot pretend that the substance that is the subject of figure is different from that which is the subject of spatial motion, etc., since all these actualities agree in presupposing extension. Further, there are other actualities [*actes*], which we call *thinking* activities: understanding, willing, imagining, feeling, etc., which agree in falling under the description of thought, perception, or consciousness and knowledge. The substance in which they reside we call a *thinking thing* or the *mind*, or any name we like, provided we do not confuse it with corporeal substance.⁵

The old division of the world into objective processes in space and time and the mind in which these processes are mirrored—in other words, the Cartesian difference between *res cogitans* and *res extensa*—is no longer a suitable starting point for our understanding of modern science.⁶

It is not just the division of the world between a corporeal, extended substance and a thinking substance that is called into question in modern micro-physics, but the very idea of substance itself, the very conception of being as substance. By drawing our attention to the impossibility of holding onto the Cartesian division of nature, Heisenberg actually invites us to call into question the substantialist world-view as such. The concept of substance, along with its distinction from its accidents, as characterizing beings in their essence, proves to be no longer adequate to account for the comportment and structure of nature in its complexity. It is the substantialist, and this means non-relational, self-identical, self-present, and permanent interpretation of the thing of nature, that twentieth-century physics has overthrown by investigating the world of the infinitesimally small (and the infinitely large). For micro-physics, natural phenomena are no longer inert objects, things already there, present in space, extended. Rather, they are things in motion, and the laws associated with this motion are no

longer those of inertia. This motion is not even only local, as it is now identified with the transformation of matter into energy, and energy into matter. It is now the concept of energy that provides the link between the thing and its movement. It is through the quantity of energy that we can see how a movement becomes a thing. Through its energetic development, the atom, for example, is as much a movement as it is a thing, as much a becoming as it is a being. Before the birth of micro-physics, the concept of energy—to say nothing of that of movement—was, of course, known, and its transformations were closely examined: kinetic energies became potential; the various forms of calorific, chemical, mechanical, electrical, chemical energy transformed into one another directly, through conversion rates. And matter was somehow perceived, or intuited, as the place or the ground for these exchanges. Yet it still remained divorced from them. Matter was perceived only as a substrate, or a substance, and energy as a quality somehow external and indifferent to this substrate. It was thought that matter had energetic properties, and that it could absorb or give out energy. The view remained somehow Aristotelian.

In contemporary physics, however, energy is incorporated into matter itself, associated with it, in what amounts to a permanent structural exchange. Not only does the atom atomize the phenomena that gather around it, but also it provides the energy it gives out with a structure. The atom is itself transformed discontinuously through the absorption or emission of discontinuous energy. Consequently, it can no longer be a question of saying that we know matter through energy, as we know a substance through its accidents, nor can we say that matter *has* energy; rather, we should now say that matter *is* energy, and that energy *is* matter. This substitution of verbs is crucial. It amounts to replacing description with equation, quality (or the logic of qualification) with quantity. Unlike matter, which can always give the illusion of locality and extension, insofar as it is given to us as already spatialized, energy is without physical contours, without a face, and thus constitutes a first step toward the freeing of nature from the grip of the Cartesian *res extensa*.

To illustrate this point, let me turn to a few pages by Gaston Bachelard.⁷ In those pages Bachelard refers to an article by one R. A. Millikan, in which the idea of the creation of the atom through movement is put forward. Specifically, and in Bachelard's own words, this paper testifies to "the ontological reversibility of cosmic radiation and matter."⁸ Millikan finds the cause of cosmic radiation in the process of edification of atoms in those regions of the universe where temperatures and pressures are at the other extreme end of those found in clusters of matter. In other words, to the process of atomic destruction in stars, Millikan opposes a process of atomic creation in the interstellar void. The atomic destruction of stars releases radioactive energy that is converted back into matter

(into electrons) in the null conditions of density and temperature that are found in the interstellar void. It is this “reconversion” of energy into matter that is announced in cosmic radiation. This is what Bachelard means by the ontological reversibility of radiation and matter. What is remarkable in this instance is the extent to which there is no longer any separation between matter and energy, as was still the case in Einstein’s equation of the photochemical effect, in which the exchange between matter and energy still presupposed some sort of autonomy on the part of the two terms. What we have now is a movement without support or foundation, in other words, a movement that creates its own support: matter is created on the basis of radiation; the thing or the substance is generated by movement itself. In a way, then, the Aristotelian schema has been reversed, insofar as movement no longer happens to a pre-given substance, but creates it. The movement or the radiation “is” as much as the particle, or matter.

The demise of the “realist” or “substantialist” viewpoint in (meta)physics can also be described in the following way.

Let us for the moment take the example of the subatomic particle. Of course, this is not just any example, but an instance that arises from within this moment or this event in the history of physics that revolutionized the entire field and forced an entire profession to reconsider what it had hitherto thought to be unquestionable—among other things, a certain metaphysical presupposition regarding the nature of the physical object, one that it shared with an entire philosophical tradition. Until the advent of quantum mechanics, it was simply assumed that an unalterable mass of matter, wrongly attributed to quantum particles, remained constant within the transformation of phenomena. In other words, the basic metaphysical paradigm remained in place: beneath the transformation of natural phenomena, the irreducible presence of unalterable atoms:

It was thus that there arose the over-simplified world-view [*Weltbild*] of nineteenth-century materialism: atoms move in space and time as the real and immutable beings [*das eigentlich unveränderlich Seiende*], and it is their arrangement and motion that create the colourful phenomena of the world of our senses.⁹

At first, this still atomistic, “realist” interpretation of particles still held sway, so rooted was the conception of matter as made up of actual things or substances, however microscopic they may be:

It has become clear that the desired objective reality of the elementary particles is too crude an oversimplification of what really happens, and that it must give way to very much more abstract conceptions.¹⁰

And so, in the words of Heisenberg himself, “nothing has been changed in principle if we recognize protons, neutrons and electrons as the smallest building-stones of matter, and interpret them as what truly and really is [*als das eigentlich Seiende*].”¹¹

In what sense is the elementary particle neither a substance nor a being in the sense so precisely formulated by Heidegger, when he writes that, for modern science, a thing designates “a material mass-point in motion within the order of space-time” which, as such, constitutes the “ground and soil” (*Grund und Boden*) or the “substructure” (*Unterbau*) of all other things?¹² Now, while Heidegger’s formulation may hold as a description of Newtonian physics and the atomism of Democritus, Leucippus, and Lucretius, one still commonly accepted in the nineteenth century, it fails to describe accurately the sense of the atom in quantum mechanics. Twentieth-century physical atomism departs from such a conception so radically that it is almost impossible to see it as the direct descendant of Ancient atomism. Elementary particles can no longer be described in terms of “infrastructures” supporting or sustaining physical events from which they could be distinguished as indivisible and irreducible kernels of being. They are no longer the *substratum* of all natural phenomena. Why? Because they lack the features traditionally associated with such a substantialist interpretation of the individuated thing: indivisibility — the *atomon* is literally indivisible, it is the smallest possible material element; permanence — its stable core endures while accidents or events take place around it; self-identity — it is not affected in its very identity by these accidents; locality (or extension) — the thing is located in a particular place in space, to which a point can be associated on a Euclidean plane.

It is now a well-established fact that all particles can be further divided when collided with other particles. What this does not mean, however, is that they are not broken down into even smaller “bits” of matter. The general belief that the “ultimate” structure of reality could be discovered by moving ever more deeply into the world of the infinitely small (a quest that governed quantum theory for much of its early history) is one that is now seriously undermined. Why? Because the more the scientific community was able to advance in the order of the microscopic, the more it found itself confronted with a multiplicity of particles. The structure of the atom first revealed a set of so-called “fundamental” particles: electrons circulating around a nucleus composed of neutrons and protons. Yet these particles turned out to be not so fundamental, but constituted by even tinier particles: quarks, which come in a wide variety, themselves held very tightly together by the exchange of small packets of energy called *gluons* (“gluing” the quarks together, so tightly and permanently that quarks can never be torn away from one another, and have never been observed experimentally in a free state); other identified particles

(in the “weak” force) include the tau meson, the muon, and the neutrino, which interact by exchanging quanta, called *W* and *Z* bosons¹³—to the point where, it is now thought, elementary particles are most likely to be infinite in number. According to the branch of quantum physics known as “string theory,” at the origin of every subatomic particle, and thus of the structure of matter as a whole, from atoms to galaxies and the universe itself, we do not find actual “things” or “beings” that would correspond to the smallest building blocks of matter; we do not even find point particles, but infinitely small (on average as long as the Planck length, or about a hundred billion billion times smaller than an atomic nucleus) one-dimensional filaments, somewhat like infinitely thin rubber bands, vibrating to and fro. These filaments are not themselves made of smaller particles, but are simply vibrations in the spatial fabric of the universe (which includes time as one of its dimensions, and an extra six, or even possibly seven, dimensions!), potentially infinite in number and variety. This theory proposes that such filaments are ultramicroscopic constituents making up the particles out of which atoms are made. But even the word “constituent” is misleading, insofar as it gives the impression of a permanent and stable substrate constitutive of atoms, when it is more a question of understanding the particles themselves, which only ever appear as points, as potentially infinitely varied microscopic vibrations. The “strings” of string theory would be so small that they would appear point-like even when examined with our most powerful equipment. One of the consequences of this theory is that, by being able to execute an infinite number of different vibrational patterns, strings would give birth to a corresponding never-ending sequence of elementary particles, thus writing the score of the universe and orchestrating its evolution. Now, on one level this theory seems to be the direct inheritance of Greek atomism, and of the theory according to which the universe as a whole is made of tiny building blocks, which time and intensive research alone will put us in a position to identify. At this stage, these uncuttable constituents are considered to be ultramicroscopic vibrations of a perpetually moving matter. On the other hand, the fact that these constituents are precisely perpetually oscillating “strings,” and not stable and permanent cores of physical matter, invalidates the classical conception of material bodies as self-identical structures extended in space. For the most remarkable aspect of this theory is its suggestion that the vibrations are vibrations not of a pre-given element, not of matter, but of the spatial fabric of the universe: vibrations of space, then, which, moreover, would not be three (or even, after Einstein, four) dimensional, but ten or eleven dimensional. Needless to say, then, the sense of space and the geometry underlying the classical determination of extension, to wit, Euclidean geometry, already insufficient to formalize relativity theory, proves here to be vastly insufficient, forcing physicists and mathematicians alike to address themselves

to new geometries derived from—but not simply identical to—that of Riemann.¹⁴ Not only is space not flat and gridlike, but curved and warped—a feature first revealed by general relativity—but it is also, or would also be, curled up in bundles at every point in space, and multi-dimensional. At this stage, any understanding of matter as merely extended substance, and of space itself as extension, has definitively collapsed.

With the privilege of substance as the indivisible called into question, the metaphysical and physical principles of permanence and identity, so central to the history of metaphysics, are themselves rejected as concepts no longer adequate to describe the reality of subatomic particles. For how “permanent” is a “being” whose duration is about one-millionth of a second? How “self-identical” is a particle whose interaction with another gives birth to another, altogether *different* particle, or which is transformed, “liberated,” into a different form of physical existence, such as energy or matter? This amounts to recognizing that elementary particles are nothing outside their accidents or attributes: their being coincides with their event. Moreover, as these accidents vary, so too does the identity of the particle: it becomes *another* particle:

[E]lectrons are without substance. An electron is composed of its qualities, and nothing else. It doesn’t have an immutable kernel that would preserve its identity, and onto which its qualities would hang, as in a wardrobe. Such is the reason why we shall never be able to ascertain that the particle we are observing is “the same” as the one observed previously.¹⁵

What are these qualities with which the electron can be identified, and outside of which it is nothing? Some, such as position, speed, or mass (even where the latter, as in the case of the neutrino, equals zero), were already central to classical dynamics. Others, such as “spin,” which has an inherently quantum mechanical meaning, are more specific to the world of subatomic particles. But the significant point is that the identity of the particle is entirely limited to these qualities, entirely equated with its own accidents. But isn’t this tantamount to saying that their identity coincides with their “accidents”? Absolutely. These accidents are not added to an independently and pre-given substance; rather, they *are* the substance itself. And when these qualities come into contact with one another, as they necessarily do, it is not as if a substance were simply modified. Rather, a new physical situation arises, one in which a new, altogether different “substance” is generated: a collision between particles does not give rise to a change within the particles, but to the fragmentation of the particle itself, not into smaller parts of the same particle, but into the advent of new, different particles. More importantly, and decisively, although we might well be able to divide matter almost endlessly, the following caveat must be observed: ultimately, it is no longer a matter of a division, but a matter of a transformation of energy into matter. There

comes a point when it is no longer a question of moving deeper within the realm of the infinitely small, from kind to species and finally to the indivisible, but when division creates a line of difference, when division becomes differentiation, creation, transformation. Difference in the sense of differentiation is here precisely not the specific difference we began by analyzing in Aristotle. It is not the difference that moves ever further and deeper into the same (the kind, the idea), but the difference that brings about new configurations of matter. In other words, division no longer leads us from genus to species, and finally into the individual (the *atomon*, the lowest stage after which a thing can no longer be divided, its—or the—residual, irreducible substance); rather, division never comes to an end, for there comes a point when it reverses itself as it were and when, instead of fragmenting itself endlessly into smaller building blocks, it transforms itself, becomes qualitatively different.

It is this very process of differentiation and equivalence that we find at work in special relativity. By recognizing that mass is equivalent to energy, Einstein had already desubstantialized the elementary particle and disallowed any straightforwardly realist interpretation of this principle. Indeed, it is not as if the energy was latently contained within the mass before being released through the atomic reaction. Thus, in Einstein's famous formulation, $E = mc^2$, the sign of equality must not be understood in ontical terms. For if the mass can indeed be *converted into* energy, this does not mean that before the act of production or transformation, that is, of atomic reaction, energy *actually* pre-existed its manifestation. The problem here is altogether different. The passage from a *state* of mass to an energetic *event* raises a problem of "equivalence" that is altogether different from a question of identity within some ontical permanence. The difficulty, therefore, is to see the extent to which the "=" in Einstein's formulation does not amount to a reiteration of the principle of identity. On the contrary, the equivalence in question here signals a conversion or a transformation indicative of a difference or a differential rather than an identity. The equals sign is not the equivalence or flat tautology of identity, but the essentially transformative and creative tautology of difference. If equality refers here to some identity, it is not an identity of fact or even of possibility, but of virtuality. I shall return to the concepts of difference and virtuality in the following chapters. For the time being, let me simply say, following March's analysis, that the idea according to which the energy would be somehow "contained" *inside* the mass, ready to manifest itself, is entirely inappropriate when it is a question of describing the phenomenon "atomic reaction." Energy is not "inside" the atom, like a genie in its lamp, waiting to be liberated. The passage from mass to energy creates a change of order, which simply did not exist prior to the reaction. This—that is, energy—can only *become*, and it can become it only through the interaction with a process entirely heterogeneous to

it. Slowly, we are discovering how, in the face of phenomena such as atomic reactions and collisions between subatomic particles, the point of view of substance, of already individuated things, given in their permanence and identity, is wholly inadequate. But, one might object, does energy not conserve itself, and, consequently, is it not to be viewed as the new and ultimate substance? Indeed, yet with the reservation that it does so only by differentiating itself, by transforming itself. Energy is actually nothing outside this differentiation; it has no reality besides that of its becoming. It is this pure event.

Another feature of the subatomic world is its intrinsic lack of stability, particularly in local or spatial terms. This is a feature closely related to that of presence and permanence, and one that goes against the metaphysical conception of beings as essentially “there,” present and stable, extended in the sense with which Descartes had come to associate matter, and thus representable and predictable within a two-dimensional space made of vertical and horizontal coordinates. In fact, if we were to capture a single electron in a big, solid box and then slowly crush the sides to pinpoint its position with ever-greater precision, we would find the electron getting more and more frantic. Almost as if it were overcome with claustrophobia, the electron will go increasingly haywire—bouncing off of the walls of the box with increasingly frenetic and unpredictable speed, eventually possibly leaving the box. As Brian Greene puts it, “nature does not allow its constituents to be cornered.”¹⁶

To illustrate this point, and the way in which the concept of space is no longer reducible to that of extension in contemporary micro-physics, let me turn to a few pages from Bachelard’s *Le nouvel esprit scientifique*.¹⁷ Taking as his point of departure Heisenberg’s critique of the theory of particles from the perspective of wave mechanics, Bachelard shows how the particle is a constructed object. It is accepted as a complex element, as an element *constructed* by way of *synthesis* (and not *isolated* by way of *analysis*). From Heisenberg’s critique, it follows that the particle has no reality outside the composition that allows it to appear. As such, the particle has no absolute permanence and does not hold its attributes like a metaphysical substance. This is because the waves that construe it must comply with liminal conditions, in other words, with conditions grounded in regions far removed from the point at which the material particle manifests itself as a passing shadow. This is tantamount to saying that the reality of the particle has its roots in the space as a whole. It “is” or “exists” not in any one given point, but wherever it is seen to “act.” In the words of Broglie, whom Bachelard quotes, in wave mechanics “we no longer conceive of the material point as a static entity concerned with only a minute region of space, but as the center of a periodic phenomenon spread all around it.”¹⁸ In other words, the location of a single particle no longer coincides with a single point in space and time, but with a whole set of points. It is

not simply in one place, but in many. And in the same way in which the particle no longer has a unity in space (is no longer a point), it has also lost its identity in time. It is no longer possible to trace its movement according to a single trajectory, where a point would designate a position in space and time exclusive of all others.

In the end, the quantum particle is not an object in the classical scientific and philosophical sense of the term, circumventable and knowable by an absolute mind or intuition. It is not the stable, fixed, self-identical, and permanent object of traditional ontology (and physics). Kant questioned our human capacity to *know* this ontical permanence, this ultimate and absolute substratum. But he did not dispute the *reality* of such a permanence. Now, it is precisely this self-identity and this permanence that are called into question by the quantum conception of the microphysical non-object. Kant still characterizes beings as self-identical and permanent substances, albeit as unknowable. And the phenomenal vision of the human, in its radical relativity, remains the sign of the fundamentally substantial reality of innerworldly beings, of which we can reasonably postulate that it is made fully manifest to God alone, as an absolute. If we need to go beyond the Kantian problematic, it is not because the critical dimension of the problem does not affect the status of the quantum particle, but, more radically, because the substantial cornerstone which Kant says escapes us cannot actually do so because there is no substance hidden behind or beneath the quantum phenomenon, whether for us or for God. There is no ultimate identity, no permanence to be found in the neutron, the electron, the proton, or any other particle. Planck's h constant, Pauli's principle, Dirac's differential equations, the radically non-representative value of Schrödinger's ψ function, all of which intervene at the very heart of Heisenberg's relations of indeterminacy, show that the quantum particle is simply external to the order of ontical permanence, an order essentially based on the self-identity of the extended substance. As a result, the physical knowledge of the quantum particle exceeds the critical distinction between phenomenon and noumenon, for there can be no "quantum" noumenon, and this simply because the scientific object thought by Kant is that of Newton, Galileo, and Descartes, and presupposes the framework of the ontical realism of the *res extensa*. Kant's critical enterprise is adapted to this particular configuration. Fundamentally, it does not modify it, contest it, or destabilize it. It takes it as a given. The type of objects considered by Kant cover only a limited region of the *omnitudo realitatis* and are valid for the macrophysical world alone, for those middle-sized objects most immediately accessible to the human intuition. In other words, in the same way in which the laws and principles discovered by Newton remain absolutely true, whatever the circumstances, albeit for a limited region of the natural world, the metaphysical conceptions of beings as self-identical and

permanent substances depict accurately but only partially a particular kind of objects.

But where does this leave us? If, in moving from macroscopic objects to microscopic ones, we do not move simply in the order of size, we do not move simply toward the infinitesimally small, but in such a way that we end up calling into question our assumptions regarding what makes a natural object what it is; if, in other words, what is decisive in the discovery of the world of subatomic particles is not so much the size of the objects, but their ontological status *qua* objects, then we need a whole set of new concepts in order to describe them. Once the traditionally atomistic and realist conception of the atom has been shown to be inadequate, the need for a new set of ontological concepts becomes clear. To carry out such a task, the focus will need to shift from the things themselves, in their individuated state, to the general system, and this means the set of relations within which the process of individuation itself takes place. Only then will we be in a position to articulate the ontological fabric within which beings themselves are caught and account for the substantialist standpoint. In the course of the analysis, a central concept will emerge, a concept through which the apparent aporias linked to the impossibility of adopting a realist standpoint in the face of the subatomic world will dissolve: the virtual. For if it is indeed true that matter is not “contained” in energy, as if in a bottle, and if it is true that, as a physical phenomenon, it is not reducible to the “atom” itself, it is nonetheless the case that, as we shall have to show, the atom can be described in terms of a set of virtualities, which constitute as many singularities, and which can be actualized in and through an interaction or an encounter with other such singularities. It points in the direction of a disjunctive, heterogeneous genesis through which virtual tendencies are actualized and transformed into individuated phenomena. What we have is a passage or a mutation from one order to another according to a law that a mathematical function alone can describe. But what sort of function are we talking about? It is crucial to emphasize the extent to which mathematics, and specifically statistical mathematics, is here ahead of natural language, able to articulate and think a phenomenon that escapes the natural region of human language, thus forcing the latter to develop new concepts, and to awaken to a reality it had not — and could not have — anticipated.

And so let me now turn to the question regarding the mathematical status of the particle. It would not be an exaggeration to say that the “being” of the particle is purely statistical, that it has no reality outside this mathematical framework. By this I mean the following: quantum theorists—but this, as we shall see, also applies to other domains of physics—make a distinction between the need to introduce statistical calculation in the case of a contingent impossibility on our part to determine the future behavior of a system (granted that such an impossibility can be

the result of our ignorance, of our inability to grasp the many parameters involved, etc.) and the intrinsically and irreducibly unpredictable nature of some other systems (or, as physics and biology have learned over the years, of most systems). Where the dice throw is a good example of the first kind of probabilistic calculation, the trajectory of an electron in a Wilson chamber or the evolution of a meteorological system are good examples of the second. Quantum theory stipulates that the knowledge we have of a system in atomic physics can only be *incomplete*, and it is as a result of this structural incompleteness that statistical laws need to be developed. To give an example, borrowed from Heisenberg:¹⁹ we know that the radium atom emits alpha radiation. Quantum theory can give us an indication of the probability that the alpha particle will leave the nucleus in unit time, but it cannot predict at what precise point in time the emission will occur, for this is uncertain in principle. And we cannot even assume that new laws still to be discovered will allow us to determine this precise point in time, for this would contradict Bohr's principle of complementarity. In other words, were this possible, the alpha particle could not be considered as also comporting itself as a wave leaving the atomic nucleus, a fact that can be proven experimentally. The various experiments proving both the wave and the particle nature of atomic matter create a paradox that forces us to devise a formulation of statistical laws.

In their experiment from the mid-1920s involving a beam of electrons bouncing off a chunk of nickel, Clinton Davisson and Lester Germer showed that electrons exhibit interference phenomena, the telltale sign of *waves*. Somehow, as with photons, individual electrons "interfere" with themselves in the sense that, over time, individual electrons reconstruct the interference pattern associated with waves. We are inescapably forced to conclude that each electron embodies a wavelike character in conjunction with its more familiar depiction as a particle. Similar experiments lead to the conclusion that all matter has a wavelike character. The reason why this is not immediately apparent in our real-world experience of matter as being solid and sturdy and in no way wavelike is due to the fact that the wavelength is proportional to Planck's constant. Since the constant is so small, the resulting wavelengths are similarly minuscule compared with everyday scales.

But of what are the electrons waves? Erwin Schrödinger suggested the waves were "smeared-out" electrons. This captured some of the "feeling" of an electron wave, but it was too rough. As an alternative, in 1926 Max Born sharply refined Schrödinger's interpretation of an electron wave, and it is his interpretation—amplified by Bohr and his colleagues—that is still with us today. Born's suggestion is one of the strangest features of quantum theory, but it is supported nonetheless by a considerable amount of experimental data. He asserted that an electron wave must be interpreted from the point of view of *probability*. This meant that places

where the magnitude of the wave is *large* are places where the electron is *more likely* to be found; places where the magnitude is *small* are places where the electron is *less likely* to be found.

This is a bold and truly peculiar idea. Hitherto, probability had no place in the laws of fundamental physics. And hitherto, probabilities were used to calculate the outcome of a situation of which we had an incomplete knowledge based on some contingency. But here the wave nature of matter implies that matter itself must be described in a fundamentally probabilistic manner. For macroscopic objects, Broglie's rule shows that the wavelike character is virtually unnoticeable and for most ordinary purposes the associated quantum-mechanical probability can be completely ignored. But at a microscopic level we learn that the best we can ever hope to say is that there is a particular probability of an electron being found at any given location. The probabilistic interpretation has the virtue that, if an electron wave does what other waves can do—for instance, slam into some obstacle and develop all sorts of distinctive ripples—it does not mean that the electron itself has shattered into separate pieces. Rather, it means that there are now a number of locations where the electron might be found with a non-negligible probability. In practice this means that if a particular experiment involving an electron is repeated over and over again in an absolutely identical manner, the same answer for, say, the measured position of the electron will *not* be found over and over again. Rather, any subsequent repetition of the experiment will always yield a variety of different results, and the number of times the electron is found at any given location is governed by the shape of the electron's probability wave. The same causes do not produce the same effects.

In 1927 Schrödinger determined an equation that governs the shape and the evolution of probability waves, or as they came to be known, *wave functions*. By 1927, therefore, classical innocence had been lost. Gone were the days of a clockwork universe whose individual constituents were set in motion at some moment in the past and obediently fulfilled their inescapable, uniquely determined destiny. According to quantum mechanics, the universe evolves according to a rigorous and precise mathematical formalism, but this framework determines only the probability that any particular future will happen—not which future actually ensues. Furthermore, there is no consensus on what it really means to have probability waves, nor on how a particle “chooses” which of its many possible futures to follow, nor even on whether it really does choose or instead splits off like a branching tributary to live out all possible futures in an ever-expanding arena of parallel universes.

While accepting the probabilistic core of quantum mechanics, Richard Feynman offered a powerful new way of thinking about the theory. According to Feynman's formulation of quantum mechanics, particles must

be viewed as traveling from one location to another along every possible path. There is, therefore, an infinite number of trajectories for a single electron traveling from the source from which it is “fired” to the phosphorescent screen onto which it is fired. In traveling from the source to a given point on the phosphorescent screen, each individual electron actually traverses every possible trajectory simultaneously. Feynman showed that he could assign a number to each of these paths in such a way that their combined average yields exactly the same result for the probability calculated using the wave-function approach. And so, from Feynman’s perspective, no probability wave needs to be associated with the electron. But this does not amount to an objection to probability of the classical type, such as the one Einstein himself famously formulated when he said that “God does not play dice with the Universe.” For Feynman began by fully accepting the probabilistic core of quantum mechanics. Instead of the probability wave, Feynman is asking that we imagine something equally, if not more, bizarre. The probability that the electron—always viewed as a particle—arrives at any chosen point on the screen is built up from the combined effect of every possible way of getting there. This is known as Feynman’s “sum-over-paths” approach to quantum mechanics. How can one electron *simultaneously* take different paths—still less an infinite number of them? Such is the (apparently) absurd reality that nature shelters. As Feynman himself once wrote, quantum mechanics “describes nature as absurd from the point of view of common sense. And it fully agrees with experiment. So I hope you can accept nature as She is—absurd.”²⁰

But no matter how absurd nature is when examined on microscopic scales, things have to conspire so that we can always recover the familiar prosaic happenings of the world experienced on everyday scales. To this end Feynman showed that if we examine the motion of large objects—like footballs, airplanes, or planets, all large in comparison with subatomic particles—his rule for assigning numbers to each path ensures that *all paths but one cancel each other out* when their contributions are combined. In effect, only one of the infinity of paths matters so far as the motion of the object is concerned. And this trajectory is precisely the one emerging from Newton’s law of motion. This is why in the everyday world it *seems* to us that objects—like a ball in the air—follow a single, unique, and predictable trajectory from their origin to their destination. For microscopic objects, however, Feynman’s rule for assigning numbers to paths shows that many different paths can and often do contribute to an object’s motion.

What philosophical conclusions can we draw from Feynman’s interpretation? Two aspects of it must be emphasized. First, subatomic particles can travel from one location to the next in an infinite number of ways. Second, each individual particle actually traverses every possible trajectory.

This leads me to the following question: to what extent is the category of possibility still adequate to describe such phenomena? Is the probabilistic nature of the calculation in micro-physics best understood *philosophically* by mobilizing this category? I believe not. For when ascribing a potentially infinite number of trajectories to an electron, and recognizing that they may be realized all at the same time, the classical conception of possibility, as prefiguring a thing in its actuality, simply dissolves. Bergson famously rejected as illusory the category of the possible, with which the concept of actuality has always been associated. For him, the real does not unfold by way of pre-given possibilities that are subsequently actualized. Actuality is not an ἐνέργεια that consists in the complete unfolding of a δύνανμις, and in which the τέλος of a thing is revealed. Contrary to what Aristotle and a certain common sense believes, possibilities do not so much precede actualities as they are extracted from them and retrospectively situated before them. Possibilities are merely derived from actualities and artificially constructed, in what amounts to a sort of illusory anteriority. As such, they do not add or explain anything. Not even in physics, as Feynman's theory suggests. Insofar as the electron's trajectories are realized from the start, insofar as they cannot be observed independently of their actualization, they cannot be understood as being ever possible *prior* to being actual. At the same time, however, it is undeniable that the position of the electron can be determined only through a calculation of probability. The question, then, is to know how to understand this apparent paradox. Is nature really "absurd," as Feynman declared? Or can this absurdity be reduced philosophically?

Paraphrasing Leibniz, and still drawing on the category of possibility (here destined to take on a very different meaning), I would like to suggest that, in the end, what we have is a situation akin to the possible world. In what sense? In the sense that there is only one world that emerges from the combination of the trajectories in their totality. It is no longer God who chooses the best possible world among an infinity of possibilities. If the world that emerges is indeed the best possible one, it is because it is the only possible one. Maybe God does play dice with the universe after all. And yet, this can be the case only if the dice are thrown in such a way that the outcome, far from being random, is actually the only possible one—the ultimate possibility, or the possibility that has gone through an infinity of other possibilities before reaching its final stage. In the end, at the tip of the pyramid as it were, there is the world as we know it, and which classical mechanics measures. Beneath this world, however, there is an infinity of possible worlds, worlds that are in themselves all possible—and indeed actual—but that cannot combine into an actuality. They are, then, impossible or, as Leibniz suggests, *impossible*. They are *compossible* only as the macro-reality to which they give birth. They are the impossible (yet real) pos-

sibilities of the actual (yet impossible) reality of the world. What quantum mechanics measures, it seems to me, is the manifest compossibility of this infinity of possible trajectories. The point, here, is that statistical mathematics allows us to grasp a situation that goes directly against everything we witness in the world at the experiential level, thus allowing for a (purely mathematical) realism that is irreducible to the Aristotelian substantialism outlined thus far. There are objects, then, that are real while being purely statistical, objects whose being cannot be expressed or indeed manifested in any way other than statistically. This, however, and as I have just attempted to show, does not mean that the philosopher cannot extract a concept from such a statistical being. What it does mean is that the concept in question can no longer operate within the boundaries set by the ontological tradition.

Let me draw one last philosophical consequence from the event of quantum theory by turning to a very complex, yet central, principle of that theory. This is the principle formulated by Heisenberg and known as the principle of uncertainty, or indeterminacy. What does this principle stipulate? And to what extent is it philosophically relevant? The classical ideal of physics claims that nature may be unequivocally and completely calculated in advance. This ideal is perhaps best expressed in what has come to be known as the Laplacian demon, who incarnates the vision of the world from an ideal standpoint, or from the standpoint of the scientist. This is a standpoint marked by its ability to grasp nature in its totality. To grasp the objectivity of nature, this demon claims, all we need to know are the rules of physics. Naturally, we human beings cannot predict the motion of all the stars in the universe because we cannot see them all. But the demon, which can see the position and the velocity of all the stars in the universe, can predict their motion. Once we have the physical law we can *in principle* predict the motion of all stars in the universe. Now, it is this principle, and this ideal, that quantum theory calls into question. With the laws of physics, quantum theory claims in relation to micro-objects, a state of motion can be determined either as to position or as to velocity, but not as to both. The prediction cannot be total. And as Heisenberg makes abundantly clear, the more precisely we know one aspect, the less precisely we know the other.²¹ Furthermore, since velocity designates the wave aspect of matter, and position its particle aspect, the duality wave-particle of matter can never be known with equal precision in relation to them. The two aspects are complementary and exclusive. As a result, it is no longer possible to obtain a *complete* knowledge of the state of a mechanical system in the sense hitherto presupposed. This means that the scientist has to choose which approach and which aspect he will favor in his or her calculations. There are two possible explanations that are mutually exclusive. The scientist has to decide the sort of *objectivity* in which the natural object will reveal itself. The “object” itself

never gives itself completely in its full objectivity. In the end we can multiply images (initially photographs) of a given system, but we cannot put them together so as to constitute a *unified* picture of it. The picture we have of it is always going to be a partial one. From this, it follows that objectivity itself does not actually exhaust the reality of the natural “object” under consideration. There is a reality, and a scientific reality at that, in excess of objectivity. The ideal of scientificity as total objectivity that prevailed for so long can no longer be held onto in the case of micro-dynamic systems. The quantum object is no longer an object in the modern sense of the term, in the sense presupposed in Newtonian mechanics and so rigorously analyzed by Kant, for example. This is why, in the Introduction to this book, I emphasized the fact that the side of nature described by science, as being *in itself*, can in no way be identified with its so-called objectivity.

What does this mean, from a philosophical perspective? Nothing less than the collapse of any dualism between subject and object. The mechanical system is no longer an object, at least in the classical sense of the term, and the scientist no longer a subject. By that, I mean the following: nature cannot be grasped from all sides at once. This is a structural impossibility — an impossibility that is mathematically formulated, scientifically accounted for. Science has itself been forced to step outside its own ideal of objectivity, not for metaphysical reasons, but for scientific reasons: it is nature as such that has proven to defy the objective frame forced onto it. As a result, the scientist no longer stands merely op-posed to nature, as if nature were this object that he or she could hold in his or her hand and grasp from all sides at once, as if seeing through the eyes of God. The world is no longer a flat surface, but a deep, thick fabric that proves to resist any attempt to grasp it as such and as a whole. The theoretical gaze, once absolutely free and omnipotent, is made to choose which nature, or which aspect of nature, will be revealed to it. Its knowledge remains partial, and necessarily so. Yes, nature likes to hide, as Heraclitus had anticipated. But not from science as such: only from a certain conception of science. “Nature hides her secret because of the loftiness of her essence,” Einstein once declared.²² Yes, nature withdraws. But this withdrawal has itself become a matter for science, thus carrying it away onto a different path, forcing it into a new direction. Quantum theory, and of course the world it reveals, engulfs the structural opposition of subject and object, of thought and extension as two distinct ontological realities, in order to reveal their intertwining and the irreducible co-destiny in which they find themselves. It reveals a nature that is no longer merely objective, and a science that is no longer its own ground. It reveals the necessary incompleteness of science and nature alike, and thus the groundlessness of both. In this sense it has stepped beyond modernity. Into what?

2. Dissipative Systems and the Arrow of Time

The ambition of classical physics was to discover the unchanging, the permanent behind and beyond the appearances of change and becoming. The introduction of a temporal parameter in classical dynamics constituted a first step but in the end only impoverished time, insofar as no real distinction was made between past and future. What we all experience existentially and know to be real—and which Bergson termed “duration”—namely, that past and future are not merely equivalent, was simply not recognized in nature itself: the equations of movement in Newtonian mechanics, as well as in quantum mechanics and relativity, are entirely reversible and so not affected by time.²³ Similarly, and closely related to the question of time, the concept of event was decidedly excluded from such a description. We saw how, in metaphysical discourse, the central concept of substance was precisely developed against that of event. Classical physics inherited this metaphysics of substance, and it took a while before it began to call it into question. But things have changed. Contemporary physics no longer deals exclusively with repeatable phenomena, from which general laws could be derived, but also—perhaps first and foremost—with events; as a corollary, the temporal dimension is one that is in the process of gaining an ever more precise *physical* description.²⁴ Here I wish to show the way in which time is given a physical reality in twentieth-century physics, one that is not reducible to its being “the number of movement,” as Aristotle famously declared in his *Physics*, and as Newton also assumed in his equations of movement. This is a sense of time that appears most clearly in thermodynamics and, naturally, since Darwin, in evolutionary biology.

Before moving into the field of thermodynamics, let me begin by stressing the difference between two types of physical systems. There is indeed a fundamental difference between a conservative system, such as a planet, which always goes through the same ellipse around the sun, and what has come to be characterized as a dissipative system. In the former, with which classical, Newtonian mechanics concerned itself exclusively, it is not only space that has the same form everywhere (this is translated into its properties of isotropy and homogeneity), but movement itself. To analyze movement, one needs to take into account not just space, but time as well. This is why, in the case of conservative systems, time does not act on the *form* of its movement. Since space is isotropic, the time of classical mechanics is reversible. It knows neither right nor left. The direction of its arrow is also reversible. This is expressed in the fact that time does not modify the value of the function which describes the energy of a system, and on the basis of which the equations of movement can be derived.²⁵ The case of the dissipative system is quite different, however. Its evolution can be analyzed according to mathematical techniques. In

this regard, it is deterministic. One such technique, *mapping*, consists in applying indefinitely a function $f(x)$ to itself, assuming that its expression carries a parameter of dissipation. What needs to be emphasized, though, is that in any such system time modifies the form of the evolution of the system, and we no longer have a function H that fulfills the previous condition. Such dissipative systems are brought to light in thermodynamics.

Thermodynamics isolates a magnitude that it terms *entropy*, and that serves to measure the increase in heat in a closed system (the system must be closed in this first stage; the move to open systems will amount precisely to a qualitative difference in its relation to time). What entropy means is that a closed system is not *spontaneously* ordered. Spontaneously, it tends toward a state of equilibrium (also known as disorder). In statistical thermodynamics, there is a law (the second law) that stipulates that, within an isolated system, if I place light molecules of gas in the left compartment of a box, and heavy molecules in the right compartment, and then allow the two compartments to communicate, the molecules will inevitably mix. The system will reach its state of entropic equilibrium only when the molecules will have mixed completely. Similarly, as we have all witnessed, a droplet of dark blue ink in a dish of still water diffuses inevitably to a uniform light blue. The ink does not reassemble into a single droplet. The increase in entropy in equilibrium systems—those closed to the exchange of matter and energy with their environment—so Boltzmann argues, stems from the statistical tendency of the system to pass randomly through all possible arrangements (the so-called “ergodic” hypothesis). In the vast majority of cases, the molecules will be distributed uniformly. And so, on average, that is what we will see. The ink droplet diffuses and does not reassemble; the molecules diffuse from one compartment to the other and do not find again their initial configuration. Left to its own device, a system will visit all possible microscopic, fine-grained configurations equally often. But the system will spend most of its time in those coarse-grained patterns satisfied by very large numbers of fine-grained patterns—molecules uniformly distributed throughout the box, ink throughout the dish.

The consequence of the second law is that, in equilibrium systems, order—the most unlikely of the arrangements—tends to disappear. There is, within matter itself, a tendency toward equilibrium, or disorder. If order is defined as those coarse-grained states that correspond to only a few fine-grained states (molecules neatly arranged in two separate areas of the box), then at thermodynamic equilibrium, those delicate arrangements disappear because of the ergodic wandering of the system through all its microstates. From this it follows that the maintenance of order requires that some form of *work* be done on the system. In the absence of work, order disappears. Hence we come to our current sense that an incoherent collapse of order is the natural state of things.²⁶ This *inner*

tendency is not a metaphysical projection (despite the fact that Bergson calls it “the most metaphysical of the laws of physics”),²⁷ but a physical reality: entropy increases in a closed system, and this *irreversibly*. If the particles within a system move about entirely randomly, they will move in the same direction also only accidentally. And if such an accident does occur, it will always tend to disappear progressively. Entropy is the measure of this disappearance. So long as the state of disorder has not reached its maximum, and this means the state where the molecules can be found in any place and with any direction, entropy increases. Entropy is proportional to the number of locations at which the molecule can be found in the vessel—up until the point where every molecule could be located anywhere within the space. The molecular disorder is at the same time a statistical order, and one that says: I have postulated that the molecules can move about randomly, and I will be able to verify this statistically with the law of entropy, which stipulates that the molecular disorder will tend toward a maximum. In the short term, this may not be the case, as there may be, and will almost inevitably be, “fluctuations,” or departures from the average value. In the long term, however, I shall be able to verify the fact that the molecules move about randomly.

Thus, between one configuration and the next, one event and the other, we have a random succession. I will always be unable to find a link between the configuration that is emerging and the previous one. If the random current event does indeed belong in the sphere of possibilities, there is, on the other hand, nothing in the past that allows me to explain why this event—rather than a different one—should occur in the present. Nothing of the past is withheld in the present. There is no order between the configurations, no way for me to compare and order them within a hierarchy. But this also means that I cannot find a link between the current event and a future one. There is nothing, in the present or in the past, that would allow me to anticipate the future. There is no end. Chance is the only rule and governing principle.

So let us assume that all we have here is the event as event, and this means an event without memory or direction. Its arrow, then, is to have no arrow. This, according to one commentator, is the reality described by the philosophical category of *disorder*.²⁸ And if this does have a specifically temporal dimension, it is one best expressed in the following, paradoxical way: its temporality, its arrow, has no direction. This very paradoxical formulation reflects a physical reality. To claim that the arrow of time, in the case of closed thermodynamic systems, has no direction amounts to claiming that disorder retains a certain order, that this absence of order is not nothing. There is, Miquel says, a “music of chance.”²⁹ For the absence of order designates something in excess of the event itself. It designates a world that is “disorganizing” *itself*. In this way nature confirms the fact that it constitutes a series of events that repeat themselves without

signification and without goal, even though there will be fluctuations with respect to this prediction in the short term. But these fluctuations are ultimately not decisive. Such is the general *orientation* of nature. Every departure from the statistically determined average only confirms this average value. The fluctuations in the present do not modify the relation between past and future. And so, in contrast to the claims of Boltzmann, in saying this I do grant time an arrow. I force a direction onto it. I accept that, over and above the event itself, there is a hierarchy between future and past. The sense of this hierarchical difference between the event and the temporal world to which it belongs is that the fluctuations of the present event have no consequence with respect to the distribution of probabilities within which they are inscribed. The fluctuations of the present do not bear on the purely random direction of events, on the fact that the present will eternally recur. Thus, the direction of the future is entirely programmed through the calculation of probabilities. It is even calculated in a manner far more rigorous than in the old representation of time. For in the latter, the event to come retained something unpredictable since, by definition, it was not yet actualized in the present. Not so with the current situation: the event to come is already actualized in the present event. Even if the actual present cannot be known exactly, since there are fluctuations, the future is nonetheless entirely predictable, to the extent that I can determine exactly the *field of possibilities* within which this event will be situated. Therefore, I know precisely the arrow of time that grants the event its direction, and that is determined entirely on the basis of its possibilities. What returns in every current state of the system is the same, average value, which no difference can alter in the long term.

Chance, disorder, is thus still an order. It is this order of the real that stipulates that time is a loop—not a circle, this “moving image of eternity”—that it is the return of the same. Over and above the event itself, there is the repetition, the eternal return of the event. There is the hierarchy between the event and the *direction* given to the event. It is the hierarchy through which the arrow of time disappears from within the event. And the calculation of probabilities expresses the form of this hierarchy. It does not say what the future event will be, but what the direction of time is, doing so in such a way that the probability of the future event can be predicted. And what direction is this? A precise *lack* of direction. This is what is calculated. But it is of the utmost importance to emphasize the fact that, in the short term, there can be fluctuations and departures from the direction imposed onto the event. This means that the event is not entirely foreign to the world within which it is immersed. While entirely *determined*, the world of probabilities is not a world of *necessity*.

Such is the reason why I want now to turn to these fluctuations. Ulti-

mately, they will reveal a different sense of time and will presuppose that we take *open* thermodynamic systems into account.

The main source of inspiration for the remarks that follow is the work of Ilya Prigogine.³⁰ As is now clear from what we have already said, probability and statistics calculate mathematical expectations and averages. It is also clear that we cannot calculate an average without a departure from the average, without fluctuation. Locally, there can be effects of lesser entropy, simply because of the nature of the collision between molecules, in much the same that the casting of the dice can accidentally turn out to be a 6 several times in a row. These variations can, once again, have an impact on a very short period of time. But they will have a smaller impact as time goes on (this is what the ergodic hypothesis verifies). We can therefore imagine that this is precisely what happened to our world. For it to tend toward disorder in this manner, it must have been ordered in the first place. Let us assume for the moment that this effect of order is local and accidental, that it is a mere fluctuation, a departure from an average that verifies the average. This, at least, is Boltzmann's hypothesis.³¹ Statistical mechanics would thus only verify at the level of molecular physics the mathematical law of large numbers in probability calculation—the very same law that leads to the forging of the category of chance.

But if we now turn to a system slightly different from the ones considered so far, the overall situation changes quite dramatically. Let us consider two compartments linked together by a tunnel and filled with a combination of two gases, hydrogen and nitrogen, for example. We begin with a situation of equilibrium: the two compartments are at the same temperature, the same pressure, and contain the same homogeneous combination of the two gases. We now establish a difference in temperature between the two compartments. One of the compartments is heated continually, while the other one is cooled. It is only at the cost of sustaining this difference in temperature that we can maintain this departure from equilibrium. The constant flow of heat compensates for the effects of thermic diffusion. So far, and from the point of view of Boltzmann's analysis, there is nothing abnormal or surprising. A huge loss of heat is needed for this difference in temperature to be maintained. Entropy increases dramatically. Yet something strange happens. While the difference in temperature is being maintained, the gases separate and remain separate. This example reveals the extent we need to free ourselves from the idea that the activity that produces entropy is synonymous with degradation, with a leveling out of differences. For while there is an entropic price to pay to keep the process of thermodiffusion at its stationary state, this state clearly corresponds to a creation of order.³²

Another example, borrowed from hydrodynamics, is known as Bénard's instability. In this experiment, a thin layer of liquid is left in contact with

the outside environment from above. At the same time, the liquid is heated from underneath. The result is a double movement whereby heat has a propensity to transmit itself from the bottom up, whereas gravity pulls the upward moving molecules down. This is a typical example of what is known as an *open* thermodynamic system, characterized by the fact that it exchanges matter and energy with the outside world. If the difference in temperature between top and bottom is sufficiently increased, a situation of non-equilibrium is created and an unexpected phenomenon is produced, one that no longer has anything to do with the action of gravity or the collision between molecules. The movement of the molecules becomes structured in whirlpools. Thus, in conditions of non-equilibrium, matter comports itself in ways that are radically different, and this state can be maintained only so long as the system dissipates energy and interacts with the outside world.

What, exactly, took place in this experiment? Something actually *emerged* in the system, as a considerable amount of energy was spent imposing certain constraints on it. A new order was generated. An order effect within disorder was produced. Through the dissipation of a large quantity of energy, a certain structure can be obtained. Does this not mean, then, that the movement of dissipative systems in general goes not only from order to disorder, but also from disorder to order, albeit at an energetic cost? Furthermore, the new order is not merely a return to the previous order, but precisely a *new* order. The possibility of novelty, then, of new forms or comportments of matter is accounted for. The expression "order within disorder" simply designates the fact that the fluctuations due to the collision between molecules also account for the fact that the system no longer goes through all of its configurations. Paradoxically, the entropy that is generated stops it from behaving randomly. New properties have emerged within it, and in such a way that its evolution is no longer accidental; the molecules no longer behave independently of one another, but are now *correlated*. The correlations thus produced no longer allow the system in question to follow the laws of chance.

From the point of view of chance, the fluctuations in a dissipative system constitute the exception that verifies the law of chance itself. But what we have witnessed is something altogether quite different. The fluctuations do not so much verify the law as change it. For they have the effect of causing the molecules to cease being independent of one another. The mere fact that these shocks between molecules (the fluctuations) introduce structural correlations between them is what, according to Prigogine, forces us to move from a statistical explanation of the evolution of the molecular system to a dynamic one. This does not mean that the two accounts are mutually exclusive: in fact, they are complementary, insofar as they operate on two different levels. Whereas the statistical account operates at a general and macro-level, the dynamic account

operates at a more precise or micro-level. This more refined account indicates that open systems are qualitatively different from closed systems. Far from their state of equilibrium, the laws of chance no longer govern open systems. As a result, their evolution is no longer statistical, but dynamic.

Does this have an effect on their relation to time? Is the arrow of time belonging to such systems different from that of the closed systems we began by examining? Naturally, insofar as the directionless arrow of time characteristic of those systems was a direct function of their statistical description. In what sense do dynamic systems differ from statistical systems, then? What characterizes the evolution of dynamic systems is the fact that they “forget” their initial conditions. Were we to reverse the arrow of time, the system in question would not return to its initial configuration. The future is no longer this other present that returns, and time no longer has the form of the closed loop Boltzmann originally associated it with.³³ It is no longer possible for the old present to return. And so, in the end, we find in science itself the main characteristic of Bergsonian duration: it can no longer be a question of identifying the future with a present that returns, as if there was no before and after, no right and left. This is why the formalism of chance loses all pertinence in the case of such systems. The time of dynamics is no longer that of statistical mechanics.

As a direct consequence, a very significant problem emerges—that of *irreversibility*. This condition of irreversibility reflects the fact that the forces of dissipation modify the volume that the system occupies in the phase space, which describes the system up to the point where it ceases to evolve. It has then reached its *attractor* state. This word designates precisely the point of no return, the point at which the system can no longer backtrack. An attractor, the form of which depends also on the paths of evolution of the body attracted by it, is a dynamic object that reveals the problem of irreversibility in a new light. By irreversibility, it is neither a question of understanding the mere loss of information of a system concerning the initial conditions characteristic of its dissipative nature, nor is it a question of assuming that it is inevitably led to an attractor. On the contrary. Irreversibility designates a twofold and simultaneous process. Specifically, it designates the action of an attractor on the trajectory of a system, combined with the counter-action of the initial, sensitive conditions of this trajectory on the very nature of the attractor. In the process a peculiar kind of attractor emerges, one that is neither a fixed point, nor a period, but a “strange attractor.”³⁴ By that, we need to understand the following: in all dissipative systems, the information regarding the initial conditions is irremediably lost. The future is no longer interchangeable with the past. The model in question loses its initial form as it moves toward its attractor. But the attractor can be either a point—in which case

the evolution comes to a halt—or a limit cycle—in which case the evolution moves toward a periodic regime. But the attractor revealed by Hénon is neither. It is sensitive to its initial conditions. In a normal mechanical system, the trajectories of phases expressing the form of the movement of a body cannot intersect, except in a single point where they converge. Otherwise, the same initial conditions could give way to different evolutions. In a dissipative system, it is the characterization of the attractor that determines the evolution of the system, whatever the initial conditions may be. In the case of chaotic systems, however, a set of even indiscernible *initial* states can give way to a number of distinct *final* states. And so, in this case, it is assumed that the initial conditions no longer constitute a simple point, but a set of points, and that they no longer permit prediction. Not only is the future no longer another present, then, but it can no longer be determined independently of the present. It depends on it essentially. Yet we would be mistaken if we took this strange attractor to designate a random dispersion. For after a number of phases, a pattern emerges. The system does not simply evolve randomly. The attractor toward which it evolves is no longer a static object, but a dynamic one. The chaotic, yet in a sense determined form of these strange attractors does not result from the large number of parameters required to define the evolution of the system. It does not result from our inability to control this vast number of parameters, from the limitations of the human mind. Rather, it results from a progress of science, which reveals a new property within chaotic systems: the sensitiveness to initial conditions.

Mathematically, this strange attractor is known as a “fractal object.”³⁵ By “fractal,” we need to understand that strange attractors are not characterized by whole dimensions, such as a point or a line, but by fractional dimensions. These are objects characterized by the fact that in each and every element of the set the structure of the set itself is inscribed. Many objects in nature are characterized by a fractal dimension. A cloud, for example, is neither a volume nor a surface (and, of course, not a point), but something in between, characterized by a dimension situated between the two-dimensionality of the surface and the three-dimensionality of the volume. Living organisms too, and exemplarily, qualify as such objects. The organs of a living system are not parts of a whole, but an organized structure within which the law of organization of the entire system can be found. As a result, we can never finish unfolding them. Within each element of the system, there is a principle of alterity, otherwise known as a “fold.” A fractal form is a form for which every fold has the character of verifying the fact that it differs from itself, that is has within itself the form of the attractor. It is, therefore, a purely *dynamic* and *open* form. In much the same way that a fractal object contains elements which are themselves fractal objects, less a point integrated within a line than a line that cannot but differ from itself at every point, so a strange

attractor has a form that has never quite unfolded, a structure that is never quite complete, since it continues to depend on those very paths that converge toward it. While imbued with a structure, this form is continually generated. It is not generated from the start, then, but generates or individuates *itself*. Thus, in excess of the event itself, doubling it as it were, science reveals a *future* that orders it, albeit *a future whose form is never given in advance*. It simply has no direction outside the event within which it unfolds.

Slowly, then, what is emerging is an order that is not an end or a goal—a movement that is not governed by its “ideal” or “final” state of rest. For this order feeds off the *event* itself, through which its structure remains open. This is a form that is not so much acted upon, as it is itself active. It organizes *itself*. Mathematics has now become a language able to describe and translate a natural object that is not entirely fixed. No longer directed toward *essences*, it now describes *events*, and by that we need to understand fractal objects, objects that have the peculiar property of differing from themselves, and of living off such a difference. This is the dimension we shall be concerned to think through in the following chapters, particularly in connection with Deleuze.

Yet before we do this, let me try to show how what I have just said in connection with thermodynamics finds echoes in the realm of life, and in contemporary biology. By looking at Prigogine’s work, we saw how it can no longer be a question of merely opposing the second law of thermodynamics to processes of self-organization, the cosmic tendency toward greater disorder and the counter-tendency to create order. Spontaneous self-organization need not conflict with the second law of thermodynamics: such processes always generate entropy as a by-product, which means that there is a price to be paid for achieving order out of chaos. As a result, the arrow of time is not simply unidirectional, despite the fact that it is not reversible. The greatest examples of self-organized physical-chemical systems are, of course, living organisms.

The question that needs to be asked is how, given the second law of thermodynamics, we can account for the fact that, all around us, it is not entropy, but the extraordinary surge toward order, that seems to rule. How can we explain the fact that, in the case of life and living organisms, the action of the environment, far from mixing and merging hereditary differences, *selects* them? How can we account for the fact that nature, which seems to be governed by chance alone in the case of the movement of molecules in a box, takes the form of Maxwell’s demon in the case of natural selection? Did Darwin ultimately reintroduce a regulative principle, a finality, or even a grand plan within nature, and this as a direct consequence of the hypothesis of natural selection? Is the shadow of God still not present within this hypothesis? Such would indeed be the case, if by “natural selection” Darwin had

ever meant something like the selection of certain species and the elimination of others according to a conception of adaptability as “survival of the fittest” (an expression forged by Spencer, which Darwin himself adopts); if, in other words, evolution were governed by some principle of perfection, or ἐντελέχεια. In the sixth edition of *On the Origin of Species*, Darwin makes quite clear that the key to understanding natural selection is divergence and differentiation, and not perfection: “[T]he varying descendants of each species, trying to occupy as many and as different places as possible in the economy of nature, constantly tend to diverge in character.”³⁶ This means that nature is not interested in perfect beings. It is concerned not so much with creating a racing horse as with preserving its power to constitute an active and dynamic order, an order through fluctuation. It does not preserve the best or the fittest (in the form of actual, fully individuated organisms), but the elements that best allow it to continue to diverge. “Natural selection,” Darwin remarks, “does not necessarily include progressive development—it only takes advantage of such variations as arise and are beneficial to each creature under its complex relations of life.” Such is the reason why “throughout the world a multitude of the lowest forms still exists.”³⁷ As a result, the meaning of the expression “natural selection” becomes quite different. We can no longer say that the adaptation of organisms results from a process of interaction with the environment, as if the latter were merely a parameter within an operation that *selects* the proper organisms and *eliminates* those that aren’t. Rather, we need to say that the environment plays the role of a disruptive agent, one that forces life to diverge, that maintains life’s ability to be this creative, fluctuating order, this flexible and plastic force that changes its form constantly. The environment is what forces us to change the definition of adaptation from organisms of a species to those of another. It is not a principle of conservation and/or elimination, but of disruption and creation.³⁸

What has emerged in the course of this preliminary encounter with the natural sciences, in the context of a reworking of the problematic concerning the ontico-ontological difference, is the realization that, even from a so-called ontical (or physical) perspective, beings or natural phenomena cannot adequately be described in terms of the traditional metaphysical vocabulary inherited from Aristotle, and reinterpreted throughout modern times, from Descartes to Kant and Hegel. In other words, it is not simply under the pressure of an initially Heideggerian problematic that the question regarding what it means for a being to be is to be opened afresh, but under that of the things themselves, as it were. It is the phenomena themselves that forced classical physics out of its epistemological and ontological assumptions and into an altogether different conception of nature. This means that what physics (and biol-

ogy) understands nowadays by “nature,” or rather, the understanding of nature that is forced upon us can no longer be contained within the parameters of the modern conception, and identified by Heidegger himself. Science has become a science of nature *in the making*; it is a science of the event, of beings in their being, but where being, far from referring to a principle of permanence, and to a thinking of substance, refers to beings in their becoming, in their evolution, in their accidentality. Being is no longer opposed to becoming, to the accidental, to difference. We saw this in the case of open dissipative systems. While imbued with a structure, the form of these systems is continually generated. It is not generated from the start, then, but generates or individuates *itself*. So, in excess of the event itself, doubling it as it were, science reveals a *future* that orders it, but *a future whose form is never given in advance*. Put simply, its direction is not independent of the event within which it unfolds. Slowly, then, what is emerging is an order that is not an end or a goal—a movement that is not governed by its “ideal” or “final” state of rest. This order feeds off the *event* itself, an order through which its structure remains open. And mathematics is now also the language of the event. Does this mean that contemporary physics reveals a way out of, or a possible overcoming of metaphysics itself? That contemporary science perhaps shelters possibilities of *genuine* thought and not simply representation? In a way, this is what I want to suggest: in thinking through what science teaches us about the structure and organization of matter, some of the most basic and natural assumptions regarding what we mean by “nature” and natural “phenomena” are challenged. This forces us to open natural language anew to a conception of nature that is fundamentally in excess of the classical concepts within which it was thought, and which is itself expressed by way of functions and equations, by way of a mathematical language that is constantly evolving, and which can venture in territories closed off to natural language.

The aim of this chapter, then, was to pave the way for a more in-depth philosophical encounter with modern science. It was to show the extent to which modern, or rather contemporary, physics—and by that I mean post-Newtonian physics—calls into question some of the most entrenched metaphysical presuppositions of both classical ontology and early modern science. Specifically, the conception of being, or of nature, which emerges from this preliminary encounter suggests that its (initially) Aristotelian impetus is no longer tenable. Concepts of substance and essence, accidents and attributes, movement and rest, potentiality and actuality, subject and object, concepts that can be traced through the thoughts of Descartes, Kant, and even Hegel, find themselves rejected in the name of a nature that begins to reveal itself in a complexity hitherto unimagined. It is the very structure of ontology as *ousiology* that begins to shake under the blows of natural phenomena themselves, and their

mathematical formalization. Yes, mathematics is a mode of thought, insofar as it allows us to formalize and understand areas and aspects of nature closed off to natural language, forcing it in retrospect to modify its own conceptuality. Yes, the book of nature, as Galileo had anticipated, is written in geometrical characters, but this arche-writing is proving to be infinitely more complex than Galileo and Euclid had anticipated. And so, unlike what Descartes claims, this book is not an open book, as if written for us; it is simply not the case that, with the laws of classical mechanics, and as most early modern physicists believed, we come to see the world as if with God's eyes. Nature proves to resist this divine or demonic approach: there is no ultimate transparency, no complete grasp of nature. Structurally, necessarily, quantum theory tells us, nature escapes our grasp. And the side by which it escapes us, this radical incompleteness, testifies to another sense of being, to being as otherwise than *ousiologikal*. And so, yes, in a way, we are back to Heraclitus: nature likes to hide, as Einstein himself recognized. But this hiding, which, Heidegger tells us, was once a matter for thought in Ancient Greece, is perhaps played out today in the micro-physical conception of nature. It has become a problem for science itself and for nature understood mathematically. Could we not say, then, that contemporary physics, in what would amount to a turning within science, if not a leap back over early modern physics, and its meta-physical origin, has brought us closer to the sense of φύσις once claimed by Heraclitus? Does it not open onto a sense of being that modern science was unable to envisage? Yes, science presents us with being as it is in itself, and not simply as it is for us. But the in-itself of being is also marked by a structural incompleteness, by a lack and a loss. With the collapse of the conception of nature as entirely circumventable, the ideal of its complete objectivity has also collapsed. And with the vanishing of a purely objectified nature, the subject, too, goes under. This is precisely the point at which, though, philosophy must undertake to characterize anew the nature of the relation that binds it to science, and contemporary man to nature.

The Renewal of Ontology

Je me sens pur métaphysicien.

—G. Deleuze, *Dialogues*

The intense world of differences, in which qualities find their reason, and the sensible its being, is precisely the object of a superior empiricism.

—G. Deleuze, *Difference and Repetition*

How can one find oneself “pure metaphysician” and, at the same time, demand of philosophy that it be materialist and empirical? In fact, there is no contradiction here. This is because the materialism in question is also an idealism, and the empiricism is transcendental. The thought and work of Deleuze—in this respect attuned to much of twentieth-century French thought—is an attempt to overcome the opposition between realism and idealism, and to create an ontology which, while transcendental, and thus situated in the aftermath of Kantian thought, does not see itself limited to the form of the objects of experience, but also essentially engaged in thinking these objects in their materiality. Such is the reason why, besides Kant, whose project is subjected to the most daring transformation, Deleuze integrates decisive aspects of the thought of figures as diverse as Hume, Maïmon, Bergson, Scotus, and Spinoza. Yet the thought of Gilles Deleuze also represents the single most and possibly most compelling attempt to construct a metaphysics, and by this I mean an ontology, against the backdrop of the takeover of metaphysics by science. His is a thought that takes up the challenge that science poses for philosophy, bringing the relation to a novel and compelling level and the problem to an elegant solution. This claim calls for some immediate clarification and precision, already sketched in my Introduction and developed further in the previous chapter. By “takeover,” I mean the process, beginning in the seventeenth century, whereby science penetrates the field of metaphysical questioning and begins to bring mathematically formalizable and experimentally verifiable solutions to bear on questions inherited from the dawn of metaphysics. This is the process I described in terms of a “realization” and a “consummation” of metaphysics in science. Now, the singularity of

Deleuze's enterprise lies in the fact that its response to this event is two-fold. First of all, I see Deleuze as thinking and writing *from* that event, as responding to something which he does not recognize as such, in the very terms in which I understand this event. This doesn't mean that he fails to thematize explicitly the nature of philosophy's relation to the sciences, and to the natural sciences in particular. It does mean, however, that while reflecting on the status of the sciences in their relation to philosophy, from *Difference and Repetition* to *What Is Philosophy?*, he never envisages this relation in a manner as historical as the one I am suggesting. Such is the reason why, ultimately, Deleuze has little time for the question regarding the end or the closure of philosophy. To the extent that philosophy coincides with what he calls the creation of concepts—a conception in which concepts are concerned with defining problems as developed in actual physical and material processes—such an end can never be declared, least of all demonstrated. It can only be fantasized. If, however, by the end of metaphysics we mean not the impossibility of creating new concepts, but the historical process through which the metaphysical is realized in the physical, and the natural sciences take over a questioning hitherto deployed within the element of the concept alone, then Deleuze's own thought can and must be envisaged as a remarkable attempt to renew metaphysics at the end of metaphysics.

This brings us to the second aspect of Deleuze's response to the event of the becoming-science of philosophy. If Deleuze is and remains a philosopher or, as he himself puts it, a "metaphysician," it is because he is not content to reverse the order in which philosophy traditionally viewed itself in relation to science, reconstructing philosophy as philosophy of science in the process. To see Deleuze as a philosopher of science, or to see that part of his work which deals with this discipline as philosophy of science, while perhaps superficially correct, ultimately amounts to a profound misunderstanding. For what goes on in this work is precisely an attempt to reinvent philosophy in the face of modern science, yet in such a way that philosophy does not become passive and merely derivative in the process. How? By revealing the extent to which philosophy is at once irremediably bound up with the sciences, and yet never reducible to them, inextricably open to them, and yet wholly *other*. Philosophy, then, is nothing like the reflection of the sciences in the realm of the concept, nothing like a simple "translation" of the axiomatic, equation-based, and more generally mathematical apparatus of the sciences into the conceptual realm that is proper to philosophy. Philosophy is not positivism. This is because philosophy is ontology, even when and where it turns to science, to art, or to any other field. Philosophy extracts from within science that which science itself cannot think: its own ontology. But this ontology is never given in advance, already constituted: it must be wrested from science itself. Science aims to secure its hold on facts and

states of affairs, whereas philosophy is concerned with that which remains withdrawn from such facts. The concepts philosophy creates find themselves implicated in art, or in science, but as their very un-thought.

If I choose to single out the relation of Deleuzian thought to science, it is because I consider it at the origin of a double shift or turn constitutive of his ontology. Under the pressure of certain material processes revealed in science, ontology undergoes a twofold transformation: first, it becomes *onto-genesis*, and this means a discourse on the way in which systems and phenomena of various types come into being; second, it becomes *hetero-genesis*, and by this we need to understand that the “principle” presiding over the process of generation is not one of identity and resemblance, but of difference and dissimilarity. Thus, Deleuzian ontology constitutes a twofold rupture with (and at the same time an overcoming of) what I have thus far described as *ousiology*: with the interpretation of being as οὐσία, whether as πρώτη οὐσία (substance, or existence) or δεύτερα οὐσία (essence); also—and as a direct consequence of this first rupture—with the interpretation of the concept as defining essences. Another way of characterizing this move is to say that Deleuze breaks with the dominant interpretation of being as self-identical and the concept as naturally attuned to the real thus understood.

Now, the way in which philosophy remains inextricably bound up with the sciences and yet never reducible to them is a direct effect of the new determination of philosophy itself, of what Deleuze will call the non-representational ontology of transcendental empiricism. It marks an ontological difference—in fact, *the* ontological difference—between the *virtual* field of problems and of Ideas (or concepts) and the local, *actual* field of solutions. While questions and problems are never given as such in actuality but only in the actualized form in which they resolve or explicate themselves, solutions themselves coincide with the actualized material and physical processes in which their problematic origin remains implicated. We shall have to understand Deleuze’s singular conception of the real as self-explication (or explanation), as the engendering of the actual as providing the solution to real (albeit not actual) problems. This partition and distribution of the real—here only briefly characterized—lies at the origin of the functional and practical difference that Deleuze makes between philosophy and science. While philosophy is concerned with questions and problems, with transposing the test of the true and the false onto the problems themselves, and not just onto their solution, the scientific “function” is concerned with cases of solution and with answers alone. While philosophy consists in the art of raising questions and articulating problems, science is the art of identifying answers to given problems. While the realm of the philosophical concept is that of the virtual, in which pre-individual, impersonal, and as yet unactualized singularities find themselves intertwined in a common fate, the realm of the scientific function is

to describe instances of solution born of this pre-individual state. Such, then, is Deleuze's imaginative and compelling response to the challenge of classical metaphysics posed by the sciences: following a path opened up by Bergson, it consists in displacing the terrain of the philosophical, moving from the solution to supposedly pre-constituted and "eternal" problems to the very formation of problems themselves, a formation in which the fate of those solutions that the sciences are concerned to describe is sealed. The new "image of thought" provided by this account and described by Deleuze in his later work as a new *plane of immanence* or *consistency* is one where the very activity of thinking is bound up with tracing the problematic within the solution, the virtual within the actual. Thought, Deleuze writes, needs to "track back [*remonte*] in scientific states of affairs or bodies in the process of being constituted, in order to penetrate into consistency [*consistance*], that is to say, into the sphere of the virtual, a sphere that is only actualized in them."¹ In no way, then, is it a question of suggesting that new problems and new concepts need to be invented by the philosopher's mind or imagination. If, as Deleuze insists, philosophy *is* the invention of concepts, it is only to the extent that, unlike physical laws, such concepts are never merely discovered. Only what belongs in the order of actuality and solutions can be discovered. By contrast, concepts belong to the order of the problematic, of the virtual, and so have to be produced.² But the problems themselves are always real, albeit virtual, and this means always already explicated and unfolded in concrete local situations. In the face of such situations, of a real that is always an instance of solution, the patience of the concept consists in teasing out the virtual or problematic horizon of which it is a solution. Philosophy ascends the path that science descends, and the concept effectuates an inverse yet nonsymmetrical path to that of the scientific function:

Such is the path that descends from the virtual to states of affairs and to other actualities: we encounter no concepts on this path, only functions. *Science passes from chaotic virtuality to the states of affairs and bodies that actualise it.*³

If, however, instead of going down the path that leads from the virtual to individuated phenomena, we move in the opposite direction, from the actual to the virtual, we begin to encounter concepts, and the virtual itself becomes "consistent":

Now, if we go back up in the opposite direction, from states of affairs to the virtual, the line is not the same because it is not the same virtual (we can therefore go down it as well without it merging with the previous line). The virtual is no longer the chaotic virtual but rather virtuality that has become consistent, that has become an entity formed on a plane of immanence that sections the chaos. This is what we call the Event, or the part that eludes its own actualisation in everything that happens.⁴

At this early stage it cannot be a question of understanding fully the nature of this quotation, the most significant concepts of which we shall try to clarify as we go. Suffice it to say for the moment that Deleuze is careful to distinguish the scientific operation from the philosophical one, all the while emphasizing their absolute proximity. The concept alone is in a position to describe events or, in the language of Stoicism, which Deleuze borrows occasionally, “incorporeals.” This is in contrast with science, which describes “bodies” or, in a term borrowed from Péguy, “states of affairs.”⁵ And it is precisely to the extent that concepts have to do with problems, or with virtual events, that they break with the classical conception of the concept as designating the quiddity of a thing. The concept, far from designating a thing in its identity, and so from adopting the figure of identity, designates the problematic and differentiated horizon at which something takes place: “[t]he concept of a bird [for example] is found not in its genus or species but in the composition of its postures, colours, and songs: something indiscernible that is not so much synesthetic as syneidetic.”⁶ Only when the concept maps itself after the event, “which must not be confused with the state of affairs in which it is embodied,”⁷ can the task proper to philosophy be defined as “extracting an event from things and beings.”⁸

1. Univocal Being

There are not two “paths,” as Parmenides’ poem suggests, but a single “voice” of Being which includes all its modes, including the most diverse, the most varied, the most differentiated. Being is said in a single and same sense of everything of which it is said, but that of which it is said differs: it is said of difference itself.

—G. Deleuze, *Difference and Repetition*

Deleuze’s ontology finds its impetus and initial inspiration in the scholastic thesis regarding the univocity of being, a thesis first developed by Duns Scotus (1266–1308) in his *Opus Oxoniense* (also known as *Ordinatio*), itself a commentary of *Petri Lombardi Libri IV Sententiarum*.⁹

Before turning to Scotus’s thesis regarding the univocity of being (already fleshed out in Chapter 1) and to his critique of Avicenna’s formulation of the analogy of being, let me briefly outline Scotus’s conception of ontology. Scotus raises the question of the object that is proper to philosophy, and to metaphysics in particular. The traditional response (after Aristotle) is that the object of metaphysics is “being *qua* being,” and this means what a “being” is, with the properties belonging to it precisely insofar as it “is.” Yet once this has been posited, everything remains to be said, for it is all too clear that metaphysics can speak of being only with respect to the way in which we know it. As such, it is a question of knowing

what we know of it, or of how we first come to know it. As the first science, metaphysics is concerned with what is primarily knowable: *prima scientia scibilis primi*. This knowable object is also the first because, as what first falls into the grip of the intellect, it is implicated in all other objects. Now, in direct opposition to Aquinas, for whom the primary object of the intellect was the quiddity of the material thing, this first knowable is, for Scotus, the *ens commune*. From this it follows that metaphysics does not have God as its direct and primary object: God is not a common being, but a singular one, and the science that bears directly on this singularity is theology. The primary object of metaphysics is rather being as such, and metaphysics is the science of being *qua* being:

Beside the special sciences, there needs to be some common [science], in which all [things] common to those special [sciences] must be proven. Thus, beside the special sciences, there needs to be a common science with respect to being, in which knowledge of the passions of being must be revealed, a knowledge which itself is presupposed in the special sciences; therefore, if there is some [science] related to God, beside it, there is also a science of being *qua* being, known naturally.¹⁰

The science that is concerned with the principles common to all special sciences has as its object what is most universal, or the condition prior to all principles. This is because the object of every naturally discovered science is a universal, with the exception of theology, the object of which (God) is singular. Consequently, the object of metaphysics can only be what is common to all beings (including God)—in other words, being. Being is thus understood as the principle of all principles:

I say the primary object of our intellect is being, for in it we find a twofold primacy, of community and virtuality, since every thing that is intelligible by itself, either essentially includes the ground of being, or is virtually or essentially contained in that which essentially includes the ground of being. Indeed, all genera, species, individuals, all the essential parts of the genus, and even the uncreated beings—all include being quidditatively; and all ultimate differences are included essentially in some of those, and all the passions of being are virtually included in beings and its inferiors.¹¹

As the science bearing on what is most common (*communissimum*), metaphysics is to be understood as the science of what we need to know, and what we actually know, before anything else, before any particular science, even if, in the order of apprenticeship, it is the last science to be studied. If we ignore it, nothing can be known. In short, transcendent to all particular objects, it is concerned exclusively with those objects “common” to all other objects. Scotus calls them the *communissima*. The object of metaphysics, in the way in which our intellect allows us to know it *pro statu isto*, is the *ens commune*.

The *ens commune* is envisaged as wholly indeterminate, or as what can be predicated of everything that is. The being to which Scotus turns as to the very object of metaphysics, while not exactly an essence, is nonetheless apprehended by the intellect as if it were one: it is “being” as such and without any determination, in much the same way that, for Avicenna, the essence taken in itself and without any further determination (physical or logical) constitutes the metaphysical state of essence. It is because being can be envisaged in this way that we have a metaphysics, and it is because metaphysics has being *qua* being as its object that, beyond physics, it is needed in order to establish the object of theology. Metaphysics, as the science of (a) being *qua* being, transcends physics as the science of being in motion. And so, *contra* Averroes, Scotus asserts that, transcending physics, it is metaphysics, and not physics, that ought to establish the existence of the first and highest being. But, again, this primary being, whose existence metaphysics establishes, is ultimately the subject of theology. Metaphysics is for the human being the supreme natural science, because it is essentially concerned with the highest object attainable for the human intellect in this world. But this object is being (*ens*), not God. Being is the support or the *subjectum* underlying or sustaining all predications. Every discourse actually bears on *ens*. And since this is the most common predicate, in every predication of an intelligible, being is understood, albeit obscurely. In more Heideggerian language, we could say that every apophantic proposition presupposes a certain pre-understanding of the being of a being as the subject that includes all predicates, or as the primary object of the intellect, to which all intelligibles are subsequently related, whether quidditatively or qualitatively.¹² *In omne nomine intelligitur ens.*¹³

Now, it is usually assumed that the thesis regarding the univocity of being was developed against Aquinas’s thesis regarding the analogy of being. According to Gilson, however, this opposition fails to see that the being in question is not the same in Aquinas and Scotus. While the being of Aquinas is originally that of Aristotle, that of Scotus comes out of Avicenna. In other words, the being that Scotus has in mind is conceived as one of those essences that, according to Avicenna, considered for themselves, are only what they are. If such is the case, then being, precisely envisaged as such, is neither singular nor universal, neither finite nor infinite, neither first nor second, neither perfect nor imperfect; in other words, its essence would have none of these “accidental” determinations that define it as this or that. And metaphysics is considered in relation to being only under those conditions. As a result, Scotus will never contest that essence, when involved in the singular manifold, is and can only be analogous. In other words, Scotus’s univocity of being does not contradict Aquinas’s analogy of being. As conceived by Aristotle, Averroes, and Aquinas, being is indeed analogous, and will always remain so for Scotus himself whenever this being corresponds with that of the physicist. But

the true problem for Scotus will be to know whether, besides its analogical “physical” state, being does not also have a metaphysical “univocal” state, one that would precisely coincide with its state of “being *qua* being.” This is a point that will turn out to be decisive for Deleuze. In articulating the problem regarding the univocity of being, Scotus also sidesteps the Aristotelian dilemma regarding the universal and the particular.

A similar conclusion is drawn by Olivier Boulnois, although via a different path.¹⁴ The analogy that Scotus is attempting to overcome, Boulnois claims, is not that given by Aquinas in its canonical and best-known form, but that formulated by Henry of Gent, author of a monumental *Summa Theologiae*, frequently referred to in the Franciscan school. It should be pointed out that the question of analogy in Henry, as well as its refutation by Scotus, arises in the context of a theological problem regarding the knowledge of God. This is important as it has direct consequences for Deleuze, for whom the univocity of being alone allows for a conception of being and of thought as purely immanent. We begin to understand why Deleuze sees Spinoza as Scotus’s philosophical heir. At the same time, and as a limit of Scotus’s own thought, we must mark from the very start Deleuze’s opposition to a conception of ontology as rooted in a sense of being as what is most common to all things. The difficulty will consist in reconciling the univocity of being with this critique of the sense of being as *ens commune*. For the sense of being will be pure difference. In what amounts to a reversal of ousiology, Deleuze argues that difference is the only feature that is “common” to all beings.

Now, following Boulnois’s analysis, who on this point is in complete agreement with Gilson, we should note that Henry thinks being (*ens*) within the framework of an Avicennian metaphysics of essence. In the *Second Analytics*, Aristotle distinguishes between two sorts of questions regarding being, each corresponding to two types of knowledge prior to the constitution of any science:

Sometimes what needs to be presupposed is that the thing is [ὅτι ἐστὶ, *si est*]; at other times, it is rather what is said that needs to be understood [τί ἐστὶ, *quid est*]; finally, at other times still, it is both.¹⁵

Medieval thought translates this difference by combining two concepts, each of which addresses a specific question: existence (does the thing exist?) and essence (what does it signify?). Following the tradition, Avicenna opposes two senses of being: essence, which is a simple, incomplex notion, and the proposition, which is a complex statement. The being of essence (*esse essentiae*) addresses the demands of a true nature, of a non-contradictory possible. In predication, on the other hand, one grants a subject its essential characters, thus providing the essence with its actuality. In this second sense, being is no longer simply an eidetic intention, but

also an existence. We thus reach the *esse existentiae*. But the important point here is that Avicenna, and Henry of Gent after him, envisage essences prior to and independently of their actual existence. There is an anteriority of essence over existence, of the possible over the real. As a result, being (*ens*), which is the simplest of all essences (since everything that is is a being, particularized or qualified through further determinations), is immediately present to our mind, as *esse essentiae*, prior to any other knowledge, as the possibility that conditions all other possibilities: "We shall say that the thing, the being and the necessary are such that they are immediately imprinted into the soul, by a primal impression."¹⁶ As Heidegger will later say: there is a pre-conceptual, pre-theoretical, and immediate *understanding* of being. This is the doctrine that Henry, and philosophy in general in the thirteenth century, inherits, and to which he subscribes.

Since, following Avicenna, Henry thinks being in its essential being (*esse essentiae*), the problem of the analogy of being takes place within the sphere of intentionality, and not within that of predication. The central text regarding this question is *Summa*, Question 21, article 2.¹⁷ Henry begins by justifying the introduction of God amid the unity of beings:

That through which several things differ from an other thing without differing from one another among themselves is common and identical to them. . . . But, in their beingness, God and the creature differ absolutely . . . from what is not.¹⁸

Thus, being is common and identical for God and the creature, precisely to the extent that they are not nothing. God and the creature have being in common. Like the creature, God is subject to being. Thus, and according to the Avicennian tradition, by entering into the domain of being and the field of metaphysics, God is subjected to the non-contradictory unity of the concept of being.

Now, Henry is well aware of the fact that bringing God into this metaphysical space amounts to nothing less than a threat to His transcendence. The question, then, is to know how to preserve such a transcendence. And it is in the face of such a question that the concept of analogy is brought into play:

It must be said that being is not something *real*, something common, in which God would communicate with the creatures. And thus, if beingness or being is predicated of God and of the creature, it is only through a community of *name*, and in no way through a community of *thing*. Therefore, it is not predicated *univocally*, according to the definition of the univocals by accident, but in an intermediary way, *analogically*.¹⁹

In other words, the analogy is mobilized here to erase the consequences of the subjecting of God to the concept of being. True, in his

concept, God is thought on the same plane as His creatures, namely, as a being; but in *reality*, this is not the case, since the conceptual community signifies nothing real. Henry is able to neutralize thus the dangerous effects of the metaphysical principle of adequation for theology.

But, in a turn back to the metaphysical, Henry is also aware of the danger of this thesis for the very possibility of metaphysics itself. For if the conception of beingness prior to any other knowledge is purely nominal (in particular in the case of God), no other concept will allow us to know truly what is. This is why Henry mobilizes the analogy as an exception to the rule of real adequation: on the one hand, the concept does not allow us to reach a real, univocal community; on the other hand, it does not posit an absolutely equivocal difference. And so, in the end, the theory of analogy plays a double role: it limits the reach of metaphysics in the particular case of the knowledge of God; at the same time, it enables a genuine knowledge of being in general, where analogy is an exception.

But, however ingenious this solution may be, does it not reveal an irreducible contradiction? For is Henry not asserting that there is a concept of being pure and simple, since it is the first concept present to our intellect, while also claiming that there are two different concepts of being depending on whether we are speaking of God or of His creatures? This is the contradiction which Scotus intends to dissolve, daring to go where Henry will not venture. We can now understand why, at first sight at least, any mention of the univocity of being was associated with the destruction of the possibility of theology. And we can also understand why, for Scotus, the question of univocity could only take its point of departure in the question regarding being as *concept*.

The abandonment of the traditional thesis regarding the analogy of being in the traditional sense and the invention, in its place, of the univocity of being appears as the very condition of possibility of a metaphysics as science. With the invention of the univocity of being, Scotus is fully aware that he is destroying a certain contemporary state of metaphysics and substituting a new one for it. Yet what is destroyed with the analogy is not the whole of metaphysics, but, according to Scotus, only metaphysics in its particular situation at the time. From his point of view, the move toward univocity coincides with the freeing up of the possibility of metaphysics.²⁰ While univocity rescues metaphysics, analogy is precisely what destroys it. As a result, theology is also rescued—and metaphysics constituted as onto-theology: “If being were not to carry a single, univocal intention, theology would simply perish.”²¹ Indeed, the theological discourse presupposes that we apply to God the concepts of our finite experience. If there was no univocity between the locus of our own experience, the finite being, and that of our discourse on God, the infinite being, “there would be no evidence whatsoever” in our theology.²² The exercise of theology presupposes a fundamental unity between our expe-

rience and the object of this science. As such, it relies on the unity of metaphysics guaranteed by the concept of the univocity of being. Univocity, which first appeared as a “destruction”²³ of analogy, and thus of metaphysics as such, amounts in fact to a rescuing of both philosophy and theology in one single metaphysics.

What is the univocity in question here? If we are to follow Scotus’s explicit formulations in the *Ordinatio*, only a concept with a sufficient unity is said to be univocal. Properly speaking, then, univocity designates “the rational unity of what is predicated,”²⁴ or the identity of a concept. In other words, it designates the unity of a single concept as put to work in a predication. Thus, it guarantees a sufficient identity for scientific reasoning. “And so, in order to dispel any confusion regarding the name of univocity, I call univocal the concept which is in such a way that its unity suffices to establish contradiction, when it is affirmed and negated of the same.”²⁵ As a result, univocity no longer simply reinscribes the Aristotelian συνώνυμος, which designates *things* identical by name and by signification (λόγος), according to a problematic that seeks to establish the various significations of being on the basis of its enunciation. Rather, the unity of signification is now bound to the identity of a concept. The question has therefore shifted, from semantics to logic. As an immediate result, univocity complies with the demands of logic in general and with the principle of contradiction in particular: a single thing cannot be affirmed or negated simultaneously of an other without contradiction, and this means without losing its identity (or, in the case of a concept, its unity).

The logical univocity at stake here, though, is a particular case of univocity in general:

There is indeed a twofold univocity, one of which is logical, and postulates that various [beings] converge in a single common concept, and the other is natural, and postulates that some [beings] converge in a single real nature. . . . Besides these two univocities, there is yet a third, metaphysical one, according to which some [beings] are united in the closest genus, and is intermediary between the first two.²⁶

There are three types of univocity, therefore, from the most universal to the most particular: logical univocity consists in the sole unity of the concept common to various beings, metaphysical univocity in the unity of the kind of various beings, physical univocity in the unity of the species proper to various singular beings.

Among the ten proofs given regarding the univocity of the *concept* of being, the first one is the main one (*Ordinatio* I, 3, §§21–34). Any intellect that is certain of a concept, Scotus claims, is certain of something that is predicated of it, namely, that it is a being. Thus, in such a case, the subject includes the predicate. The concept of God, naturally mobilized as a

paradigm of certainty, presupposes that it is a being: while doubtful with respect to the finite or infinite, created or uncreated being, the concept of being with respect to God is independent from the other two concepts and is included in both. There is, in other words, a certainty with respect to the concept of being, one that underlies all the doubts we may have with respect to particular concepts. As such, the concept of being is univocal. “Being” (*ens*) is the common concept.

To what does the univocity of being apply? To virtually everything that is, in whatever sense being can be attributed to it, but not to everything in the same way. Granted, everything that is intelligible includes being, but it can include it in a number of ways, either directly, by virtue of the “primacy of community” in being, or indirectly, by virtue of the “primacy of virtuality” in being.²⁷ This amounts to saying that being is primordial not only with respect to that to which it is *actually* common, but also with respect to that which it implies *virtually*. Now, being is common to all things that “are,” in whatever sense we like, and to the extent that such things are something. This is the case regardless of whether we’re talking about individuals, species, or the genera. When we attribute being to such things, we attribute it *in quid*, that is, as belonging to their very essence. But there are also those other determinations of being which, in themselves, are not, but qualify it, in the sense in which what is implies necessarily at least one such determination. Thus, “actuality” and “potentiality” are not beings, yet every being is necessarily one or the other. Determinations of this kind contain either the ultimate differences of being, such as the one we have just mentioned (*differentiae ultimae*),²⁸ or its ultimate properties (*propriae passionis entis*), also known as “transcendentals,” such as *unum*, *bonum*, or *verum*. Being is univocal to the intelligible as a whole through either of these two ways, but it is univocal, of a univocity of community, with respect to that of which it is said only *in quid*, as designating a thing that is. As for the ultimate differences and the transcendentals, which determine the essence of being by qualifying it, being is univocal to them only with respect to a primacy of virtuality, or virtually, because it implies them while they, taken for themselves, “are” not.²⁹

Now, it is precisely to the extent that the community of being spills over and, as it were, penetrates the entire domain of the intelligible that it cannot be thought as a genus, or as the genus of all genera. It is precisely too common to be that, and this despite the fact that it is not common to its ultimate differences and transcendentals. Being permeates everything, and since the intellect knows all things as “being,” it cannot conceive of a genus outside of which nothing remains in order to determine it. The ultimate differences of which being is not predicated cannot serve as an objection here. For what matters is that there are differences of which being can be predicated directly, in the same way in which it can be predicated of their kind.

In short, the univocity of the concept of being in its commonality does not go as far as the ultimate determinations of being. It does not reach as far the different qualities or the “passions” of being since, as we have seen, a concept is univocal to the extent that it remains identical within a predication of essence: when, in other words, a subject is predicated with its essence *qua* essence. This amounts to saying that univocity presupposes a quidditative predication. This is a predication in which the predicate is included in the subject, inherent to it. Thus, the concepts of species and genus are univocal for the physicist and the metaphysician. Likewise, the concept of being that transcends all kinds is univocal in that it allows a quidditative predication, and is included in the subjects under consideration.

In the hierarchy within a succession of particularizations, the definition of an essence presupposes a potential genus (the *determinable*) and an actual difference (the *determining*). The first concept is included within it quidditatively. The second concept, however, is added onto it extrinsically: it is not “because they are bees that bees are of many types,” but because of determinations extrinsic to their essence.³⁰ This is a *qualitative* predication. And so, the ultimate difference (that of which no other species and no other difference is said), which in the last instance qualifies the essence as a proper essence, is not predicated from within with respect to being: it is attributed to it from without, qualitatively. It is determining, without in turn being determinable. Such is the reason why being is not a univocal concept predicated of the ultimate difference: it is not included in it directly. On the vertical axis of an increasing determination, which moves from the transcendentals to the ultimate species, the univocity of the concept of being, which coincides with its quidditative predication alone, stops short of the qualitative concept of the ultimate difference, from which it is excluded.³¹ This, we recall, is the result we arrived at in our preliminary sketch of this question in Chapter 1.

To conclude and summarize this brief exposition of univocity, let me emphasize again that Scotus brings a certain philosophical tradition to an end, that tradition governed by a theory of analogy supporting a metaphysics of participation. In a space of reasoning common to Denys the Aeropagite, Aquinas, and Henry of Gent, each particular being, in its own finite way, takes part in divine nature. To abstract from one’s particularity is to be brought back thus to a concept of being that is proper or analogous to God, in other words to a concept that signifies God first and foremost. Ontology is intrinsically theology. This means that metaphysics bears directly and equally, in its very object, on being and on the supreme being, on being as (at least in part) divine being. In this sense, it is onto-theological, and by that we should understand the ambiguous or twofold gesture by which philosophy constitutes itself as metaphysics.

But the question is that of knowing the extent to which, by isolating a

concept of being as univocal to God and to the creature, Scotus does not radically modify this situation. For being has now become the object of a transcendental, *neutral*, indifferent, and common discourse. It is prior to any theological consideration. And whereas the knowledge of God presupposes that of a univocal concept, the opposite is not true: the concept of being does not refer to God with any priority. Metaphysics, precisely because it is the science of being *qua* being, cannot become an ontology prior and indifferent to philosophical theology. Does this mean that knowledge of God is excluded from metaphysics? In no way. Knowledge of God remains the ultimate end of metaphysics. But this knowledge is articulated with the knowledge of being in a mediated way and is the object of a complicated process. Such is the reason why, in his commentary on Scotus, Boulnois prefers to speak of an onto-theological *structure*. While acknowledging the importance of the move that takes place between analogy and univocity, particularly in terms of the possibilities opened up for Deleuze's own thought, we must also continue to stress the fundamental continuity of structure unifying metaphysics as onto-theology, which entails collapsing the ontico-ontological difference into an ontical one.

Let me now turn to Deleuze's own interpretation of Scotus's thesis and the introduction of his own ontology. First, it is worth pointing out that the so-called univocity of being concerns the *ens*, or what Heidegger would have called *das Seiende*, and not *esse*. Metaphysics—and in this regard Scotus is no different from any of his predecessors—posits itself as a discourse and a science aimed at *das Seiende* as such and as a whole. This is particularly apparent in the qualification of *ens* as *ens commune*. Metaphysics is a science regarding what is most common to all things, to creatures and their creator. As such, it is the science of being *qua* being as the science concerning the beingness of beings, or the entity of entities. So, far from calling into question the Heideggerian interpretation of Western philosophy as the questioning concerning beings with respect to their common being, Scotus's thesis regarding the univocity of being, and thus Deleuze's appropriation of it, would seem to confirm it. Furthermore, the entire debate is generated by an onto-theological discussion regarding the possibility (or impossibility) of thinking "being" in one and the same sense (συνωνύμως, *univoce*) in connection with both God and the created world. Yet before jumping to hasty conclusions regarding the onto-theological nature of Deleuze's conception of being as the *communissimum*, let us look a bit closer at how he himself interprets it. Doing so, we shall see the extent to which this twofold aspect of the classical debate is subjected to a double modification. First of all, it is no longer born of the attempt to bridge the ontological abyss separating God and the created world (although it is

that too, as Deleuze's commitment to Spinoza's divine substance testifies), but of the attempt to think the difference between beings and their being. Thought is now concerned with the ontico-ontological difference, and no longer with the onto-theological difference—even where Deleuze continues to speak of God as Being. In addition, it coincides with the attempt to think the difference between beings and their being away from any relation of resemblance or identity. "Between" beings and being, there is space for difference alone, or there is the space of difference itself. Yet this "space" is now understood in terms of production, or genesis, and difference is an *operation*: it coincides with the coming into being or presencing of beings. From which it follows, second, that what is common to all beings (the *ens commune*) turns out to be difference, and this in such a way that the very sense of commonality becomes inverted, or overturned. And in this inversion, it is the very sense of being that is transformed: from an abstract quality or a feature common to all things, it comes to designate the event of things themselves, or things in their eventfulness. In the end it is only superficially that the Deleuzian discourse seems to reinscribe the onto-tauto-theological discourse of classical metaphysics. It invades it, inhabits it, but only to overturn it.

At this early stage of the analysis, the significant point is that the univocity of being throws new light on a conception of being that indeed goes back to Aristotle, allowing it to be wrested from the grip of the identity of essence or the unity of the concept, and to be thought coextensively with difference as such. More specifically, this is a conception which, while certainly derived from Aristotle, is going to be expressed by Deleuze in terms that are rather different from Aristotle's own. For the thesis regarding the analogy of being, which the subsequent thesis regarding univocity is to overthrow, is not to be found in Aristotle himself, but, as we have already seen, in Aquinas and Avicenna. However, it is a thesis that is a translation of a problem and a vocabulary that is wholly Aristotelian. For Aristotle, remember, Being is not analogical, but homonymic. Homonyms (ὁμώνυμα), we are told, are "those things of which only the name is common, whereas the statement of essence corresponding with the name is different [λόγος τῆς οὐσίας ἕτερος]." ³² Thus, "dog" is a homonym for both the celestial configuration and the barking animal. Synonyms (συνώνυμα), on the other hand, are "those things the name of which is common when the statement of the essence corresponding to that name is the same." ³³ Now, the distinction between homonymity and synonymity is the one that becomes canonical under the names of equivocity and univocity: two things will be said equivocal when they do not share a community of essence, and univocal when they do. But what about "being"? Is it a univocal or equivocal concept? Homonyms, Aristotle tells us, are almost always accidental and contingent, and therefore

ought to be able to be avoided. In the order of λόγοι, synonyms seem to be the rule. But is being a synonym with respect to all things that are? No, since synonymity presupposes a community of essence between different species, but not between kinds. Kinds, we recall, are in themselves too different to be called different in the strict sense: they are not so much different from one another as *other* to one another, since two things can be said different only if there is some respect in which they can be said the same. In other words, “being” is too broad a concept to be a synonym. But is it an accidental homonym? Is it really accidentally that being is said in so many ways? To this question, and to the problem as a whole, Aristotle responds by saying that being is indeed a homonym, but one that is not accidental, and so not without foundation. As such, it is closer to a synonym. Being, Aristotle tells us, is a πρὸς ἓν λεγόμενον; it is indeed something that is said in many ways, but always *in relation to a single term*: “Being is said in many ways, but always in relation to a single term, to an identical nature, and not by homonymy.”³⁴ It is said in many ways, but each time “with reference to an identical ground” (πρὸς μίαν ἀρχήν).³⁵ This ground, we recall, is what Aristotle calls οὐσία. Everything that is is somehow related to the sense of being as οὐσία. It is this solution, *between* equivocacy and univocity, to which Aquinas will begin to refer as analogy. And it is this Aristotelian problematic, both as it occurs in Aristotle and in his medieval commentators, that Deleuze has in mind, and distances himself from when he turns to the Scotian thesis. Now, although the Aristotelian problematic of the one sense of being and its many other significations comes subsequently to be equated with the problematic concerning God and His creatures, it is with the former that Deleuze is primarily concerned. In other words, Deleuze “uses” Scotus to return to the opening, Aristotelian problematic, and specifically to the way in which the Aristotelian “solution” arises out of a division of the real into kinds, specific differences, and individuated particularities, and this in such a way that differences can be identified and isolated only at the level of species, thus subordinating the latter to the work of identity or of the concept.

It was Aristotle who designated being as what is most common and who insisted that being was not a common *genus*, a warning that will be followed by the tradition. If being were a genus, we could assimilate its differences with specific differences, but then we would no longer be able to say that they “are,” since the genus is not attributed to its own differences. In other words, being cannot be posited as a common kind without destroying the very reason why we would want to posit it thus in the first place (the possibility of *being* for those specific differences). In this respect the univocity of species within a common genus refers back to the equivocacy of being in the various genera. Now, Deleuze argues,³⁶ it is true that the Aristotelian concept of being, rather than collective and so able to function like a genus with respect to its species, is actually distrib-

utive and hierarchical: in itself, it has no content; it is only when related to those formally different terms (the categories) with which it is predicated that it has a content. The concept of being has a common sense only through this distribution among categories. At the same time, it has a hierarchically primordial sense with respect to these categories. Thus, according to Deleuze, "common sense" (*le sens commun*) and "primary sense" (*le sens premier*), which he also calls "good sense" (*le bon sens*), are the two distinctive traits of a philosophy of categories and of the faculty of judgment that presides over the twofold activity of distribution and hierarchy. This activity, though, the very activity of judgment, is analogical, and is so in a twofold sense. First of all, with respect to its categories, being is in a relation of analogy, and this means of proportion (as the Scholastics will make clear), whether from the point of view of common sense or of primary sense, whether distributively or hierarchically. Analogy is the essence of judgment. Second, the analogy of judgment (with respect to which its differences are only generic) is itself the analog of the identity of the concept (with respect to which its differences can only appear as specific), its response or its equivalent, as it were. Identity (of the concept) and analogy (of judgment) belong together. Judgment distributes terms and relations within the pre-given identity of the concept and establishes hierarchies by way of measurements of such terms and relations. Now, in what sense does the concept of univocity alter this situation radically, simultaneously wresting judgment from analogy and the concept from identity? Precisely to the extent that through it and through it alone can being be said *in one and the same sense* of all its distinct differences, or individuating factors.³⁷

As we have already noted, the univocity of being is a response to the conception of analogy predominant at the time of Scotus,³⁸ itself an attempt to think the relation between two entities of a different ontological status (God and the creature). For medieval philosophy, then, the sole *ontological* difference is the one between the infinite, divine being and the finite, created one. It is a difference of an ontological significance between two different types of beings, and not the ontico-ontological difference *per se*. Now, as we shall see, Deleuze does not limit the question regarding analogy to the onto-theological debate arising from medieval Christian thought, but broadens it so as to encompass Aristotelian thought itself. What Deleuze recognizes as a crucial move in the thesis regarding the univocity of being is a threefold possibility: that possibility, first of all, of a unified ontology through the recognition of an essential ontological sameness between not just God and man, but all things. This sameness in no way signifies that God and man, or indeed all beings, are identical: ontological sameness does not mean ontical identity. Rather, it signifies that their very difference stems from a single being that is itself entirely indifferent to this difference as well as to its many differences. It

means that if being can be said or predicated of this as well as of all its other differences, it is always in the same sense. Being is equal (and, as we shall see in a moment, equally indifferent) to all its individuating differences, yet these difference are precisely not equal among themselves. Being is said in one and the same sense of all its differences or intrinsic modalities, but these differences do not have the same sense. Univocal being essentially relates to individuating differences, but these differences do not have the same essence and are precisely not “variations” of the essence of being. In other words, it is not a question of annulling the difference between God and man, or between any two given phenomena, but of showing how, paradoxically perhaps, all modalities and differences are expressions of a single being or substance:

One and the same voice [*voix*] for the thousand ways of the multiple [*le multiple aux mille voies*], one and the same Ocean for all the drops, one clamour of Being for all beings.³⁹

It is on this point, then, that Deleuze differs from Scotus, for whom the concept of univocity applied to quiddities only, and not to ultimate determining differences. Deleuze goes one step further, allowing all differences to be expressions of a single being. Far from signifying the end of differences, therefore, the univocity of being constitutes their sole affirmation:

Being is said in one and the same sense of everything of which it is said, but that of which it is said differs: it is said of difference itself.⁴⁰

Paradoxically, then, and this paradox fuels Deleuze’s entire thought, univocity opens directly onto an ontology of difference.⁴¹ For, and this is the second possibility, such differences can never be brought back to the ontological site of a particular being, but only to the neutrality and indifference of (an) impersonal being. Whereas for Aristotle, and for an entire tradition after him, difference remained caught up within the identity of the concept (of the genus or of essence), its many forms as specific difference always presupposing the form of identity within generic concepts, and thus was never itself a concept, being is now said of difference alone, and this in such a way that the very form of the concept no longer presupposes that of identity. With univocity, ontology frees itself from the primacy of the identity of the concept, which is also always a primacy of the concept of identity. It is the very sense of the concept itself that changes, drawing in its wake a transformation of the relation between difference and identity which, as we shall see, amounts to nothing less than a reversal and a displacement of the traditional hierarchy governing the two terms. And so, in this double twisting free of what Deleuze calls “representation,” an ontology of difference begins to be articulated, and metaphysics overcome:

Here we find the principle which lies behind a confusion disastrous for the entire philosophy of difference: assigning a distinctive concept of difference is confused with the inscription of difference within concepts in general—the determination of the concept of difference is confused with the inscription of difference in the identity of an undetermined concept.⁴²

With the word “representation,” and at the most general level, Deleuze has in view the type of thought for which the form of the concept has the form of identity. The prefix re- in the word representation, Deleuze writes, signifies this conceptual form of the identical that subordinates all differences to its own identity.⁴³ Finally, and intimately related to the first two possibilities, univocity locates *immanence* at the very heart of ontology. If theology is indeed the science of transcendent being, metaphysics is the science of being *qua* being, which is said equally and indifferently of God, man, and all other things. Thus, being is no longer thought from within an ontological separation between two different orders, from a certain dualism in need of subsequent bridging. As such, it escapes all classical ontological dichotomies (finite/infinite, created/uncreated, contingent/necessary, etc.). With Scotus, then, being becomes *neutral, indifferent, and impersonal*, and philosophy becomes *immanent* (although the question of how philosophy, as investigation into immanence, is itself born of this immanence remains to be addressed; in other words, it remains to be seen how thought is itself immanent to being).

Finally, and perhaps most importantly, it should be noted that the univocity of being allows us for the first time to operate philosophically at a level of determinacy and particularity hitherto unknown. It allows us to venture into hitherto uncharted and forbidden territory. As we saw quite clearly from the first part of this book, Aristotelian equivocal and analogical ontology—which I characterize as *ousiology*—forces us to evolve conceptually at a fairly general level: specifically, at the level of the identity of the concept of being in general, and of the analogy of the most general concepts. We find ourselves trapped in the intermediary regions of genera and species. As a result, analogy finds itself enmeshed in a structural impossibility: it wants to relate particular beings to being, but it finds itself unable to account for their own individuality. Of the particular, it retains only the general (form and matter) and always looks for the principle of individuation of any given thing within an element of the already constituted thing. In other words, it cannot envisage the particular *as such*, even where and when this is what it has in view. Now, Deleuze argues, the situation is entirely different when we turn to univocity. Differences are no longer simply *in quid*, attributable to being as to the identity of a concept, but actually determining and individuating. As a result, ontology becomes a philosophy of individuation, or a philosophy concerned with the genesis of individuated entities; it becomes *ontogenesis*. This

means that, in the wake of Nietzsche, Bergson, and Heidegger, Deleuze is able to reconcile being with time, and the univocity of being with the ever-changing flow of becoming. When, Deleuze argues, we claim that univocal being relates immediately and essentially to “individuating factors,” we need to understand that they are precisely not individuals, or individuated entities. For univocity implies impersonality. Rather, what we have in mind is the transcendental principle (which, as it will turn out, is nothing like a principle, which always presupposes its own identity) coextensive with the process of individuation at the heart of these individuals. Such a “principle,” Deleuze claims, is just as capable of dissolving and destroying individuals as it is capable of constituting them temporarily. These “individuating factors” are intrinsic to being, moving from one “individual” to the next, circulating, and communicating beneath forms and matters. In the end we shall be in a position to oppose the *specification* of equivocity and analogy to the *individuation* of univocity. A very different difference is at work in each process. But even this is not enough: what needs to be shown is not only the way in which individuating differences differ from specific differences, but first and most importantly how individuation *precedes* all elements pertaining to the constituted individual: matter and form, species and parts, etc. The univocity of being demands that we show how individuating differences within being precede generic, specific, and even individual differences. In other words, the movement and process of individuation, to which univocity alone leads, is altogether heterogeneous to the operation of specification, as well as to the individuation through form and/or matter, both presupposing the analogy of being:

So the way in which, in the analogy of being, generic and specific differences are in general mediated in relation to individuating differences, is entirely different from the way in which, in univocity, univocal being is said immediately of individual differences or the universal is said of the most singular independently of any mediation.⁴⁴

Being avoids analogy, and becomes univocal, by becoming genetic, and, more specifically, hetero-genetic. And so, ultimately, it is a question of knowing how a traditional onto-tauto-logy, governed by the division of genera into species and the distribution of differences on the basis of a pre-given identity, makes way for an onto-hetero-genesis in which the real is divided according to its natural articulations, bifurcations, and lines of divergence.

Needless to say, then, with the univocity of being, while the classical concepts of metaphysics reappear, they no longer have the same signification. It is a thesis, which, in Deleuze’s eyes, does not constitute a mere variation on a metaphysical theme, but a profound revolution. Progressively, being comes to be equated with difference and individuation,

with the indifferent and neutral⁴⁵ site in which differences proliferate;⁴⁶ difference is no longer so much specific, bound to the pre-given identity of its concept, as it is individuating; individuation is no longer concerned with the relation between form and matter, but with those (pre-individual) singularities that lead to particularities without the mediation of generalities and universals.

Throughout *Difference and Repetition*, and beyond, Deleuze will argue that the task of philosophy is to overthrow metaphysics (*renverser la métaphysique*). But what is the metaphysics that is at issue here? This is a question we shall have to address in greater detail, but to which we have already begun to respond: the metaphysics that needs to be overthrown, and this means at once inverted and overcome, is the metaphysics of representation as defined above. It is, in other words, the thought that systematically subordinates the movement of the real itself (as a process of pure differentiation) to the identity of the concept (or of essence). It is an operation of grounding, in which the ground is posited as the self-identical and self-present Idea (the αὐτὸ καθ' αὐτό), and with respect to which the grounded is in a relation of resemblance and identity. In reality, however, it is not the identity of the concept that differentiates itself in individual differences, but the movement of difference itself that produces *effects* of identity.

What makes this thought great is not simply its ability to bring back to life this or that thesis or figure in the history of philosophy, however imaginatively, but its recognition that the thesis regarding the univocity of being is the only ontological framework within which to think what we have called the self-overcoming of metaphysics in the natural sciences. From Parmenides to Heidegger, through Scotus, Spinoza, and Nietzsche, Deleuze claims, there was only ever one thesis regarding being, and that is univocity. It is the same voice, the same “clamour of being” that echoes from one to the other.⁴⁷

2. Transcendental Empiricism

What, then, becomes of being when it is no longer associated with the very movement of identity, and what becomes of metaphysics when it is no longer rooted in the fourfold principle of representation? What should we understand by “being,” when being is no longer subordinated to the identity of the concept and governed by the law of analogy? The science of being *qua* being is no longer a science of identity and analogy, but of difference and univocity. Being is the *ens commune* only and precisely to the extent that it coincides with the movement of difference itself. This is the movement I now need to describe. So far I have only alluded to what difference was not, and only implicitly and indirectly established its link with univocity. It has now become necessary to reveal exactly how the

unfolding of being, or the movement of the real itself, coincides with the differentiating of difference. It is in the context of this exposition that I shall introduce the concept of onto-hetero-genesis and reveal its intimate connection with the realm of mathematics and the natural sciences.

In what, then, does the movement of difference consist? And how can we describe further a metaphysics of univocal being? To these questions, Deleuze answers by stating the following: metaphysics, when properly understood, and on one side of itself at least, is an aesthetics, or a science of the sensible. It is concerned with the very being *of* the sensible. Now, Deleuze adds, this certainly amounts to equating philosophy with empiricism, insofar as it has become a question of grasping the individual as such, in its individuating (and not specific) difference. It has become a question of allowing the concept to express the sensible thing as such, of grasping it in its singularity. So long as the concept corresponding to the object itself has not been found, so long as the unique concept has not been identified, we remain stuck within the order of generalities and abstract ideas. What escapes us is the thing in its difference or *nuance*. And this we can achieve by following the real in its self-differentiation, by pursuing the thing all the way to its internal difference, at the stage at which it becomes a "this." Yet the empiricism in question is further qualified as *transcendental* empiricism, and one that, in the process, becomes a *superior* empiricism. This may come as a surprise. For what allows Deleuze to equate being with the sensible? And what remains of the *meta*-physical, when the real has been reduced to the physical? All traces of the difference between God and His creatures, all concerns to do with the difference between two ontologically distinct types of entities, seem to have vanished. But this is precisely what the position of univocity has allowed us to achieve. The difference between God and His creatures, between the substance and its modes, has receded in the face of another difference, or another set of differences—those very differences that constitute the sensible itself. It would be incorrect to say that the difference inherited from medieval philosophy has simply vanished. Instead, we should say that, under the weight of univocity, it has been radically altered; for difference no longer points to a hierarchy and a transcendence, but to the movement of the substance or of nature itself. Difference is no longer the expression or the effect of some transcendent order as it is the life of pure immanence. And so, once again, it is the very meaning of difference itself that has changed, from transcendent and analogous to immanent and univocal. Empiricism points to the sphere of immanent being to which thought is now directed, and at the heart of which it finds the movement of difference. But Deleuze, as I have suggested, goes further and, in what amounts to a contrasting association, qualifies this empiricism as *transcendental*. How are we to understand the use of the transcendental in this context?

As Agamben has rightly pointed out in a reading of the last text published by Deleuze,⁴⁸ the fundamental character of Deleuzian immanence is that “it does not refer to an object” and “does not belong to a subject.” In other words, it is immanent only to itself. And yet it is motion.⁴⁹ This is the sense in which it is described as a “transcendental field.” The transcendental is here opposed to the transcendent insofar as it does not presuppose a consciousness, but is defined as “what escapes the transcendence of the subject as well as the object.”⁵⁰ The notion of transcendental field refers back to Sartre’s essay from 1937, “Transcendence of the Ego.”⁵¹ In this essay, which Deleuze sees as decisive, Sartre speaks of a “transcendental impersonal field that has neither the form of a synthetic consciousness nor that of a subjective identity.”⁵² This concept, which Sartre did not manage to free entirely from the plane of consciousness, is taken a step further by Deleuze; now it is a matter of reaching a pre-individual and totally impersonal zone beyond (or perhaps prior to) any idea of consciousness. According to Deleuze, not only is it impossible to understand the transcendental in the way that Kant does, that is, “in the personal form of an I,” but it is equally impossible—and in this instance, it is Sartrean phenomenology that is being targeted—to preserve for it the form of impersonal consciousness, “even if we define this impersonal consciousness by means of pure intentionalities and retentions, which still presuppose centres of individuation.” Why? Because “the error of all efforts to determine the transcendental as consciousness is that they think of the transcendental in the image of and in resemblance to that which it is supposed to ground.”⁵³ And if this is the case, then it is because the transcendental field in question does no more than uncover the conditions of *possibility* of knowledge or of experience and not, as Deleuze would want, the real conditions of emergence of phenomena. Insofar as the “condition” which classical transcendental thought seeks to identify is nothing more than the *form of possibility* of the conditioned, and this regardless of whether it is the form of logical, mathematical, physical, transcendental, or moral possibility, it is altogether incapable of *generating* what it is actually supposed to “found.” As a result, the conditioned is in no way “affected” by the condition, which is merely an abstract doubling of itself, one to which it remains indifferent:

But however we define form, it is an odd procedure, since it involves rising from the conditioned to the condition, in order to think of the condition as the simple possibility of the conditioned. Here we rise to a foundation, but what is founded remains what it was, independently of the operation that founded it, unaffected by it.⁵⁴

And so the very goal of the transcendental enterprise coincides with the attempt to purge the transcendental field of any trace of resemblance:

We cannot think of the condition in the image of the conditioned. The task of a philosophy that wants to avoid the traps of consciousness and the cogito is to purge the transcendental field of all resemblance.⁵⁵

So long as we do not move beyond the point of view of consciousness, we remain trapped in the problematic of resemblance between the foundation and whatever it is that is being founded. The *cogito*, from Descartes to Husserl, grounds the possibility of treating the transcendental as a field of consciousness. But unlike in Kant, for whom this field takes the form of a pure consciousness without experience, Deleuze definitively twists the transcendental free of the very idea of consciousness (even in its Sartrean, impersonal mode). As such, it appears as an experience without consciousness or subject. The transcendental in Deleuze's sense amounts to a double twisting free, therefore: first, from *transcendence*, whether of God, of being, of the subject (of consciousness), or the object; second, from the problematic regarding the conditions of *possibility* of experience and knowledge in general, irreducibly complicit with the logic of resemblance. Deleuze replaces the classical problematic of the transcendental as involving transcendence and possibility with that of immanence and genesis. Transcendental empiricism is concerned with isolating the genetic and immanent conditions of existence of the real. And metaphysics is the sole instrument available for understanding what is real within the real, the only access to its inner movement, rife with novelty.

The transcendental field is impersonal, unconscious, and pre-individual; yet it is the field of individuation for all phenomena. And this is a field constituted by differences or intensities, singularities that are pre-individual and impersonal. In other words, Deleuze rejects the alternative between a completely undifferentiated depth, a formless non-being synonymous with chaos, and an already individuated Being, a personalized Form, between the discourse on the conditions of possibility and the return to the essences or decrees of God, between the transcendental in the Kantian sense and scholastic ontology. Instead, he insists, philosophy should open itself to those pre-individual differences constitutive of the individuated world as such, and seek to determine an impersonal and pre-individual *transcendental* field which, while not resembling the corresponding *empirical* fields, cannot be mistaken for an undifferentiated depth either. As a result, we are no longer operating within a world of pre-individuated phenomena, but within an intensive field in which *individuation* is the organizing principle. In this field of individuation, there are only individual differences (and not differences carried by individuals), or "differential relations" sustained by intensities, singularities independent of the form of the I or the Self. Not consciousness, even in its impersonal mode defined by Sartre, but singularities, and they alone, are the "true transcendental events."⁵⁶ As this unconscious or pre-conscious surface, as this surface

otherwise than conscious, otherwise than individual and personal, they alone preside over the genesis of individuals and persons. Representational thought alone thinks that, outside these determinations and anchor points for thought and experience, there is only chaos and disorder. Far from being the irreplaceable figures of individuation, the I and the Self turn out to be the strongest obstacles to a genuine thinking of individuation. And so, in the end, the transcendental field comes to coincide with this “disorder” that Kant’s critical enterprise was designed to subdue, because it remained incapable of conceiving it. Thought is now to enter the highly chaotic and uncharted territory of the transcendental:

Only when the world, teaming with anonymous and nomadic, impersonal and pre-individual singularities, opens up, do we tread at last on the field of the transcendental.⁵⁷

We are now in a position to begin to understand the following programmatic passage from *Difference and Repetition*, which introduces somewhat abruptly the idea of a transcendental empiricism as a counterpoint to representation, linking it with the question of difference. With this passage, we begin our journey into *Difference and Repetition* and the scientific background against which it unfolds:

It is strange that aesthetics (as the science of the sensible) could be founded on what *can* be represented in the sensible. . . . Empiricism truly becomes transcendental, and aesthetics an apodictic discipline, only when we apprehend directly in the sensible that which can only be sensed, the very being of the sensible: difference, difference of potential and difference in intensity as the reason behind qualitative diversity. It is in difference that the phenomenon flashes [*fulgure*], explains and explicates itself as a sign [*s’explique comme signe*], and that movement is produced as an “effect.” The intense world of differences, in which qualities find their reason, and the sensible its being, is precisely the object of a superior empiricism.⁵⁸

These remarks are still enigmatic, and will remain so until we find ourselves in a position to understand why and how difference is first and foremost intensive (rather than extensive) and potential (but in no way simply *possible*), and the phenomenal, in its very movement, an “effect” that “flashes” in a virtual field which it “signifies” as its very “reason.” This will require that we tease out the scientific context in which the concepts of genesis and heterogeneity become necessary, and return to the notion of “system” as it appears in mathematics, physics, and biology. At the most elementary and preliminary level, it is a question of understanding why and how differences, and differences alone, underlie the world of phenomena—how, in other words, and in what amounts to a reversal of representation, phenomenal identities are only *effects* of

dynamic and material differential processes which themselves cannot be traced back to prior identities. Such is the reason why transcendental empiricism is ultimately irreducible to speculative dialectics: for it opens being directly onto difference, against all the mediations, all the reconciliations of the concept. If transcendental empiricism, as a theory of the sensible, accounts for the real, it is not by moving from the general to the specific, from the universal to the particular, or from the possible to the real. For transcendental empiricism is not concerned with the real insofar as the latter conforms to *possible* experience. Rather, it is concerned with the conditions of *real* experience. And such conditions, far from being general possibilities, or vague categories, are real, albeit not *actual* singularities. At the heart of the actual, as the very reason or condition of the actual, there is non-*being*. But this non-being is not the negation of something actual, and thus not the very force of the real understood as actuality. Rather, it is the differential space in which all identities are produced, not as an image or a copy of a self-identical Idea, but as the effect, and thus to a certain extent the epiphenomenon of an originary *disparity*.

Yet despite the still enigmatic character of the passage from *Difference and Repetition*, this much can be guessed: the question concerning the being of beings is not a question of essence. The question "What is a being?," the question that questions *what is* with respect to its being, is not a question that bears on beings as individuated substances on the basis of a permanent and ideal essence. It is a question which, as we shall see in detail, bypasses the twofold determination of being as substance or as actuality, and as essence or as *idea*. How? By reorienting the analysis in the direction of what, in excess of actuality, still actualizes itself, and in excess of essence, reveals itself as event. Transcendental empiricism is a science of the virtual and the event. As such, metaphysics, as ontology, is irreducible to the conceptual space initially broached in response to the question of being and characterized by the bi-polarity of essence and existence, as if this very space exhausted the reality of the real. From this it follows that philosophy is the science of neither the mere fact of factual or actual being nor, for that matter, of its traditional counterpoint, essence, or quiddity. Neither a science of mere beings nor a science of eternal and permanent essences, ontology is equally irreducible to the opposition constitutive of metaphysics as Platonism, the opposition between the sensible and the intelligible. If philosophy is empiricism, concerned with the being *of* the sensible, "being" should in no way be seen as referring to the intelligible counterpart of the sensible. The "transcendental" to which being refers in this instance, while irreducible to the mere physical contours of an individuated substance, is nonetheless nothing like a purer version of it. The "difference" with which it coincides serves to indicate the relation of heterogeneity *and* production that governs the very movement of the sensible.

Let me return to the passage from *Difference and Repetition* I was quoting

a moment ago. There Deleuze seems concerned to identify the properties of a phenomenon — not of any specific, actual phenomenon, as attributes of a given substance, itself accessible through its essence, but of *all* phenomena. It is thus a question of identifying the phenomenality of all phenomena, or the being of all beings — this, of course, so long as we can assume that every being coincides with its phenomenality. At this stage the terms “being” and “phenomenon” seem interchangeable. But what is most striking with respect to such phenomena is that, when questioned with respect to their being, they appear as “mere” signs to be situated and deciphered in the broader context of a system which is wholly *differential*. The phenomenon, we are told, is a “sign” that “flashes” within a “system,” thus illuminating it, much in the way in which lightning illuminates the sky; and yet, it illuminates it as the very system that carries it and sustains it, delineates it, and allows it to unfold *as* this very phenomenon. Further on, in a passage that echoes the one I was just citing, Deleuze writes:

Every phenomenon flashes in a signal-sign system. In so far as a system is constituted or bounded by at least two heterogeneous series, two disparate orders capable of entering into communication, we call it a signal. The phenomenon that flashes across this signal, bringing about the combination between disparate series, is a sign.⁵⁹

By “phenomenon” in the strictest sense, then, we need to understand the individuated and fully completed process that coincides with its presence in the actuality of space and time. The phenomenon thus defined, however, presupposes a broader horizon, one to which it points or that it signifies: the system within which it “flashes” or “resonates.” The system is itself not composed of such individuated phenomena. Nor is it composed of permanent idealities or forms, for that matter. Rather, it is composed of what Deleuze calls “disparate and heterogeneous series.” This vocabulary will need to be clarified. At this early stage, suffice it to say that these “series” constitute the pre-individual horizon for the individuation of all phenomena. The system as a whole is not so much an objectively present thing, then, or a substance, as it is an *event*, from within which the actuality of the phenomenon “flashes.” Needless to say, then, the system that sustains and bounds the phenomenon in its actuality is itself irreducible to such an *actuality*, in much the same way that it is irreducible to the *identity* of the phenomenon. From which it follows that the phenomenon *itself*, insofar as it retains the trace of its nonactual, and yet not simply possible “past,” does not coincide absolutely with its actuality. The actuality of the phenomenon does not exhaust its being. Actuality is only one side of being, its visible side. But the other, invisible side of being, is the *virtual*. Neither actual nor self-identical, the system within which the phenomenon flashes is a *virtual multiplicity*. Philosophy, Deleuze claims, is the science of *virtual multiplicities*.

Virtual Multiplicities

A double battle has the objective of thwarting all dogmatic confusion between event and essence, as well as every empiricist confusion between event and accident.

—G. Deleuze, *Logic of Sense*

1. Multiplicity in Place of οὐσία

In Deleuzian ontology the point of departure is neither the empirical, understood as the merely actual or the already actualized, nor the transcendental, understood as the power of subjectivity to organize and synthesize (to *determine*), but the transcendental as the pre-individual horizon from out of which the empirical is generated. The pre-individual corresponds to a field of problematicity, or to what the vocabulary of *Difference and Repetition*, drawing on the Dialectic of the first *Critique*, calls an Idea. Indeed, Ideas for Kant designate first and foremost problems, and human reason, as the site where these Ideas originate, designates the faculty of generating problems. Yet the significant difference with Kant's conception of the Idea is that, for Deleuze, it is not reason as a human faculty that is the site of Ideas, but the real itself: the problematic, or the Ideal, is a dimension of being itself—it is, in fact, the virtual side of the real, or the pre-individual, proto-actual within the individual or the actual. It is the real itself that, according to Deleuze, is problematic through and through, and it is this problematic dimension of the real that presides over the genesis (and not simply the conditioning, as Kant believed) of the phenomenal, which coincides with the domain of concrete, actual solutions for a given problem. In this respect, Deleuze agrees with the objection formulated by the post-Kantians, and by Salomon Maïmon in particular, according to which Kant held fast to the point of view of *conditioning* without attaining that of *genesis*.¹ As far as Deleuze's relation to transcendental philosophy is concerned, the entire difficulty (in which the possibility of a return to ontology is played out) consists in replacing the

problematic of conditioning, in which phenomena are legislated only in relation to their *form*, and the structure of experience envisaged only in relation to its *possibility* (thus leaving the realm of phenomena—the reality of experience and its empirical laws—entirely undetermined with respect to its material content), with that of *genesis*. Such a transition can take place only if the very status and meaning of the Idea changes, only if it is seen as regulating and legislating not just the form of phenomena, but their actual materiality, not just the structure of possible experience, but that of real experience. Now, it is only insofar as the Idea designates a *virtually* (and not actually) differentiated structure or system, which Deleuze also characterizes as a “multiplicity,” that it can account for the genesis of the real in its phenomenality. We must therefore begin with an analysis of the concept of multiplicity.

The question of “multiplicity” is central to Deleuze’s entire philosophy, before and beyond *Difference and Repetition*, and can be traced back to his reading of Bergson.² The term itself is not coined by Bergson but comes from the geometry of Bernhard Riemann.³ Riemann defines as “multiplicities” those things determined according to their dimensions or their independent variables, distinguishing further between *discrete* multiplicities and *continuous* multiplicities.⁴ Whereas the former contain the principle of their own metrics (the measure of one of their parts being given by the number of elements they contain), the latter find a metrical principle in something else, even if only in phenomena unfolding in them or in the forces acting in them. Now, the decisive point here is that Bergson changes the direction of Riemann’s distinction quite significantly. For Bergson, continuous multiplicities belong essentially in the order of *duration*, not space. Besides the multiplicities of mathematics, which are magnitudes, and so only quantitative, it is a matter of recognizing another, purely qualitative type of multiplicity. Such is the multiplicity constitutive of our very being as essentially temporal:

Let us try for an instant to consider our duration as a multiplicity. It will then be necessary to add that the terms of this multiplicity, instead of being distinct, as they are in any other multiplicity, encroach on one another; and that while we can no doubt, by an effort of imagination, solidify duration once it has elapsed, divide it into juxtaposed portions and count all these portions, yet this operation is accomplished on the frozen memory of duration, on the stationary trace which the mobility of duration leaves behind it, and not on the duration itself. We must admit, therefore, that if there is a multiplicity here, it bears no resemblance to any other multiplicity we know.⁵

And so, whereas the theory of quantitative, and essentially spatial, multiplicities is a matter for mathematics, the theory of qualitative, temporal multiplicities requires its own, specific science. Such is metaphysics, the science of the real *in the making* (and not already made), the discourse

that follows the flow of duration through a specific method defined as *intuition*.

Now, to the extent that duration is a multiplicity, it is not simply the indivisible, or the nonmeasurable. Rather, it is that which divides only by changing in kind, that which is susceptible to measurement only by varying its metrical principle at each stage of the division. Such is the origin of Bergson's opposition to Einstein and Riemann. For Bergson, the multiplicity proper to duration has a "precision" as great as that of science, itself purely quantitative or numerical. So how does he distinguish the continuous and qualitative multiplicity from the quantitative or numerical one? By distinguishing the objective from the subjective. An object can be divided in an infinite number of ways. Now, even before these divisions are actually performed, they are perceived as possible, without this affecting the overall aspect of the object. Even where and when they are not actually realized, they are *de jure* perceived as actualizable. By "objective," Bergson means precisely what has no virtuality. Whether realized or not, possible or real, everything is actual in the objective. In short, "object" and "objective" denote not only what is divided, but also what, in its division, does not change in nature. It is thus what divides by differences in degree.⁶ In this sense the object is called a "numerical multiplicity." For number, and primarily the arithmetical unit itself, is the model of what can be divided without actually changing in kind. A qualitative multiplicity, on the other hand, also characterized as "subjective," is a multiplicity that cannot be divided up without changing in kind. This is why it is a *nonnumerical* multiplicity. Take, as an example, a complex feeling. A "mixture" or a "complex" of love and hatred can be actualized in consciousness, but hatred and love become conscious feelings only to the extent that they differ in kind from one another. As Deleuze puts it, in a formulation that will remain decisive: "There is *other*, without there being *several*."⁷ Alterity, or heterogeneity, is not a numerical category, and *qualitative* multiplicity has nothing to do with plurality. Ultimately, then, the subjective, or duration, is the *virtual*, a virtual always inseparable from the movement of its actualization. For actualization comes about through differentiation (or, as Deleuze puts it in *Difference and Repetition*, and for reasons we shall consider later on, through differentiation) and creates differences in kind by virtue of its own movement. In a numerical multiplicity, everything is actual, albeit only as a possibility: everything may not be realized yet, but everything is actual. There are no relationships other than those between actualities. On the other hand, Deleuze argues, a nonnumerical multiplicity, such as the one defining subjectivity, moves into another dimension, one that, for Bergson, is essentially temporal. We can understand, then, how Deleuze could see in Bergson's theory of multiplicities and the general ontology that derives from it an alternative to Hegelian speculative dialectics: in the passage from qualitative, virtual

multiplicities to their own actualization in space through differentiation, the “work” is done by difference alone, without any negation or opposition. The latter concepts apply to quantitative and actualized multiplicities alone and thus account only for differences in degree.⁸

What is distinctly philosophical, therefore, and specifically Bergsonian, is the concept of *virtual* multiplicity. This is the concept with which Deleuze is chiefly concerned. Allow me, therefore, to make a few more points regarding its significance in Bergson’s thought, before turning to Deleuze’s interpretation of it. It is of the utmost importance to emphasize the fact that Bergson’s coining of this concept takes place within the context of a philosophy of *life*—first, that of consciousness, understood as duration, and then, more broadly, that of evolution. Now, life, as evolution, designates an irreducibly *temporal* dimension (“duration”). This is the very dimension that both metaphysics and science remain oblivious to, as they think primarily in spatial terms, even in their attempt to think time, thus turning into a magnitude what is essentially a qualitative phenomenon. Now, while such an approach may not be problematic in the case of closed and isolated dynamical systems (the equations corresponding to such systems remain reversible), it is far more problematic in the context of open systems, such as life itself, to say nothing of our own personality in its flowing through time—our self that endures. In biology, then, and most of all in metaphysics, another approach is required. The problem with classical, mathematical science is that it treats those systems for which time plays an active and decisive role *as if* they were closed, as if they did not involve this qualitative, durational dimension, thus introducing within them an extraneous and abstract component.⁹ In the face of such theoretical gestures, in which the work of duration is artificially neutralized, Bergson asks how we can account for change, for evolution, in such a way that time itself will be given an ontological reality other than that of a succession of points along a line, otherwise than through a geometrical, and thus spatial, representation. How can time be given its proper, *qualitative* dimension, and not always be treated as a quantity? How can ontology, when committed to thinking the very being of becoming, or being *in* becoming, move beyond spatial representation? Now, this is, of course, a question that lies at the heart of other philosophical problematics of the twentieth century, Husserl’s and Heidegger’s in particular. Husserl too locates the key to the enigma of time at the heart of a self-constituting transcendental subjectivity, and understands the unity of the world as temporal flow, or as duration. And Heidegger, at least in the early project of fundamental ontology, locates the very sense or horizon of being as time in the form of the ecstatic being of existence. But Bergson is the one who, while recognizing that human experience is essentially durational, also feels the need to locate duration beyond human experience, and thus to think “beyond the human condition.”¹⁰

With Bergson, we are provoked to ask ourselves whether the real itself is not durational, whether the dimension which we, as living things, experience so commonly finds an echo in the actual, physical world.¹¹ Can we extract, from the material world itself, a qualitative dimension irreducible to its merely quantitative and measurable extendedness? Such questions mark, of course, a radical departure from the Cartesian account of material nature as an extended and quantitative, geometrically overdetermined substance, in which time figures only through the image of eternity, as an endless succession of instants and so, ultimately, as a certain a-temporality. As Prigogine and Stengers have shown, this is a conception of nature that still governs Newtonian physics.¹² And Bergson himself goes as far as to identify it with the world of the mathematician in general:

In short, *the world the mathematician deals with is a world that dies and is reborn at every instant—the world which Descartes was thinking of when he spoke of a continued creation.*¹³

All that science does, when measuring the speed of a movement, is to observe a simultaneity. So long as it remains content with determining the position of two objects in motion (say, Achilles and the tortoise) at a given moment, or with admitting *a priori* that two such objects will meet at a point *x*—a meeting point that is itself a simultaneity—mathematics remains within its own boundaries. It transgresses them, however, when it claims to reconstitute what actually took place in the interval between these two simultaneities. What it does is to continue to measure simultaneities, which are novel indeed, and the increasing number of which should alert it to the fact that motion can never be created on the basis of motionless positions, nor time, therefore, on the basis of space. The questions we have just raised are the questions that set Bergson underway to a thinking of life as *creative* evolution. But the question would itself need to be reformulated. For when we ask whether it is possible to extract from the actual, material world itself, and in this case from life, a qualitative, durational dimension, we act as though such a dimension were somehow displayed in the *actualized* world of matter itself, when it is precisely a question of identifying a pre-actual, or virtual, horizon from out of which the material world is actualized. In other words, so long as we begin with already individuated life processes, with species, we will never be in a position to extract that which, in the process itself, constitutes the individuating factor, that which gives birth to qualitatively different life forms. And this, after all, is what Bergson, and Deleuze after him, are after: not the conditions of *possibility* of actual, material processes, but their *real*, albeit non-actual conditions of existence.

What, in this context, does the concept of virtuality do? And to what

extent can life, as an evolutionary process, and thus as an open physical and chemical system, be seen as a *virtual* multiplicity? This is the point at which Bergson's famous distinction between virtuality and possibility must be introduced. For in claiming, as we just did, that Bergson and Deleuze are concerned with the *real* conditions of existence of actual, material systems, and not simply with their conditions of *possibility*, the concept of reality here introduced needs to be distinguished from the concepts of both *actuality* and *possibility*. How does virtuality differ from actuality? To the extent that actualities, in the realm of life, such as species, limbs, organs, etc., are the outcome or the end result not of other actualities, but of tendencies that are indicative of problems more than they are of causes and agents. How does virtuality differ from possibility? If evolution is not a purely mechanical process that simply adds existence to something already pre-given as a possibility; if the products of evolution are not the mere realization of possibilities given in advance of the process itself, possibilities which the process in question would simply actualize; if, in other words, a peculiar inventiveness can be located at the heart of evolution—then existence (or actuality), as a concept, and the conditions of existence of such life processes themselves, can no longer be seen, as in Kant, as a non-real predicate, as something simply added on to a content given in advance as a possibility. Kant was right to say that there is no difference (no difference of content, that is) between the concept of a thing and its existence. This is true so long as we think of concepts as designating the thing *qua* possibility. In this case the existing thing is only an absolute positing of its concept, or of its possibility, and resembles it. But what if concepts were thought to designate not just possibilities, and thus not the *form* of a thing, but virtualities, and by that we need to understand the real tendencies or individuating factors of the actual thing, expressed and enveloped in the thing, but in no way resembling the thing? What if concepts were able to designate things not so much in their possibility—a conception which, according to Bergson, is nothing but an illusion, since possibilities are in effect abstracted from actualities, and artificially retro-jected “before” this actuality, so that, in the end, it is possibilities that resemble actualities, and not the other way around—but in their event? In this case there would not simply be a difference between a concept and a thing, and not simply in the order of positing, but the concept itself would be indicative of the thing in its difference—in its difference from those virtual tendencies from out of which it is born, as well as in its difference from the very differences constitutive of the concept itself, as the site of divergent virtual tendencies. This, as we know, constitutes the very heart of the Deleuzian enterprise: to think concepts as genetic, as revealing the problematic horizon from out of which actual processes emerge and constitute themselves, as solutions to problems with which they bear no resemblance.

Bergson's conception of what a virtual multiplicity entails is perhaps best captured in the following quotation from *Creative Evolution*:

While, in its contact with matter, life is comparable to an impulsion or an impetus, regarded in itself it is an immensity of potentiality [*virtualité*], a mutual encroachment of thousands and thousands of tendencies which nevertheless are "thousands and thousands" only once regarded as outside each other, that is, when spatialised. Contact with matter is what determines this dissociation. Matter divides actually what was but virtually multiple; and, in this sense, individuation is in part the work of matter, in part the result of life's own inclination.¹⁴

And so, while always material, and by that we need to understand engaged in the process of division in actual life forms, life is also something in excess of this actuality, and by that we need to understand an immensity of potentialities or virtual tendencies which co-exist and mark the site of life's qualitative, durational dimension. I will not go any deeper into the intricacies of Bergson's thought, as this is not my goal here. The reference to Bergson, however, and to his conception of virtual multiplicities in particular, proves indispensable in attempting to grasp Deleuze's own use of such a concept.

I now wish to situate the Deleuzian project as an extension of Bergson's philosophy, and of his concept of virtual multiplicity in particular. The question, from a Deleuzian perspective, is to know whether the conception of the real as involving a virtual horizon can apply not only to human experience, and to certain open systems, such as life, but to all systems, whether physical (natural), aesthetic, socio-economical, psychological, etc. In other words, can the move beyond the human condition extend to the entirety of the real? This is tantamount to asking, as we did in the previous chapter, whether we can extract a universally valid transcendental—and this means also pre-individual and impersonal—horizon, or a sense of being as absolutely univocal. At stake, then, in the concept of virtual multiplicity is a unifying and univocal ontological horizon from out of which all phenomena, whatever their nature, whatever the field or region in which they manifest themselves, are accounted for in their phenomenality. But this is also tantamount to asking the extent to which the fundamental trait of virtual multiplicities identified by Bergson, namely, intensity, or duration, does not apply to all systems, and thus, ultimately, to space itself.

What does Deleuze's own thought, particularly in *Difference and Repetition*, retain from Bergson's conception of multiplicities? And to what extent does it differ from such a conception? I can only be schematic here, and so will emphasize the following three points only.¹⁵ There is, as we have just seen, the possibility of a purely differential ontology, one dealing with real, dynamic processes that do not presuppose the negative as their

processor. This is an ontology concerned with separating out, in a reality that is essentially “mixed,” differences in kind from differences in degree, and this means qualitative from quantitative multiplicities, virtual horizons from their actualization in space and time. There is, second, the crucial point regarding the necessity of avoiding any confusion between the thematic of multiplicities and that of the One and the Many: a multiplicity is not a plurality to which we should superimpose some unitary instance, in what would amount to a return to the metaphysics of the ὑποκείμενον previously identified. Finally, and directly connected to the previous point, the continuous multiplicities with which we are concerned here *evolve*, thus describing systems in their process of becoming. This evolution happens through a series of differentiations, each line of difference corresponding to a difference in nature, to a divergence or an invention that does not presuppose the identity of a previous term. This is a logic of radical heterogeneity, which describes a process of differentiation entirely independently of differences dividing the identity of a generic concept according to its species. Ultimately, the function of the concept of multiplicity is to think the real without essence or substrate, and to replace an essentially static account of the real with a dynamic, and specifically *morphogenetic*, one. This is tantamount to saying that philosophy is no longer concerned with providing definitions of essences, but with describing events and processes. And events, as we have already suggested, always involve a dimension in excess of mere actuality. The human species, for example, is no longer to be defined through the specification (“rational”) of a common genus (“animal”). It is now to be understood as a historically constituted entity: the *resemblance* of its members is explained by the fact that they have undergone common processes of natural selection, and not by the fact that they possess a common essence; similarly, the enduring *identity* of the species itself is guaranteed by the fact that it has become reproductively isolated from other species. The ontology that is in the making here is clearly one that capitalizes on results and findings in the realm of contemporary biology and, as such, exemplifies my central point regarding Deleuze’s thought as an attempt to provide a new metaphysics for the scientific becoming of classical metaphysics. It amounts to an overcoming of metaphysics within metaphysics, and specifically to an immanentization of transcendence through the overcoming of the viewpoint of essence: whereas an essentialist account of, say, species or chemical elements and elementary particles can rely on factors that transcend the realm of matter and energy, a morphogenetic account does away with all transcendent factors, using only form-generating resources that are *immanent* to the material world. Materialism and immanentism become the new metaphysics. This is a metaphysics that, like that of Bergson, is attuned with natural science. Yet it is one that extends this attunement to other areas of science, which developed since Bergson’s time.

Such is the reason why, ultimately, Deleuze's conception of multiplicity is not purely Bergsonian (or, for that matter, Riemannian), although it is inspired by both. As Manuel de Landa rightly emphasizes in the first chapter of his *Intensive Science and Virtual Philosophy*,¹⁶ the Deleuzian conception of multiplicity retains two traits from what, starting with the differential geometry of Friedrich Gauss and Bernhard Riemann, came to be known as a "manifold," a term closely related to that of multiplicity and serving to designate a geometrical space with certain characteristic properties. The two traits of a multiplicity, essentially derived from Riemann's development of Gauss's idea that a surface ought to be treated as a space in itself, are, first of all, its variable number of dimensions (a trait that was to take on a decisive aspect in the hands of Einstein a few decades later) and, more importantly, the absence of a supplementary (higher) dimension imposing an extrinsic coordinatization, and hence, an extrinsically defined unity. This goes back to the points I made earlier regarding Deleuze's reading of Bergson, and the following quotations illustrate the two traits I have just identified. An Idea, Deleuze writes in *Difference and Repetition*,

is an n-dimensional, continuous, defined multiplicity. Colour—or rather, the Idea of colour—is a three dimensional multiplicity. By dimensions, we mean the variable co-ordinates upon which a phenomenon depends; by continuity, we mean the set of relations between changes in their variables . . . by definition, we mean the elements reciprocally determined by these relations, elements which cannot change unless the multiplicity changes its order and its metric.¹⁷

In what sense can color, or the Idea of color, be seen as a multiplicity? And how can we avoid thinking of color as an εἶδος or a kind common to various individuals? Deleuze had already turned to the example of color in his early essay "Bergson's Conception of Difference."¹⁸ In a few pages devoted to "The Life and Work of Ravaissou," and included as the final chapter of *The Creative Mind*,¹⁹ Bergson poses the question of how we determine what colors have in common. *Either* we extract the abstract and general idea of color, "by taking away from red what makes it red, from blue what makes it blue, from green what makes it green." In this case we have two things: a concept that is a kind ("redness," for example) and several objects subsumed under it. There is a duality of concept and object, and the relation between the two is one of subsumption. This is the way of proceeding which, in the first part of this book, we saw operative in an entire eidetic tradition, from Aristotle to Husserl. *Or*, Deleuze goes on to comment after Bergson, we pass the colors through a converging lens that directs them onto a single point: what we obtain, in this case, is the "pure white light" that brings out "the differences between tints." In this case, the different colors are no longer subsumed under the identity

and unity of the concept, one that remained external to the things themselves. Rather, they are the nuances or the degrees of the concept itself, “degrees of difference itself,” Deleuze writes, and not “differences of degree.” To what extent does this example serve to demonstrate the concept of virtual multiplicity? Precisely to the extent that the different colors are no longer seen as specific differences of a pre-given identity or concept, isolated qualities brought together under the unifying power of a genus, but as nuances of the concept itself seen as an intensive, undivided unity. And the concept is a multiplicity to the extent that, far from being the One subsuming a manifold, it is this manifold itself, in which all the possible degrees of difference coexist:

Multiplicity must not designate a combination of the many and the one, but rather an organisation belonging to the many as such, which has no need whatsoever of unity in order to form a system.²⁰

This is clearly consistent with what Bergson himself writes when attempting to provide an image that will help us understand the nature of this absolute multiplicity (duration) that metaphysics seeks to grasp:

It would be better, then, to use as a comparison the myriad-tinted spectrum, with its insensible gradations leading from one shade to another. A current of feeling that passed along the spectrum, assuming in turn the tint of each of its shades, would experience a series of gradual changes, each of which would announce the one to follow and would sum up those that preceded it. Yet even here the successive shades of the spectrum always remain external to one another. They are juxtaposed; they occupy space. But pure duration, on the contrary, excludes all idea of juxtaposition, reciprocal externality, and extension.²¹

While ultimately involving extension, externality, and spatial juxtaposition as their outcome, in what amounts to a point of divergence with Bergson, we need to emphasize the extent to which Deleuze is in agreement with Bergson regarding the nature of *virtual* multiplicities. As such, they account for extension, externality, and spatial juxtaposition, while preceding them and remaining in excess of them. We shall have to clarify, of course, the sense of this “precedence” and this “excess,” which brings us back neither to a straightforward chronological sense of time nor a transcendent sense of excess. At this stage, however, let me simply point out that multiplicities, unlike essences, do not possess a defining unity (“color,” in the case of blue, green, and yellow, or the unity of rationality and animality in the case of the human essence) and are not taken, moreover, to exist in a transcendent space that serves as a container for them. In the end it is a matter of thinking colors not as instances of a same kind to be subsumed under it, but as the nuances or the degrees of difference

of the concept itself: the different colors are differences of the concept itself, which itself exists only in and through this differentiation.

Yet so long as we remain at this purely formal level, we fail to see how multiplicities adequately replace essences in the description of material objects and natural kinds. We need to specify the way in which multiplicities relate to the *physical* processes that generate those material objects and kinds. In other words, we need to show how Deleuzian ontology is not merely formal, but genetic, how the concepts of multiplicity and difference are extracted from the real itself, and extended to all of its areas—how, in other words, virtual multiplicities apply to phenomena and processes of all kinds, allowing us in the end to overcome the residual dualism of Bergsonism and affirm the univocity of being.

This we can do by turning to the theory of dynamical systems, already introduced in Chapter 6. The turn to such systems, however, and to the way physics describes them, remains subordinated to the task of extending the Bergsonian theory of multiplicity to the whole of being, and so to a possible reconciliation between physics and metaphysics. What I am concerned with, then, is not so much a detailed account of specific scientific theories, as the possibility of extracting in them this strictly ontological horizon consistent with the theory of virtual multiplicity. In other words, and as I have repeatedly announced, Deleuze's turn to science has nothing to do with the transformation of metaphysics into a philosophy of science. On the contrary: it has everything to do with the possibility of extracting the unthought of science itself, of bringing out the transcendental horizon that science itself cannot circumvent. My ultimate goal, then, in what follows is not to give an overview of the state of contemporary physics and biology, but to show the extent to which Deleuze's thought enables us to think them *philosophically*—by that, I mean the possibility of extracting from them the dimension that they themselves cannot think. Ultimately, it is a question of recognizing the extent to which the purely philosophical problematic of the ontico-ontological difference is also played out in science and the sense of nature it displays. This is a point that is worth bearing in mind from the start, as the discussion of science that follows runs the danger of diluting the ontological problematic in technical details.

With this warning in mind, let me turn to the theory of dynamical systems, in which a concept of virtual multiplicity can be shown to be presupposed. Throughout, I shall refer to technical analyses and examples developed in de Landa's *Intensive Science and Virtual Philosophy*. In this theory the dimensions of a manifold are used to represent properties of a particular physical process or system, while the manifold itself is identified with *the space of possible states* which the physical system can adopt. In other words, manifolds are envisaged as *models* of physical processes. When we attempt to model the dynamical behavior of a particular physi-

cal object (say, the dynamical behavior of a pendulum or a bicycle), the first step is to determine the number of relevant ways in which such an object can change (these are known as an object's *degrees of freedom*), and then to relate those changes to one another through differential calculus. A pendulum, for instance, can change only in its position and momentum, so it has two degrees of freedom. A bicycle has five moving parts, which can all change in position and momentum, and thus has ten degrees of freedom. Next, we map each degree of freedom into one of the dimensions of a manifold. A pendulum's space of possibilities will need a two-dimensional plane, but the bicycle will involve a ten-dimensional space. After this mapping operation, the state of the object at any given instant of time becomes a single point in the manifold, which is now called a *state space*. This is a concept we have already come across. In addition, we can capture in this model an object's *changes of state* if we allow the representative point to move in this abstract space. A physicist can thus study the changing behavior of an object by studying the behavior of these representative trajectories.²²

Henri Poincaré took things a step further when he mobilized topological resources to analyze certain features of these spaces. He discovered and classified certain special topological features of two-dimensional manifolds (called *singularities*—a concept central for Deleuze, who equates the being of any given phenomenon with a horizon of pre-individual singularities) that have a large influence on the behavior of the trajectories, and since the latter represent actual series of states of a physical system, a large influence on the behavior of the physical system itself.²³ Singularities may influence behavior by acting as *attractors* for the trajectories. What this means, as we began to see in Chapter 6, is that a large number of different trajectories, starting their evolution at very different places in the manifold, may end up in exactly the same final state (the attractor), so long as all of them begin somewhere within the “sphere of influence” of the attractor (the *basin of attraction*). Given, in this sense, that different trajectories may be attracted to the same final state, singularities are said to represent the inherent or intrinsic *long-term tendencies* of a system, the states which the system will spontaneously tend to adopt in the long run so long as it is not constrained by other forces.

In order to illustrate this point regarding the manner in which singularities (as part of what defines a multiplicity) lead to an entirely different way of viewing the genesis of physical forms, let me turn to an example provided by de Landa. There are a large number of different physical structures that form spontaneously as their components try to meet certain energetic requirements. These components may be constrained, for example, to seek a point of minimal free energy, “like a soap bubble, which acquires its spherical form by minimizing surface tension, or a common salt crystal, which adopts the form of a cube by minimizing

bonding energy.”²⁴ Now, de Landa goes on to suggest, we can imagine the state space of the process that leads to these forms as structured by a single point attractor (representing a point of minimal energy). One way of describing the situation would be to say that a topological form (a singular point in a manifold) guides a process that results in many different physical forms, including spheres and cubes, each one with different geometric properties. And this is precisely what Deleuze means when he says that singularities are like “implicit forms that are topological, rather than geometric.”²⁵ What we have, therefore, is an explanation which, while accounting for the concrete aspect and comportment of the phenomenon, does not refer to its actual physical appearance. This is in contrast with the substantialist-essentialist approach in which the explanation for the spherical soap bubbles, for instance, would be framed in terms of the essence of sphericity, that is, of geometrically characterized essences acting as ideal forms. Decisive, then, in singularities is the fact that by determining long-term tendencies, they tend to be recurrent, that is, *they tend to characterize processes independently of their particular physical mechanisms*. They account for them, while being nothing like them: the “condition” of the sphericity of the soap bubble is itself nothing spherical. Singularities, as the conditions of actual physical mechanisms, are nonetheless independent from such mechanisms.

This *independence* from the mechanism is what makes singularities and the multiplicities they define irreducible to essences: the *identity* and indeed the very *existence* of the physical object (the soap bubble, for instance, or the salt crystal) cannot be accounted for in terms of its geometrical properties (spherical, cubical). These are rather the *effect* of a process that in no way *resembles* the geometrical shape of the object. There is a radical heterogeneity between the two. Figures, as clearly shown in the theory of groups, come to be classified by their response to events that occur to them, and not on the basis of their common, static properties (the set of properties common to all cubes, for example). And these events can amount to a change or a transformation of one figure into another. This is known as a break in symmetry. In a physical process, transmutations through broken symmetry may occur, for example, in the form of *phase transitions*. Phase transitions are events that take place at critical values of some parameter (temperature, for example), switching a physical system from one state to another, like the critical points of temperature at which water changes from ice to liquid or from liquid to steam. A more elaborate example would be that of a fertilized egg that differentiates into a fully formed organism with differentiated tissues and organs: the progressive differentiation of the spherical egg (a process known as *embryogenesis*) is achieved through a complex cascade of symmetry-breaking phase transitions.²⁶ While in essentialist interpretations of embryogenesis tissues and organs are supposed to be already given in

the egg (preformed, as it were, and hence having a *clear and distinct* nature), most biologists today have given up preformism and accepted the idea that differentiated structures emerge progressively as the egg develops. This does not mean that the egg is an undifferentiated mass. Rather, and in Deleuze's vocabulary, it means that, unlike the "clear and distinct idea" of Cartesian thought, which is to serve as the very ideal and paradigm by which knowledge is measured, the egg possesses an *obscure yet distinct* structure defined by zones of biochemical concentration and by polarities established by the asymmetrical position of the yolk (or nucleus). It is this obscure structure that clarifies itself as it unfolds. But this clarification is coextensive with a process of differentiation. In other words, and in de Landa's own words, even though the egg "does possess the necessary biochemical materials and genetic information, these materials and information do not contain a clear and distinct blueprint of the final organism."²⁷ This is precisely the extent to which it is an Idea, or a virtual multiplicity: it is not the clear endpoint toward which actuality unfolds, but a virtual horizon from which the actual organism or system in general unfolds. An Idea, Deleuze insists, is not at all differentiated (it differentiates or actualizes itself), but it is entirely differentiated (or determined). Every thing, according to Deleuze, consists of two halves: an ideal half, immersed in the virtual, and constituted by differential relations and concomitant singularities; and an actual half, constituted at once by the qualities that incarnate these relations and the parts that incarnate these singularities. If the state of the fully differentiated Idea can be characterized as distinct, and that of the fully actualized or differentiated Idea as clear, then the Idea is in itself distinct and obscure.

The transition from one singularity (or from one set of singularities) to another is called a *bifurcation*. Bifurcations may be studied by adding to a particular state space one or more control parameters displaying critical values, thresholds of intensity at which a particular bifurcation takes place, breaking the prior symmetry of the system. Such thresholds are clearly identified in the case of distinct hydrodynamic flow patterns (steady-state, cyclic, and turbulent flow), for instance. Each of these recurrent flow patterns appears one after the other at well-defined critical thresholds of temperature or speed. In Deleuze's own words:

Throughout a state of affairs, a cloud or a flow, even, we seek to isolate variables at this or that instant, to see when, on the basis of a potential, new ones arise, into what relations of dependence they can enter, through what singularities they pass, what thresholds they cross and what bifurcations they take.²⁸

And so, unlike essences, unlike the concepts of transcendental philosophy and dialectics, which are always abstract and general categories, multiplicities are concrete and singular universals: not generalities,

under which particular instances are subsumed, but sets of singularities through which actual processes are formed, concrete sets of attractors (realized as tendencies in physical processes) linked together by bifurcations (realized as abrupt transitions in the tendencies of physical processes). Unlike the generality of essences, and the resemblance with which this generality endows instantiations of an essence, the universality of a multiplicity is typically divergent: the different realizations of a multiplicity bears no resemblance whatsoever to that multiplicity, and there is, in principle, no end to the set of potential divergent forms it may take. This lack of resemblance is amplified by the fact that multiplicities give form to *processes*, not to the final product, so that the end results of processes realizing the same multiplicity may be highly dissimilar from each other, like the spherical soap bubble and the cubic salt crystal which not only do not resemble one another, but bear no similarity to the *topological* point guiding their production.

One final distinction can be drawn: unlike essences, which, as we saw previously, coexist side by side as abstract generalities, sharply distinguished from one another, concrete universals must be thought as *meshed together into a continuum*. This, of course, brings us back to our opening distinction between discrete and continuous multiplicities. Multiplicities blend into each other, forming a continuous immanent *space* very different from a reservoir of eternal archetypes or genera, or indeed from a set of juxtaposed and discrete elements. Multiplicities, as Deleuze writes, coexist,

but they do so at points, on the edges, and under glimmerings which never have the uniformity of a natural light. On each occasion, obscurities and zones of shadow correspond to their distinction. Ideas [or multiplicities] are distinguished from one another, but not at all in the same manner as forms and the terms in which these are incarnated. They are objectively made and unmade according to the conditions that determine their fluent synthesis. This is because they combine the greatest ability of being differentiated with an inability to be differentiated.²⁹

Here, and limiting ourselves to physical processes, Deleuze distinguishes the progressive unfolding of an Idea or a multiplicity through broken symmetries (differentiation) from the progressive specification of the continuous space formed by multiplicities as it gives rise to our world of discontinuous spatial structures (differentiation). We shall return in some detail to this twofold sense of differentiation, and to the latter in particular, in the following chapter. Yet a preliminary clarification seems in order at this stage. What we need to understand, and has become somewhat clear from what I have said so far, is the extent to which the Idea, far from referring to an essence, or a form (and thus a transcendent reality), or even a transcendental horizon that would condition without generating, refers to the ontological horizon which, while not actual, pre-

sides over the actualization of worldly processes. This is a horizon, or a problematical field, composed of pre-individual singularities, which, in their difference, generate a number of material (or even “spiritual”) processes. A multiplicity (or an Idea) is thus a continuum from within which discontinuous processes occur. In the case of space, and following de Landa’s analysis, we should say that, instead of “a transcendent heaven which exists as a separate dimension from reality, Deleuze asks us to imagine a continuum of multiplicities which *differentiates itself* into our familiar three-dimensional space as well as its spatially structured contents.”³⁰ And so, unlike what Bergson wanted us to believe, space cannot simply be opposed to time, as discontinuity to continuity. It is not as if philosophy, as the science of continuous multiplicities, was concerned solely with duration, leaving the study of space to mathematics. We cannot simply oppose the metaphysical *intuition* of a reality in the making with the scientific *analysis* of a reality already made, merely extended and constituted by a juxtaposition of measurable parts. Metaphysics and science find themselves on both sides of the divide. Strictly speaking, there is no such divide. The real cannot be carved up in this way, and the roles between the sciences distributed accordingly. The objection that can be addressed to Bergson is that his conception of philosophy remains too territorial: we cannot ascribe a *specific* region or territory to philosophy, that is, one that would be different from that of science (or art, for that matter). The difference between philosophy and science presupposes a different articulation, another division, to which we shall return.

The extent to which this logic of multiplicity, or of the Idea, insofar as it involves self-differentiation, differs from the dialectical logic of the Idea, as exposed by Hegel, is, of course, decisive. It is even perhaps the most decisive issue, inasmuch as Hegel’s conception of the real as substance-subject, and this means as fully self-differentiated through negation, constitutes the most systematic and consistent attempt at articulating an ontology of immanence beyond essence. Deleuze was, of course, well aware of this and identified in Hegel’s thought the greatest challenge to be met. Hegel is the one figure whom, from the very early texts to the very late, Deleuze “opposes” ceaselessly. His early *Bergsonism* and *Nietzsche and Philosophy* can and must be read as anti-Hegelian war machines. Throughout, the sole focus of this confrontation concerns the sense of the concept of difference. Despite all appearances, Deleuze claims, there is no “real” concept of difference in Hegel, but only a difference *in* the concept, or a fully differentiated concept, which is mistaken for the real. The real, Deleuze insists, does not unfold, or generate itself through negation, opposition, and contradiction, but through non-dialectical differentiation alone. And the natural world, as well as social, economical, or cultural phenomena, are made to testify to this reality. I shall return to Deleuze’s critique of Hegel on several occasions.

Now, returning to de Landa's analysis of state space in relation to the Deleuzian conception of multiplicity, let me note the following. The idea of a continuous multiplicity of spaces is confirmed on two different levels. First of all, and as we have begun to see already, the various nonmetric geometries of the last two centuries suggest that between nonmetric and metric spaces there is a relation that is not so much of exclusion as of differentiation. Specifically, there is a hierarchy governing the relation between projective, affine, and Euclidean geometry: each level possesses more symmetry than the level below it. This suggests that, as we move down the hierarchy, a symmetry-breaking cascade should produce progressively more differentiated geometric spaces, and vice versa, that as we move up we lose differentiation.

But—and this corresponds to the second, and perhaps most significant, level—this cascade of broken symmetries can be given not just a purely *logical* dimension, but also an *ontological* or *ontogenetic* one. One way in which this scenario for the birth of metric space can be made more directly ontological is through a comparison between metric and non-metric geometrical properties, on the one hand, and *extensive and intensive physical properties*, on the other. Extensive properties include not only such metric properties as length, area, and volume, but also quantities such as amount of energy or entropy. They are defined as intrinsically divisible properties. As such, they are akin to the Bergsonian spatial quantities discussed earlier. And the Bergsonian approach holds for intensive properties too. Indeed, an intensive property is characterized by the fact that it cannot be divided without involving a change in kind. Using these new concepts, de Landa shows how the metric, Euclidean space we inhabit can be seen as emerging from a nonmetric continuum through a cascade of broken symmetries—how, in other words, this genesis can be seen not as an abstract mathematical process, but as a concrete *physical* process in which an undifferentiated intensive space (that is, a space defined by continuous intensive properties) progressively differentiates, eventually giving rise to extensive structures (discontinuous structures with definite metric properties). In the vocabulary of Stoicism, which, beginning with *Logic of Sense*, Deleuze adopts at times, we could say that the “concept” of a thing, which is precisely not its essence, but its Idea in the sense developed in *Difference and Repetition*, is first and foremost an intensity composed of singular points distributed across a pre-individual plane:

The concept is an incorporeal, even though it is incarnated or effectuated in bodies. But, in fact, it is not mixed up with the state of affairs in which it is effectuated. It does not have spatiotemporal coordinates, only intensive ordinates. It has no energy, only intensities; it is anenergetic (energy is not intensity but rather the way in which the latter is deployed and nullified in an extensive state of affairs). The concept speaks the event, not the essence or the thing.³¹

This passage is itself echoed and confirmed in the following remarks from *Difference and Repetition*:

Ideas are by no means essences. Insofar as they are the objects of Ideas, problems belong on the side of events, affections, or accidents rather than on that of theorematic essences . . .

Problems are of the order of events. . . . In this sense, it is correct to represent a double series of events which develop on two planes, echoing without resembling each other: real events on the level of engendered solutions, and ideal events embedded in the conditions of the problem.³²

Deleuzian multiplicities, then, like Bergson's, are not identifiable through spatio-temporal coordinates; they are not extended in three-dimensional space. Why? Because they are differentiated *intensities*. Yet, Deleuze insists, intensity is always engaged in the process of its own extensity, and difference in that of its own identification. We could say, in a sort of reversal of Hegelian speculative thought, that identity is the *Äusserung* or the externalization of difference or intensity into extendedness: virtual time-space explicates and resolves itself in the space-time of actuality. What representation perceives as a self-identical and self-present substance is only the end of a process that begins with the infra-substantial and the pre-individual, and not with the opposition and differentiation within the actual.

So phenomena turn out no longer to be "beings" in the sense that Heidegger rightly attributes to the philosophical tradition. Rather, they are actualized phases or strips of a virtual horizon, itself composed of heterogeneous series, each series being defined by the differences between the terms composing them. Under the action of a given force, the series communicate, bringing differences into relation, constituting within the system a network of differences of differences: these second-degree differences play the role of a "differentiating" factor relating the first-degree differences to one another. These differences are *intensities*, if intensities are indeed constituted by a difference that itself refers back to other differences (E-E' where E refers back to e-e', and e to ε-ε' . . .). The intensive nature of such systems does not allow us to presume of their qualification: mechanical, physical, biological, psychological, social, aesthetic, philosophical. Thus, words can be intensities in certain aesthetic systems, and concepts can be intensities in philosophical systems. Now, when communication is established between heterogeneous series, something "comes through" between the border zones, events burst out, phenomena "flash," like lightning or thunder.

As an illustration of this point, and following de Landa, we can turn to recent developments in quantum field theory, which we have encountered in our brief discussion of string theory in Chapter 6. The concept of spontaneous symmetry breaking, originally developed in rather humble

branches of physics, is now helping to unify the four basic forces as physicists realize that, at extremely high temperatures (the extreme conditions probably prevailing at the time of the birth of the universe), these forces lose their individuality and blend into one, highly symmetric force. The hypothesis is that as the universe expanded and cooled, a series of phase transitions broke the original symmetry and allowed the four forces to differentiate from one another. If we consider that, in relativity theory, gravity is what gives space its metric properties (more exactly, it is a gravitational field that constitutes the metric structure of a four-dimensional manifold), and if we add to this that gravity itself emerges as a distinct force at a specific critical point of an intensive property (temperature), the idea of an intensive space giving birth to extensive ones through progressive differentiation becomes more than a suggestive metaphor.

Let me summarize the itinerary thus far. We have seen how the concept of multiplicity can be seen to replace the metaphysics of essence and substance. While the latter concepts imply a unified and timeless identity, the former lacks unity and implies an identity that is not given all at once, but is defined progressively. While essences have to their instantiations the same relation that a model has to its copies, that is, a relation of greater or lesser resemblance, multiplicities imply divergent realizations that bear no relation to them. Moreover, replacing the problematic of οὐσία (including its modern, Kantian interpretation as involving the conditioning and constitution of the real through transcendental subjectivity) with multiplicities involves supplying an alternative explanation of ontogenesis and individuation, beyond that of Aristotle and Scholasticism. Unlike essences, which traditionally assume that matter is a passive receptacle for external forms, multiplicities are immanent to material processes, defining their spontaneous capacity to generate pattern without external intervention. Certain features of mathematical models (state spaces) were used to define the nature of multiplicities: a multiplicity is defined by distributions of singularities, defining tendencies in a process, and by a series of critical transitions that can take several such distributions embedded within one another and unfold them. Finally, de Landa's analysis revealed how a population of such concrete universals forms a real dimension of the world, a nonmetric continuous space that progressively specifies itself, giving rise to our familiar metric space as well as the discontinuous spatial structures that inhabit it.

One last, and indeed decisive, aspect of Deleuzian multiplicities must be envisaged. This is an aspect we have repeatedly touched upon in connection with Bergson. Multiplicities, Deleuze claims after Bergson, are *virtual*, and philosophy is the science of virtual multiplicities. Now, this is an ontological category nowhere recognized as such in science, whether in mathematics, in logic, or in physics. It is absolutely central to Deleuze's ontological edifice, however, and carries implications that are ultimately

quite different from those found in Bergson.³³ With this concept, we touch on the sense of the real, or the meaning of being, that science cannot think, but that cannot be thought independently of science. We touch on the unthought of science itself, with which philosophy is to concern itself. The virtual is not a scientific function, but a philosophical concept. As such, however, it does not exist outside the many fields in which its fate is played out.

In relation to science, and following our previous discussion, we need to ask the following: if state space is a space of *possible* states, what is the status of attractors and bifurcations in relations to these possibilities? Are they themselves possible? Can multiplicities be interpreted in terms of the traditional modal and ontological categories, the possible and the necessary, the possible and the actual, or do we need to postulate an original form of physical modality to characterize them? These questions, broached and tentatively addressed earlier, now need to find a proper answer.

In order to address this question, let me turn to Deleuze's ontological analysis of state space. This analysis is distinct and original, and is rooted in Poincaré's topological studies and in the ontological distinction that may be posited between the *recurrent features* of state space and the *trajectories* these features determine. It is important to distinguish between the various operators involved in the construction of state spaces. Given a relation between the changes in two (or more) degrees of freedom expressed as a rate of change, one operator, *differentiation*, gives us the instantaneous value for such a rate, such as an instantaneous velocity (also known as a *velocity vector*). The other operator, *integration*, performs the opposite but complementary task: from the instantaneous values it reconstructs a full trajectory or series of states. For Deleuze, the differentiation-integration couple governs the very logic of multiplicities. Such is the reason why Deleuze ascribes to the structure of the Idea in *Difference and Repetition* the form dy/dx , indicative of the differential function. When it becomes a question of thinking the nature of change in general, or the move from one state to another, Deleuze believes, it is not difference as dialectical negation (*non-A*), but difference as (mathematical) differentiation that proves to be adequate. The real does not unfold, and this means evolve and change, under the pressure of the negative, of opposition and contradiction, but according to the laws formalized in the differential calculus. At the simplest and most fundamental level, what is so decisive about differential calculus, therefore, is its ability to determine the rate of change of a system, and thus to integrate a certain notion of temporality. This is an aspect Bergson had already recognized, hailing infinitesimal calculus as "the most powerful of the methods of investigation at the disposal of the human mind,"³⁴ precisely to the extent that it allowed modern mathematics to grasp motion no longer from without, but from within:

Modern mathematics is precisely an effort to substitute the *being made* for the *ready-made*, to follow the generation of magnitudes, to grasp motion no longer from without and in its displayed result, but from within and in its tendency to change; in short, to adopt the mobile continuity of the outlines of things.³⁵

In the light of this extraordinary development, it is quite natural, Bergson goes on to say, that metaphysics should want to extend it to all qualities, that is, to reality in general. And this extension is “natural” to the extent that “quantity is always quality in a nascent state; it is, we might say, the limiting case [*le cas limite*] of equality.”³⁶ In doing so, are we reviving the old “chimera” of a universal mathematics? In no way. Thought, as *meta-physical* thought, must find its own calculus, which has nothing to do with an actual calculation, with actual measuring and predicting. Bergson’s own goal, therefore, was to develop in relation to duration (as a purely *qualitative* reality) a method that was as rigorous and successful as that developed by mathematics in relation to magnitudes: the object of metaphysics, he writes, “*is to perform qualitative differentiations and integrations.*”³⁷ Deleuze’s own theory of Ideas, or multiplicities, can and must be seen as an extension of that project: it is a matter of opening thought itself, and all the domains and fields with which it interacts, to the essentially fluid and differentiating nature of the real; it is a matter of inventing for thought the means by which the nature of qualitative change will be brought to light. Ideas are, for him, nothing other than the *foci* of motion, nothing other than strips of becoming that are, at the same time, always involved in the process of their own crystallization and quantification.

It is also of the utmost importance to understand the extent to which Deleuze sees in the potential extension of differential calculus a way of understanding the nature of thought and Ideas away from their Platonic, Cartesian, and most of all Hegelian interpretations. In the hands of Deleuze, differentiation, while retaining its mathematical structure, is wrested from its basis in the realm of spatiality, or extensity, and is turned over to the intensive and the pre-individual, or the pre-substantial. It is equated with a horizon of being, which is not that of actuality, yet the reality of which does not consist in negating the actual, but in affirming it, through differentiation. The problem, or the multiplicity, constitutes itself through differentiation and resolves itself through integration (or differentiation). The integral calculus of thought follows from its differential calculus, “realizing” it on a different plane.

The two operators (differentiation and integration) are used in a particular order to generate the structure of state space. The modeling process begins with a choice of manifold to use as a state space. Then, from experimental observations of a system’s change in time, that is, from actual series of states as observed in the laboratory, we create some trajectories

to begin populating this manifold. These trajectories, in turn, serve as the raw material for the next step: we repeatedly apply the differentiation operator to the trajectories, each application generating one velocity vector, and in this way we generate a *velocity vector field*. Finally, using the integration operator, we generate from the vector field further trajectories that can function as predictions of future observations of the system's states. The state filled with trajectories is called the "phase portrait" of the state space.³⁸

Now, the decisive point here is that Deleuze draws a sharp *ontological* distinction between the trajectories as they appear in the phase portrait of a system, on the one hand, and the vector field, on the other. While a particular trajectory (or integral curve) models a succession of *actual* states of a system in the physical world, the vector field captures the *inherent tendencies* of many such trajectories, and hence of many actual systems, to behave in certain ways. As mentioned above, these tendencies are represented by singularities in the vector field and, as Deleuze notes, despite the fact that the precise nature of each singular point is well defined only in the phase portrait (by the form the trajectories take in its vicinity), the existence and distribution of these singularities is already completely given in the vector (or direction) field. In the words of Albert Lautman, who is the main inspiration for Deleuze on the ontological analysis of state space:

The geometrical interpretation of the theory of differential equations brings clearly into focus two absolutely distinct realities: there is the field of directions and the *topological accidents* which may suddenly crop up in it, as for example the existence of . . . singular points to which no direction has been attached; and there are the integral curves with the form they take on in the vicinity of the singularities of the field of directions. . . . The existence and distribution of singularities are notions relative to the field of vectors defined by the differential equation. The form of the integral curves is relative to the solution of this equation. The two problems are assuredly complementary, since the nature of the singularities of the field is defined by the form of the curves in their vicinity. But it is no less true that the field of vectors on one hand and the integral curves on the other are *two essentially distinct mathematical realities*.³⁹

Elsewhere, quoting the mathematician Abel, Deleuze writes that "we must determine the conditions of the problem which progressively specify the fields of solvability in such a way that 'the statement contains the seeds of the solution.'"⁴⁰ In the mathematical field this method involves the progressive integration of the vectors within the state space. Through the process of integration, the problematic field is resolved. This resolution comes about from within the problem itself, and not from the outside: it is immanent to the problem itself. The problem field is progressively "closed

down” to provide a determinate solution. Abel’s and Lautmann’s words are clearly echoed in the following passage from *Difference and Repetition*, in which Deleuze emphasizes the difference in kind between the singular points within the differential equation and their solution by integration:

No doubt the specification of the singular points (for example dips, nodes, focal points, centres) is undertaken by means of the form of integral curves, which refers back to the solutions for the differential equation. There is nevertheless a complete determination with regard to the existence and distribution of these points which depends upon a completely different instance — namely, the field of vectors defined by the equation itself. *The complementarity of these two aspects does not obscure their difference in kind — on the contrary.* Moreover, if the specification of the points already shows *the necessary immanence of the problem in the solution*, its involvement in the solution which covers it, along with the existence and the distribution of points, testifies to *the transcendence of the problem* and its directive role in relation to the organisation of the solutions themselves.⁴¹

The difference in kind of the problem from its solutions is what allows Deleuze to declare that the very nature of the problem, or of the problematic, is dialectical (or ontological), while the solutions themselves are always aesthetic (or ontical) and always belong to a particular field (physics, biology, etc.). In a way, then, we could say that the form of the problem is always dialectical, even though the problem itself always comes about in relation to a certain field and within a certain context. There is no “absolute” or “brute” problem, merely specific and concrete problems. Yet the problematic is always transcendent and irreducible to the solutions it finds. It is therefore not a question of applying mathematics, and differential calculus in particular, to other domains, but of isolating the differential calculus that is proper to the domain under consideration. This is the sense in which Deleuze speaks of the “differential calculus corresponding to each Idea.”⁴² The elements within the problem-instance, if they are indeed to designate the differential conditions for the solution-instance, must differ in nature from the solutions themselves. As such, they do not presuppose the unity and identity of an actualized term, or a substance, but designate the set of singular points distributed across a pre-individual plane. Were they themselves to be actual, they would already be individuated, and would in turn presuppose their own pre-individual genesis, their own virtual past. Thus, to say that the elements constitutive of the Idea designate the real conditions for an actual or individuated system does not mean that they are themselves actual. On the contrary: it means that, while entirely real, they are still only non-actual conditions for actuality. And, in the process of actualization, they disappear *qua* conditions. And so, if the differentials disappear in the result, if these differential relations actualize and individuate themselves in spatio-temporal relations, it is only insofar as the problem-nexus differs essen-

tially from the solution-nexus, only insofar as the ontological differs essentially from the ontical, only insofar, then, as there is a spatiality and a temporality of the virtual that differ from that of the actual. Between the problem and its solution, between the pre-individual and the individual, or between the virtual and the actual, there is a difference in kind, the only ontological difference in the proper sense. And yet, as we shall see, the two are genetically linked, not given in advance and separately from one another, but co-given, always implicating one another. It is crucial, therefore, to see that the movement of ontogenesis does not go from one actual term (a substance), however immediate and abstract it may be, to another actual term, nor, for that matter, from an essence to an existence, but from the virtual, or from a system the differential elements of which are inseparable from a potential, to its actualization. The move, then, is from “the structure to its incarnation, from the conditions of a problem to the cases of solution, from the differential elements and their ideal connections to actual terms and diverse relations that constitute at each moment the actuality of time.”⁴³ Thus, in the same way in which the Idea, or the structure, is entirely independent of the principle of identity, genesis is independent of the rule and logic of resemblance: between the conditioning and the conditioned, there is indeed a relation of genesis, and not just of determination. This relation, however, does not presuppose the identity of a pre-given term, nor does it imply any similarity between the two. This is clearly expressed in the following passage from *Logic of Sense*, where the emphasis is on singularities, and on the way in which they come to be extended over a line of *ordinary* points, thus marking a shift that slowly opens up the world of the actual:

The surface topology, these impersonal and preindividual nomadic singularities constitute the real transcendental field. The way in which the individual is derived from this field represents the first stage of the genesis. . . . In general, as we have seen, a singularity may be grasped in two ways: in its existence and distribution, but also in its nature, in conformity with which it extends and spreads itself out in a determined direction over a line of ordinary points. This second aspect already represents a certain stabilisation and a beginning of the actualisation of the singularities.⁴⁴

It is not just the geometry of state space that reveals two essentially distinct realities, but all fields and all areas of the real. Referring to the problem of entropy, for example, Deleuze stresses that “it is in the same way that a singularity is extended over a line of ordinary points and that a potential energy is actualized and falls to its lowest level.”⁴⁵ It is the real as such that is twofold, or harbors an irreducible ontological difference—between the virtual and the actual, between pre-individual, impersonal singularities and phenomena individuated in the actuality of metric space-time. It is not a question, therefore, of claiming that problems are

in themselves mathematical, and specifically mathematical in the sense proposed by differential calculus,⁴⁶ and the solutions themselves of a different field (physical, biological, socio-economic, etc.), but of claiming that differential calculus provides the *form* in which to think the problematic, or, in the vocabulary of *Difference and Repetition*, the dialectical. Such is the reason why Deleuze can assert that differential calculus belongs entirely in the realm of mathematics, while claiming that it also finds its meaning in revealing a *dialectic* that exceeds mathematics as a regional field of solution. Now, it is the very *form* of the problematic that I want to highlight here by referring to the geometry of state space. This form encapsulates the way in which singularities determine a virtual field from which actual (physical, aesthetic, mental, etc.) processes are born. Specifically, it serves to highlight two fundamental aspects of the multiplicity (or the Idea), namely, that its elements are inseparable from a *potential* or a *virtuality*, and that such a potential is determined through *reciprocal, differential* relations. By reciprocal relations, we need to understand that each term or set of terms in the relation exists only through its relation to the other, and this in such a way that it is no longer necessary, nor indeed even possible to point to an independent variable from which the other elements would be derived. Thus, the potential characteristic of the Idea is itself a function of this differential relation, and the Idea has this differential relation as its object: it contains or integrates the variation, not as the variable determination of a relation that is presumed to be constant (this is what calculus calls “variability”), but as a degree of variation of the relation itself (“variety”). This difference may not sound like much, but is actually decisive. In Deleuze’s ontological interpretation of differential calculus, differences are not the product of the variation of a constant relation, and this means of a pre-constituted identity (and we recall how the Husserlian eidetic variation remained governed by just such a logic of identity, thus turning the εἶδος into a variable multiplicity and not into an always and already differentiated multiplicity, or an Idea), but are themselves the elements whose differential relation generates actual solutions. It is only through the transformation of the transcendental field, from a mere conditioning and determination as the conditions of possibility of the determined to a reciprocal relation between differentiated terms, that philosophy can become ontogenesis. Precisely insofar as the virtual is only one side of the real, less opposed to than distinct from the actual, the real itself is unitary and univocal. The ontological distinction between the virtual and the actual does not amount to a dualism, and as such does not threaten the univocity of being. On the contrary: the immanence and univocity of being is guaranteed by the very distinction between the virtual and the actual, which alone can provide a genetic account of actual systems, and revive the medieval problematic of individuation independently of its classical frame,

based on the Aristotelian distinction between form and matter. The material, individuated world is born of its pre-individual singularities. It is real without being actual. With the category of the virtual, it becomes possible to account for the genesis of individuals via a specific process of individuation, such as the developmental process which turns an embryo into an organism, or a set of virtual universes into an actual one.

This emphasis on the objective production of the spatio-temporal structure and boundaries of individuals stands in contrast with the complete lack of process mediating between the possible and the real in classical modal thought.⁴⁷ The main charge against the category of the possible, inherited from Bergson,⁴⁸ is that it assumes a set of predefined forms which retain their identity despite their non-existence, and which already resemble the forms they will adopt once they become realized. The virtual distinguishes itself from the possible in at least three different ways. First of all, the category of the possible has to remain extraneous to the category of existence. In what amounts to a direct refutation of Kant's short, pre-critical essay on the concept of negative quantity,⁴⁹ Deleuze writes:

What difference can there be between the existent and the non-existent if the non-existent is already possible, already included in the concept and having all the characteristics that the concept confers upon it as a possibility? Existence is the same as but outside the concept. Existence is therefore supposed to occur in space and time, but these are understood as indifferent milieus instead of the production of existence occurring in a characteristic space and time.

Existence, or actuality, far from being the mere *positing* of the concept in its possibility, is *produced* on the basis of the reality of the virtual, in accordance with a space and a time immanent in the Idea. This, then, is the first way in which the virtual multiplicity (or, in the vocabulary of *Difference and Repetition*, the Idea) differs from the concept of representation. Second, Deleuze adds,

the possible and the virtual are further distinguished by the fact that one refers to the form of identity in the concept, whereas the other designates a pure multiplicity in the Idea which radically excludes the identical as a prior condition.

So, whereas the possible is a category that corresponds to the concept as the form of identity under which differences are subsumed, the virtual presupposes differences alone, without the presupposition of the concept in its self-identity. The virtual, or the Idea, is a purely differentiated multiplicity that produces actual phenomena through differentiation. Third, and finally,

to the extent that the possible is open to 'realisation,' it is understood as an image of the real, while the real is supposed to resemble the possible. That is

why it is difficult to understand what existence adds to the concept when all it does is double like with like. Such is the defect of the possible: a defect that serves to condemn it as produced after the fact, as retroactively fabricated in the image of what resembles it. The actualisation of the virtual, on the contrary, always takes place by difference, divergence or differentiation. Actualisation breaks with resemblance as a process no less than it does with identity as a principle. Actual terms never resemble the singularities they incarnate. In this sense, actualisation or differentiation is always a genuine creation. . . . For a potential or virtual object, to be actualised is to create divergent lines which correspond to—without resembling—a virtual multiplicity.⁵⁰

This third critique reiterates the Bergsonian thesis regarding possibility and does away with the process of resemblance as governing the relation between the conditioned and its condition. Where the condition is merely the possibility of the conditioned, it is only retroactively modeled after the actual. But virtual multiplicities are nothing like their actualization, precisely to the extent that this actualization takes place through differentiation alone—a process we shall have to analyze for itself later on. And it is precisely insofar as the relation between virtuality and actuality is not one of resemblance, precisely insofar as it does not describe a move from original to copy or from model to image, that differentiation is creation. All divergent lines, all lines of differentiation, are lines of creation. Similarly, all acts of creation, including the creation of concepts in philosophy, when genuinely understood, amount to the inscription of lines of differentiation. Creation is always born of the virtual, which it taps as a reservoir. Equally, the philosophical is a *counter-effectuation* of the real: from the actual, or the state of affairs, the concept returns upstream to the event, or the virtual. This is where the concept is truly “at home.” The scientific function, on the other hand, follows the path of the virtual in its actualization: it finds its references in the effectuation of the event in the state of things. But, as I have already suggested, the line taken by the philosophical concept in its movement upstream is not a segment of the line that the scientific function follows: they are two different lines, yet lines that meet or intersect in the actual.

Let us consider the progress we have made so far. Among the crucial aspects characterizing traditional ontology as delineated in the first part of this book was the characterization of οὐσία as essence and substance. Now, it is this very determination which the concepts of multiplicities and singularities, as inherited from non-Euclidean geometry, begin to dislodge. And it is this same determination that also begins to shake the concepts of identity and resemblance or likeness, coextensive with that of essence. If we wanted to hold onto the concept of essence to designate multiplicity and the event, it would be at the cost of a formidable transformation:

We can doubtless preserve the word “essence” but only if we say that the essence is precisely the accident, the event, the sense; not simply the contrary of what is ordinarily called the essence, but the contrary of the contrary: multiplicity is no more appearance than it is essence.⁵¹

Essence, then, can no longer be opposed to the thing in its event or its accidentality, in its singularity if you like; rather, it names that thing-event itself, what befalls the thing as such. In doing so, it points to the realm of virtual singularities that presides over the genesis of the phenomenon; it reveals this pre-phenomenal dimension of the phenomenon, or, as Deleuze once calls it, this “noumenon closest to the phenomenon.”⁵² Once again, however, the noumenon, or the Idea, is not the ἰδέα or the εἶδος, the quiddity of the thing. With the transformation of the sphere of being from οὐσία ὑποκείμενον to the eventfulness or eventuality of beings, the question that governs thought also undergoes a decisive transformation. The Idea is no longer linked to the question “What is X?” The Idea (or the problem) no longer aims to designate the thing in its whatness; it no longer points in the direction of an essence of which the thing would be an instance, an incarnation, an existence. The old and all-pervasive question of essence is now replaced with questions that point in the direction of the structural and genetic conditions of existence of a thing. To question beyond or, rather, *before* existence, is not to question in the direction of essence (unless, once again, we think of essence as altogether heterogeneous to existence, as the potential for heterogeneity whence existence itself comes into being). The question “What is?” presupposes that the thing is already given and constituted. It presupposes a certain understanding of the thing as substance, and of being as presence. It is not a genetic question, but a static one, a question that, from the start, is directed at what is permanent or essentially present within the thing, at what lies hidden behind the thing in its very becoming. It is the counter-eventful question, the question that severs all things from their virtual past and their real conditions of existence. Far more decisive than the question of essence, then, are the questions: “How many, how, in which case?” Of course, such questions can seem disappointing only with respect to the apparently more ambitious and profound question of essence. But, whereas the latter leads us nowhere, the former, more empirical, more modest question throws wide open the doors of the pre-individual, providing thus a genuine access to ontogenesis. It is in the transformation of these questions, in the shift of questions addressed to the phenomenal world, that the renewal of ontology takes place and that it ceases to be *ousiology* in order to become *ontogenesis*.

In a rather convincing passage, de Landa shows how, in its approach of natural phenomena, much of classical science remained indebted to the metaphysical principles of identity and resemblance inherited from

Aristotelian ontology. This is a point I have already begun to make in connection with the physics of open dissipative systems. The implicit conclusion is that the dividing line does not run between philosophy and science *as such*, but within them, separating thus the metaphysics of identity and permanence from the thought of difference and becoming. Turning to the classificatory practices common in Europe in the seventeenth and eighteenth centuries, and to the botanical taxonomies of Linnaeus in particular, he writes:

Simplifying somewhat, we may say that these classifications took as a point of departure perceived *resemblances* among fully formed individuals, followed by precise comparisons aimed at an exhaustive listing of what differed and what stayed the same among those individuals. This amounted to a translation of their visible features into a linguistic representation, a tabulation of differences and *identities* which allowed the assignment of individuals to an exact place in an ordered table. . . . The resulting biological taxonomies were supposed to reconstruct a natural order which was *fixed and continuous*, regardless of the fact that historical accidents may have broken that continuity.⁵³

With Deleuze, however, identities and types are not originary, atemporal archetypes or forms of which concrete individuals would be instances. Rather, they are themselves the result of evolutionary processes, and so are only *relatively* stable. Their true being lies not so much in their identity, as in their ability to differentiate; not so much in their fixity, as in their ability to evolve. In other words, they are not so much substances, and essences, as they are events.

It is being as such and as a whole, then, that is an event. There is the virtual or ideal event, which defines the problem, and there is the event as it is actualized in a state of affairs. There is the noumenon within every phenomenon, as the intensity that coexists with every extensity. And if the problem is of the order of the event, it is not just, as Deleuze argues, because cases of solution emerge as real events, but because the conditions of the problems themselves implicate events such as sections, ablations, adjunctions. In other words, the differential elements constitutive of a pre-individual multiplicity themselves function as events. In this sense, Deleuze argues,

it is correct to represent a double series of events which develop on two planes, echoing without resembling one other: real events on the level of engendered solutions, and ideal events embedded in the conditions of the problem. . . . The ideal series enjoys the double property of transcendence and immanence in relation to the real.⁵⁴

An echo without resemblance. How should we understand this? The solution-events within nature echo the pre-individual problem-events

within being. But how can there be an echo without resemblance, without likeness? If an echo is a sort of repetition, what sort of repetition do we have here? If this repetition is not one of identity, one in which the identical is repeated itself, albeit slightly differently, can we still be talking of repetition? Can we have repetition without presupposing identity?

With this, then, we arrive at the literally paradoxical content of the ontological difference, the fact that, between the virtual and the actual, there is indeed a relation of conditioning, and indeed a relation of iteration or repetition, but one that involves differentiation, one that is not a matter of the same, but of difference alone. We shall have to come back to this crucial question regarding the peculiar temporality of repetition. For the moment, let me simply emphasize that every being, every phenomenon, is born of, and thus repeats, a pre-individual set of conditions, conditions that it nonetheless does not resemble. But these conditions, these elements, are themselves wholly differentiated. They mark nothing other than the space of a potential, nothing other than a set of virtual tendencies, born of a series of differential relations. Every actualization, every phenomenalization is itself a differentiation: the real, insofar as it marks the site of a problem, “resolves” itself through differentiation, and every differentiation is a creation, or the birth of a new line of divergence (whether physical, biological, social, artistic, etc.). Every phenomenon echoes its noumenon, presupposes it, but the noumenon, itself entirely real, is nothing “like” the phenomenon: born of it, the phenomenon repeats the noumenon, only always *differently*. At the same time, the noumenon, while entirely immanent to the phenomenon, remains in excess of it, its virtuality irreducible to its actualization. There is a surplus of the ideal over the real, a transcendence of the problematic within the immanence of the solution. Between the problem and the solution, there is a relation of immanence: the solution presupposes the problem, but the problem exceeds the solution. The world of virtual tendencies is vaster than that of actualized differences. Between the two, there is a relation of heterogeneity, not homogeneity. While the solution is entirely immanent to its own problematic horizon, this horizon transcends the solution that it produces. This is because the problem, the virtual, constitutes a world that is much larger and infinitely richer—rich with potentials, and not mere actualities disguised as possibilities—than that of the actual.

But, once again, the virtual does not exist independently of the fields of solution in which it expresses itself. Being does not unfold independently of beings. The virtual tendencies in excess of the actual are themselves explicated and covered over, extended and implicated in the actual. This, in turn, implies that their spatio-temporal presence, their metric extensity, does not exhaust their virtual intensity. Between the pre-individual and the individual, between the sphere of problematicity

and that of solution, there is indeed a passage. But this passage is neither imitation (reproduction) nor mediation. It is creation (or production) through differentiation and affirmation. Solutions, like problems, are born of differences, through differences themselves. Ultimately, therefore, there is no more a relation of opposition between structure and event than between structure and genesis. The true opposition does not lie between structure (or Idea) and genesis, or structure and event, or even between structure and sense. Rather, the true opposition (or the true alternative) is between multiplicities or concepts (understood as structure, event and sense) and concepts (as designating essences and kinds). In other words, the true opposition is between multiplicities or Ideas, understood as the site of the pre-individual, virtual, and singular conditions of the *existence* of phenomena, and concepts, understood as designating the *possible* identity of the phenomenon in the form of quiddity. In the language of *Logic of Sense*, which, instead of recognizing two different levels of events, prefers to speak of ideal events and their spatio-temporal realization, the situation is formulated in the following way:

The distinction is not between two sorts of events; rather, it is between the event, which is ideal by nature, and its spatio-temporal realisation in a state of affairs. The distinction is between *event* and *accident*. Events are ideal [*idéelles*] singularities which communicate in one and the same Event. . . . Events are the only idealities. To reverse Platonism is first and foremost to remove essences and to substitute events in their place, as throws of singularities. A double battle has the objective of thwarting all dogmatic confusion between event and essence, as well as every empiricist confusion between event and accident.⁵⁵

From this quotation we clearly see the theoretical abyss separating not only a dogmatic idealism from transcendental empiricism, but also a crude empiricism from the “superior empiricism” Deleuze calls for. If Deleuze’s metaphysics and his materialism are also idealisms, it is to the extent that every physical and material phenomenon presupposes its own horizon of constitution or problematic individuation. And the ideal, while entirely immanent to the real, also marks the inscription of transcendence within immanence. But we should be careful not to mistake the nature of the relation between immanence and transcendence being proposed here. Transcendence is not superimposed onto immanence; it does not govern it from above. As a result, immanence is not immanent *to* transcendence. Rather, it is transcendence itself that is transcendent to the immanence within which it unfolds: instead of transcendence, therefore, we should speak, as Deleuze suggests, of trans-descendence. As Deleuze puts it in *What Is Philosophy?* it would *seem* that the virtual is transcendent because it surveys (*survole*) states of affairs. Yet, in actual fact, it is pure immanence that gives it “the capacity to survey itself by itself.”

And what is transcendent, or, more accurately perhaps, “trans-descendent,” is “the state of affairs in which the event is actualised.”⁵⁶ But the event itself is immaterial and incorporeal: pure *reserve*. What we have with the virtual is not so much a position of transcendence as something like a surplus of immanence within actualized immanence.

Needless to say, then, problems never quite disappear. Only those problems that are “inside our heads” can be said to vanish. But then, those problems are precisely *false* problems. As soon as a problem is exposed as a false problem (and the task of philosophy is, in part at least, to expose such problems), it vanishes. Yet if it vanishes so easily, it is because there was no *real* problem to begin with. It is as if it had never existed. Not so with genuine problems. They are not born in our heads. Genuine problems are *of the real*, ontological through and through. Their domain of solution does not erase them as much as retain them, inscribing them differently, encoding them as it were. But problems lie intact in their solutions; they continue to live “under” their solution, as their very memory, and their future: while solutions explain and explicate (*expliquent*) problems, problems always remain *implicated* in their local solution. This is because problems are essentially *complicated*, that is, live in a state of complication. Such is the reason why problems always need to be teased out or posed; they are never given as such or in advance; they must be generated, but generated backwards or retrospectively as it were. We have grown accustomed to believing that problems are already constituted, and that the effort of thought must focus on bringing about their solution. Some have gone as far as to define philosophy itself as mere “problem solving.” By contrast, Deleuze, following Bergson, believes that the task of thinking is primarily to generate the problems behind existing solutions. What is “given” is precisely not the problem, but the solution, not the noumenal, but the phenomenal. Not everything is given, then: what is given is (only) the actual. But not everything is actualized. What is actualized, here and now, are such and such relations, relation values, distribution of singularities; other relations are actualized elsewhere, at different times. What is actualized is not the whole of what is, though. The real is also and primarily constituted by relations and differential elements that coexist in a whole that is completely determined, yet not actual. Phenomena are not so much the beginning, but the tail end of the real, and the task of philosophy is to transpose itself into the problematic, virtual field that continues to operate within the phenomenal. Thus, the concepts of transcendental empiricism follow problems to their forgotten, yet actualized origin. They re-create the virtual conditions of their existence and follow the lines of divergence from out of which they emerge. This is a difficult task, for in the process philosophy must itself become virtual. And in this regard, one understands why Proust, who elevates the experience of the artist to that of a detective engaged in the deciphering of

aesthetic signs and their ideal origin, is, for Deleuze, the archetype of the metaphysical writer. Whereas false problems are perhaps nowhere but inside our heads, the true problems are everywhere but there. And yet, they are never actually and simply *given*. Rather, they are distributed across the plane of pre-individual being, and this is the plane from which they must be extracted and reconstructed. The disappearance of problems understood thus would simply mean the end of becoming, the radical impossibility of change and transformation.

2. *The Event of Thought*

At this stage, and before going any further into the question regarding the genesis of the real, and the way in which it continues to imply a debate with contemporary science, let me pause and reflect on what, in *Difference and Repetition*, Deleuze calls the “event of thought” that corresponds to the new definition of philosophy as the science of virtual multiplicities.

Multiplicities, or Ideas (later on also referred to as concepts), precisely insofar as they designate *real* problems, or ontological structures, should not be represented as originating from our heads, or indeed from a faculty of thought (reason, for example). Nor should they, as in Descartes, be perceived as “innate.” As we have seen, Ideas are at once *of* the real, and thus impersonal, and, for that very reason, to be re-generated. Ideas are before language, and before representation and its propositions—they are extra-propositional and sub-representative. They are also prior to consciousness itself: they do not presuppose the representation of a consciousness, the individuated existence of a consciousness as the site of representation. They do not presuppose any form of ipseity—not even that of an impersonal consciousness, not even that of a Dasein—any individuated instance *to whom* they would be immanent. No, Ideas are pre-conscious; they are the unconscious of the real itself, its subterranean life and breath. The unconscious is thus ontological, pre-individual, and so does not have human consciousness as its physical site or indeed its corollary. Since Ideas do not originate in the human, *are* not human, they do not *naturally* correspond or naturally agree with a human faculty of thought. We do not know them in advance, *naturally* as it were. There is no such thing as an innate idea, an idea that we would produce naturally. There is nothing “natural” about thought. Never again will we say, as Descartes implied when attempting to establish a presuppositionless soil on which to rebuild philosophy, on which to start from scratch: “We all know, nobody can deny . . . what it means to think, to be, to understand, etc.,” “you must grant me at least this, that . . .” None of this can be granted, none of it can be assumed, if it is indeed the case that thought is not naturally disposed toward knowledge, that the philosopher is not

characterized by his *good will*. It is this “image of thought,” according to which thought is supposed to be naturally attuned to the true, naturally oriented toward its object, which, according to Deleuze, is the most stubborn presupposition of philosophy. Even where and when, and, in a way, this has been throughout its history, philosophy decides to set aside all *objective* presuppositions, it continues to indulge in this *subjective* presupposition, this image of thought that characterizes it as *naturally* inclined toward truth. This is the philosophical doxa par excellence, the opinion philosophy cannot shake off. Against this, then, Deleuze insists that Ideas must be wrested and fetched where they *really* are: neither “out there,” already constituted and readily available, nor within us, and this in such a way that the operation of thought would come to be identified with a movement of reflection. Reflection is intrinsically narcissistic, and its concepts given in advance. Ideas, on the other hand, constitute a realm we have to penetrate. But how, if we are not naturally oriented toward them? How can we overthrow the classical image of thought, and allow thought to set itself underway to the transcendental? At stake in this question is nothing less than the possibility of thought itself, nothing less than the question regarding the *origin* of thought. Where, when, and with what does thought begin? What sets it underway?

We need to begin by recognizing that we are not inclined to think, that to engage in this activity, it is not enough to be of good will, to will to think, as if such a decisive event were a matter of choice, a matter for our ability to decide. Furthermore, it is not enough to believe that thinking will then naturally guide us to the true, so long as we can listen to the voice of nature within thought, to the intrinsically “good” disposition and orientation of thought. In this regard, Deleuze acknowledges his debt to Heidegger:

We recall Heidegger’s profound texts showing that as long as thought continues to presuppose its own good nature and good will, in the form of a common sense, a *ratio*, a *Cogitatio natura universalis*, it will think nothing at all and remain a prisoner to opinion, frozen in an abstract possibility . . . : “Man can think in the sense that he possesses the possibility to do so. This possibility alone, however, is no guarantee to us that we are capable of thinking.”⁵⁷

The mere *possibility* of thought alone, the mere ability to think, most often equated with a human faculty, does not account for the *event* of thought. The event of thought is itself intimately linked to the thinking of the event. Any thought regarding the nature of the event, including the event of thought itself, is doomed if it takes its point of departure in the category of *possibility*. Thus, the event of thought is itself nothing like the actualization of a possibility or the explicit use of an implicit faculty. Something else is required in order for thought to take place, something that is itself heterogeneous to thought, but that still calls for thinking.

Thought, then, the very possibility of the event of thought, requires more than an account, no matter how elaborate, of the powers of thought, understood as a faculty. And this, not just because thought does not naturally orient itself toward Ideas, does not naturally agree with them. Rather, the opposite also holds true: Ideas, problems, are themselves not naturally turned toward thought. They are not illuminated by a *lumen naturale*, on which the human mind would be focused. They do not “give” themselves to thought. What calls for thinking is, indeed, as Heidegger so powerfully argued, the fact that we are not yet thinking. This is the structure of the *event* of thought, and not just the structure of its possibility. Yet what calls for thinking, being as such, does not “give” itself to thought, does not call upon thought as upon what bestows it with the gift of being. The thematic of the gift, which binds the human and being together in the singular event of ap-propriation, reinscribes at the other end of the relation what was assumed by the philosophical doxa as a fundamental trait of the faculty of thought, that is, its natural orientation toward truth. Inscribing the relation between the human and being as a relation of donation, Heidegger acts as if being itself were always turned toward the human, giving and sending itself to the human, addressing it in and through language, which becomes in turn the privileged site of this reciprocal belonging. Everything happens as if being itself were animated with a certain good will, a certain natural disposition toward thought. This, I think, is where Heidegger’s most problematic assumption lies: in having ultimately “attuned” being to the human, in having interpreted the event of being in terms of a gift, when it is more akin to a shock. Because Ideas and problems are not intended for thought, not directed toward it, because thought itself is not naturally prone to them, the birth of thought can only ever be violent. Thought is born of a certain violence or an initial shock; at the same time, it must wrest its problems from being, which nonetheless detach themselves from it.

We need to begin, therefore, by recognizing that we are *forced* to think, that thinking always comes second, that it is moved from without, as a result of some shock, some *encounter*, and not some *recognition*: we only ever recognize what is *like us*, and what we already know, what, in one way or another, we have anticipated—as Descartes himself clearly saw. We recognize ourselves alone, only what we placed in the object of recognition in the first place, no matter how openly conflictual such a process may be—something of which Hegel himself was well aware. The logic—and the dialectic—of recognition is fundamentally self-centered, fundamentally autonomous: it is a logic of identity. By contrast, the logic of encounter is heteronomous through and through and presupposes difference and dissimilarity alone; we recognize the same, but encounter the other, difference alone. Thought, wresting us from our innerworldly

immersion under the impulse of this violence, returns us to the world, allows us to be born to the world. But with what does this violence begin? And how does it manifest itself?

This shock, this violence is first and foremost that of the sensible. This should come as no surprise since we began by describing philosophy as being concerned with the being *of* the sensible. Every shock has its pathos, every encounter its climate. Every encounter is surprising, defies anticipation, and lacks the language within which it first arrives. An encounter is first *felt*: something takes place; we do not know what; we lack the words to describe it. Yet what is felt calls for words, invites us to think, calls for thinking. But what is felt is different, is difference itself, and so the slow, tentative, and creative work of thought begins. Thought thinks in many ways: conceptually, artistically, scientifically, etc. But at the heart of each one of these ways of thinking lies the shock of the sensible. In a way, then, thought (and this includes art and science) is nothing other than the sensible pushed to its limit, nothing other than the sensible raised to the second power. And how can we not, once again, think of Proust here, whose every thought is born of an aesthetic experience, whether explicitly artistic or merely sensible, whether triggered by a painting by Elstir or Vinteuil's sonata, by the pain caused by jealousy, or by the repeated pleasures felt at the final reception given by the Princesse de Guermantes? If Proust manages to reconcile the two sides of the aesthetic, the sensible and the beautiful, and thus to overcome a fundamental divide in metaphysics, it is because he interrogates them with respect to their common being, because, as a transcendental empiricist, he interrogates the being *of* the sensible. Thought as the *truth* of the sensible? Perhaps. In any case, thought is always *of* the sensible. Thought is empirical. But behind the sensible lurks the pre-individual, and through it thought becomes transcendental. For us, then, problems are born from within the sensible, and Ideas, which Deleuze will subsequently characterize as *concepts*, unfold at the surface of things. Yes, in a way, as their essence, but an essence that cannot be distinguished from the sensible, an essence that is its very depth and its very style.

And yet, for thought to be born, it is not enough to engage practically with things; something more than a mere immersion within the sensible is needed. For thought to take place, for the passage to the problematic to happen, some event must occur from within the sensible, one that "reminds us" of its virtuality or its problematic dimension. In a way, then, thought is remembrance, yet remembrance of the pure past of the pre-individual, and not remembrance as re-collection of something that once actually took place. It is rather the memory of the taking place of place, the turn to the past—a past that is also to come, also futural—that lives on in the present, all-pervasive yet never actually present. The origin of

thought is somewhat mysterious. But one thing is certain: thought emerges from within being, and always despite itself. The experience of the narrator in Proust is the experience of thought itself: it is the experience of the sensible as a collection of signs, the signifieds of which are themselves never given, but still need to be produced. And therein lies the work of art. The sensible *forces* the narrator to think, in spite of everything else around him, in spite of the idle life and the time lost, which, had it not been for the shock of the sensible, would also have been the time wasted. Ultimately, and only retrospectively, through the retrospective eye of the one who has become a writer, this life appears not to have been wasted, even though, at the time, it *actually* was. But, insofar as it is revisited, taken up again in writing, repeated in the light of a *series* of decisive and yet *actually* very dissimilar experiences that open onto the *exigence d'écrire*, this life appears as the infinitely vast life behind or beneath phenomena. In the words of Proust himself, which Deleuze likes to quote: "Real without being actual" and "ideal without being abstract." In the end the novel marks the victory of art and thought, but the entire work narrates the way in which thought tries to find its way through the many experiences of the narrator, experiences that are always, by definition, experiences of the sensible, but whose meaning can come about only through a transformation, only through the move to the pre-individual, in which the truth of the sensible is revealed. And how is this done? Precisely through the creation of the work of art, through the work of literature, alone capable of carrying out this transformation, alone capable of turning the sensible inside out, revealing its ideal, problematic lining. But this return upstream, this movement back to the pre-individual, problematic conditions of existence of these experiences can amount only to a work of creation, a work of invention. Creation—whether artistic or philosophical—is an operation of doubling, of repetition, but one entirely devoid of imitation. Does art imitate nature, or nature art? *That* is a false question. For, in doubling the real, thought exposes its *doublure*, its lining. To the physical surface of effects and signs there corresponds the metaphysical surface or the transcendental plane of sense. *Sense* is the doubling/lining (*doublure*) of the aesthetic realm that art and philosophy set out to conquer. And yet, the "doubling in no way signifies an evanescent and disembodied resemblance, an image without flesh."⁵⁸ This, perhaps, is another paradox: that the turn to truth, or the turn to the pre-individual, that the relation to being is one of creation; that, in *repeating* the virtual conditions of the actual existence of an experience, a phenomenon, all we can do is create; in that respect, the work of art or of philosophy, unlike that of science, is a moment of creation, a moment of invention, precisely insofar as it is true, precisely to the extent that it uncovers and repeats what was already there, albeit only virtually. And so, there is nothing personal in art or in philosophy: what announces itself in the

sensible, what calls for thinking in the violence of the shock, and opens onto the act of creation, or invention, is radically impersonal—cosmic and virtual.

What the sensible opens up, then, or what opens itself through the sensible, is the dimension of the transcendental as sheltering the genetic conditions of the real. Thought itself is born in this opening, forced into existence through this irresistible attraction. It is absorbed into the black hole of the transcendental, exposed to the realm of the problematic as the “transcendental horizon belonging ‘essentially’ to beings, things and events.”⁵⁹ But, transposed thus, wrested from the actual through the shock of the sensible, thought does not come face to face with Ideas or virtual multiplicities, as if these were pre-given and already constituted ideal objects, accessible to contemplation alone; Ideas are precisely not stable and permanent terms to be contemplated, entities fully present in an intelligible region of being, of which the sensible would be merely the image or the representation. Rather, they must be wrested *from* and not re-presented on the basis *of* the phenomena themselves. This is why the relation of thought to its object is not one of knowledge, but one of *learning* or of apprenticeship. The thinker is an apprentice to the problematic. We learn to think, very much in the way in which we learn to swim or learn to speak a foreign language, that is, by organizing and composing our own singularities with those of an other multiplicity:

[L]earning evolves entirely in the comprehension of problems as such, in the apprehension and condensation of singularities and in the composition of ideal events and bodies. Learning to swim or learning a foreign language means composing the singular points of one’s own body or one’s own language with those of another shape or element, which tears us apart but also propels us into a hitherto unknown and unheard-of world of problems.⁶⁰

Thus, the problematic is a foreign body to our actualized, sensible selves. But it is a foreign body with which we can enter into a relation of composition, an Other we can encounter. This is what learning means: to experience the power of heterogeneity behind beings, to allow our own singularities to communicate with those of other beings, in what amounts to a new, unique assemblage. Every operation of knowledge is a relation of identity and recognition, in which the heterogeneity of the pre-individual is reduced to the homogeneity of a power of representation and cognition. Representation and knowledge are expressions of an individuated consciousness, the propositions of which designate cases of solution alone. But the problematic is pre-individual and pre-conscious, sub-representational and extra-propositional. And the propositions of consciousness, those solutions about which representational thought debates and argues, give an entirely inadequate notion of the transcendental instance which engenders them as cases, and which they resolve. So

long as thought remains at the level of the individuated cases of solution, so long as it does not step back from those solutions to the pre-individual singularities and differential relations which engender them, it will amount to nothing more than an impoverished empiricism. If there is anything like a phenomenological reduction in Deleuze's thought, this is where it lies: not in the reduction of the natural attitude and its phenomenon to the transcendent sphere of consciousness, existence, or even the lived body—all of which remain individuated, albeit non-empirical, instances, actual conditions for the phenomenologization of phenomena—but in the reduction of the phenomenal to its genuinely transcendental, and this means pre-individual and genetic horizon. In actual fact, however, there would be some irony in retaining the vocabulary of reduction in the phenomenological sense, given the fact that Deleuze mobilizes another sense of reduction, namely, its mathematical, algebraic sense, in order to characterize the phenomenal field. In other words, phenomena are themselves reductions, they are themselves instances of the solutions of problems or differential relations that constitute them. For Deleuze, the reduction is not so much phenomenological as it is phenomenal, not so much transcendental as empirical. It is phenomena themselves that are reductions. And so, with respect to such reductions or solutions, the task of thinking is precisely to return upstream to the virtual or problematic point at which they reveal their transcendental horizon: from "reduction" to what Simondon, and Deleuze after him, calls "transduction," that is, from the movement of phenomenological thought, which reduces the difference of the empirical world to the identity of a transcendental consciousness, and the difference of singularities to the identity of essence, to transcendental empiricism, in and through which the differential play behind identities is revealed. And in becoming genuinely transcendental, thought moves into a different mode of questioning. It no longer asks: "What is the solution to this problem?," a problem given in advance and inherited; instead, it now asks: "Given this solution, given this particular actual configuration, what is the problem?" "True" and "false" are categories that no longer apply to the solutions, or to propositions, therefore, but to the problems themselves. It is the task and singularity of non-representational thought to transpose itself into the domain of the pre-individual, and to re-generate the problems behind the phenomenal. In marked contrast to the operation of knowledge, then, which applies the categories of truth and falsehood to propositions and solutions alone, Ideas and "learning" bring out the "extra-propositional or sub-representative problematic instance: the presentation of the unconscious, not the representation of consciousness."⁶¹ In so doing, however, "truth" and "falsehood" have to undergo a radical transformation, such as the one Heidegger develops throughout his writings, beginning with §44 of *Being and Time*. Here "true" can no longer be understood in the

sense of correspondence or *adaequatio*, given the fact that the very logic of resemblance between condition and conditioned, the very interpretation of the relation between the two as involving similarity, original and image, has been radically called into question. By truth, then, we can mean only the uncovering of the genetic conditions of actuality that lie at once inscribed and effaced in the phenomenal. Under such circumstances, truth is revived as an ontological concept and designates the virtual conditions of existence of beings in general. The true is itself generated, produced by thought, but only insofar as thought enters the depth of the problematic, as precisely providing the genetic code or the problematic horizon of the phenomenal. In this way we can see

how the final truth, when it is obtained, emerges as though it were the limit of a problem completely determined and entirely understood, or the product of those genetic series which constitute the sense, or the outcome of a genesis which does not simply take place in the head of a monkey [or a philosopher].⁶²

What measures the value (its truth or falsehood) of a problem is a purely ontological, even ontogenetic, criterion, therefore, not an epistemological one: not its adequation with the thing (this definition of truth holds for the solution alone, and presupposes the homogeneity between condition and conditioned), but its genetic power, its ability to generate real effects; not the certainty with which we can “know” it, but the freedom with which we can “learn” it.

But if we *can* indeed learn to know, if we *can* be taught or develop the method that leads to knowledge, if there *is* a technique for identifying the true and the false in the sphere of propositions (logic), we cannot learn to learn or think. There is no method for learning, no path already cleared for thinking. Thinking takes place in ways that cannot be anticipated or decided in advance:

We never know in advance how someone will learn: by means of what loves someone becomes good at Latin, what encounters make them a philosopher. . . . There is no more a method for learning than there is a method for finding treasures, merely a violent training, a culture or *paideia* which affects the entire individual.⁶³

If we think, then, it is under the hammer blow of a certain violence, of a shock that awakens our entire being. At the origin of thought, there is a demand, an imperative, something categorical, even, yet one that has nothing to do with a moral law or a rule of reason. It is something that comes to us from without, provoking a trembling of our sensibility, and opening us to questioning. There is indeed something like a pathology of thought, an affective climate or a culture for thought. To acknowledge the imperative nature of thought, to relate thought to the categorical in

an extra-moral sense, is already tantamount to wresting it from the grip of the hypothetical, to liberating the critical enterprise from the form of *possible* experience. The movement of thought does not go, as in Platonic dialectic, from the hypothetical to the apodictic, in what would amount to a process elevating it from one hypothesis to the next, each hypothesis constituting a springboard “in order to attain the an-hypothetical principle that determines the solution to the problem as well as the truth of the hypotheses.”⁶⁴ Nor does it go, as in Descartes, from doubt to certainty or, as in Kant, from the “*Critique of Pure Reason*, entirely subordinated to the hypothetical form of possible experience, to the *Critique of Practical Reason* in which, with the aid of problems, he discovers the pure necessity of a categorical principle.”⁶⁵ Rather, the movement of thought is from the problematical to the categorical, that is, from the imperative whence it unfolds.

If there *is* a “method” for thought, it will be that of reminiscence. In a very fundamental sense, already mentioned in connection with Proust, thinking *is* remembering, understood as creative repetition of a virtual past, as a doubling of the real without imitation. As such, remembrance or, more accurately perhaps, reminiscence, is not a psychological operation. Reminiscence is not a function of memory as faculty, in much the same way that Ideas and problems do not belong to a faculty. Learning is an activity, maybe even a passivity, that feeds on the unconscious, and does not presuppose the representation of consciousness. It is perhaps closer to Proust’s involuntary memory, if the memory in question is indeed the remembrance of that which never actually took place, but which still lies behind everything that did take place, as the pre-individual transcendental horizon, or the pure time of virtual events. Reminiscence, then, is an ontological category, insofar as what is remembered is the transcendental, yet entirely virtual, horizon of the actual. We think and learn at the feet of an event that is forever virtual. If Plato is able to determine the transcendental conditions of thought in the form of reminiscence,⁶⁶ and not innateness, it is because he models the task of thinking after “learning,” and not after knowledge. With reminiscence, Deleuze argues, “learning truly [becomes] the transcendental movement of the soul.”⁶⁷ But what is decisive in the interpretation of the task of thinking as one of learning, and of reminiscence in particular, is that it opens up the sphere of the transcendental, or of the pre-individual, as already spatialized and temporalized, or as the very event of time and space, one which neither presupposes, nor even resembles, that of presence and the present. Whether it be Heidegger, or Proust, or Bergson, it is always the same imperative that is being articulated, the same event that is being addressed, and this is the event of being as the event of time and space, a time and a space simply otherwise than present and actual. Not the time of facts or of solutions—extended time—then, not chronological time, but the time of

problems and of pure thought—intensive time. Not the space of actuality, or three-dimensional space, but the space or place of virtual differentiations, which calls for its spatial resolution in extension. To Euclidean, metric space we need to juxtapose another, altogether heterogeneous dimension, in the same way that, to three-dimensional time, we need to add the fourth and “prior” dimension of pure, empty time. Both dimensions are not added *ex post*, but are presupposed: not as some moment actually preceding time and space, or even as some mythical moment and place, but as their transcendental horizon, or their problematic condition.

Smooth Space and Volcanic Time

Thus far, while alluding repeatedly to the process whereby multiplicities, or virtual events, are engaged in their own actualization or solution, we have focused almost exclusively on the pre-individual plane, where singularities and differentiations prevail. Ideas, we saw, have two principal characteristics. First, they consist of a set of differential relations between elements that are lacking in sensible form and function, elements that exist only in and through their reciprocal determination. Such relations are of the type dx/dy . Second, to these differential relations correspond distributions of singularities, of remarkable and ordinary points. The notions of singular and regular, remarkable and ordinary are far more decisive than those of “true” and “false,” which they now replace. They are more decisive, inasmuch as they determine nothing less than *sense* itself. The reciprocal and complete determination of the Ideas constitute the two aspects of sufficient reason. Having established this double status of the Idea, through which it is made entirely determinate, we now need to see how it is actualized in qualities (or species) and parts (or organs), respectively. Each “thing,” it turns out, is constituted at the crossroad of a double synthesis of qualification (or specification) and composition (or organization). In other words, a thing in general is characterized, first, by the qualities it displays, and then by the extensity (*étendue*) it occupies. Parts are the number of the species, much in the way that the species is the quality of the parts. It is only when actualized in this way that the Idea is fully differentiated. It is to this process of actualization, or differentiation, that we must now turn. It is a process that corresponds to a second level of genesis, one that mobilizes yet another concept of difference. Put slightly differently, and to return to the quotation from *Difference and Repetition* with which we began, it is now a

question of identifying the general system in which the phenomenon *flashes*, and of focusing on the very process through which the phenomenon is actualized. The question with which we are now confronted is that of the passage or the transition from the virtual to the actual. What, exactly, accounts for the fact that the virtual is, from the start and always, involved in the movement of its own explication and resolution? What, exactly, *forces* the virtual into its own phenomenalization? The answer, once again, is difference, yet difference understood in a way that is altogether different from the differential that characterized the real as potential. Between these two differences, between the two differentiating processes, there is no relation of identity or resemblance, merely a relation of difference and dissimilarity. How are we to understand difference in this second sense? It is the difference that is situated “between” the pre-individual and the individuated. Not halfway between the two, as if it amounted to a measurable, extended quantity (when, as we shall see, it designates precisely that by which extensive quantities come about) separating two independently and pre-given domains, but the very process that broaches this space (and this time) of the “between.” It is only at the cost of thinking this “between” or this inter-stice as co-originary, as unfolding alongside the process of virtual differentiation, and thus away from any problematic concerned to bridge a certain gap and a certain heterogeneity by way of, say, the production of schemata, that the univocity of being can be maintained. If the process of actualization were indeed a matter for schematism, a matter of a passage between two separate realms in need of their own bridging, then being would no longer be univocal and could only be thought *analogically*. To the irreducible equivocality of being would correspond a thinking of analogy. But the “passage” that is now being introduced is precisely a difference, an inter-stice that extends virtual differences *as* it separates or divides them, a “medium,” we might say, in a way that recalls Heidegger’s later thinking of difference as *Unter-schied* and *Mitte*:

In accordance with Heidegger’s ontological intuition, difference must be articulation and connection in itself; it must relate different to different without any mediation whatsoever by the identical, the similar, the analogous, or the opposed. There must be a differentiation of difference, an in-itself which is like a *differentiator* [*différenciant*], a *Sich-unterscheidende*, by virtue of which the different is simultaneously gathered rather than represented on condition of a prior resemblance, identity, analogy or opposition.¹

And, just as in Heidegger’s account of originary difference, to which I have already referred, this movement or process of difference involves a singular spatio-temporality:

Deeper than the actual qualities and extensities, species and parts, lie the spatio-temporal dynamisms. These are the actualising, differentiating agencies. They

must be surveyed in every domain, even though they are ordinarily hidden by the constituted qualities and extensities [*étendues*].²

This “between” or “medium” is therefore the place of a genesis, of a coming into presence—of what, following Simondon, and naturally reviving a theme central to post-Aristotelian and specifically medieval philosophy, Deleuze designates as a process of “individuation.”³ With this concept of differentiation, it is a matter of delineating what is no longer the pre-individual, and what is not yet the individuated, but emerges as a medium of formation for the individuated phenomenon. This is a process that generates its own elements, other than the pre-individual singularities on which the analysis bore hitherto. What are these “new” elements, generated by and inseparable from individuation? They are “qualities” and “extensities.” Yet if individuation generates these new elements, in which differences are ultimately “integrated,” it is only to the extent that individuation designates a field of intensity (*intensio*) involved or implicated in the movement of its own extension (*extensio*), itself characterized by the peculiar way in which heterogeneous series, in other words, differences, are made to communicate within a system. But as individuation, it is itself neither extensive nor distributed in qualities within extensity. And it is to this new and complex set of concepts and distinctions that we need now to turn, in an attempt to complete the picture of being as hetero-genesis.

Let me begin with the following preliminary remarks.

Whereas the model that enabled Deleuze to think the realm of the problematic, or of the virtual, was mathematical, and was captured under the notion of differentiation, the model that serves to formalize the movement of actualization from the virtual to the actual is biological, and very much thought through Bergson, although only up to a certain point. It is that of differentiation, that of the manifestation of the new, of species and organisms, from a series of divergent moves or bifurcations. Yet it is not as if the movement from one level to the next were a passage from one field to another, from mathematics to biology. It is a single problematic that is being unfolded here, one that is philosophical, and more specifically ontological through and through:

[M]athematics and biology appear here only in the guise of technical models which allow for the exposition of the virtual and the process of actualisation, along with the exploration of the two halves of difference, the dialectical half and the aesthetic half.⁴

In the same way that differential calculus served to conceptualize or formalize a field that was not primarily mathematical but dialectical, so differentiation formalizes the other side of the object, its phenomenal or aesthetic side, with which I began when I said that transcendental empiri-

cism was concerned with the being of the sensible. Differentiation is a universal concept that applies to all modes of actualization, whether biological, physical, musical, social, artistic, etc. At the same time, however, biological systems constitute privileged examples of individuation, insofar as actualization through differentiation is most evidently at work in such systems.⁵ And it is because biological differentiation, and embryology in particular, functions as a model for the process of actualization that Deleuze will liken the world to an “egg,” thus suggesting a system rife with virtual tendencies, tendencies which certain spatio-temporal processes alone can actualize. It is through a series of differentiations that the relatively undifferentiated egg, or still developing embryo, reaches its final stage, and this in such a way that the finished product does not resemble its virtual configuration. This is the sense in which the world, or being, can be said to be an egg.

The virtual, as we already saw, is not opposed to the real, but to the actual alone. It is itself entirely real and constitutes one side or one aspect of the real. The reality of the virtual, as Deleuze repeatedly insists, consists in “the differential elements and relations and the singular points that correspond to them.” This means, as we have already seen, that the virtual is neither vague nor indeterminate, but *completely* determinate: it designates the genetic differential elements of a given system, whether a physical or biological system, or a work of art or literature. These differential elements and relation, these singular points, all co-exist within the work or the phenomenon. And yet, despite its determinateness, the virtual constitutes only one side of the object. It is *completely* determinate without being *entirely* determinate.⁶ This means that the object, as virtual, is indeed a being, an *ens*, or rather a (*non*)-*ens omni modo determinatum*. It is real, without being actual. Actuality constitutes the other side of the object. But what is lacking, at this stage, is an account of the way in which virtual multiplicities are realized as actualities. Now, as I have repeatedly suggested, the relation between the two sides of the object is not one of resemblance and identity, of original to image, or model to copy. And if the actual does ultimately *repeat* the virtual, it is by carrying it along a different path, a divergent line (such would be the literal and most profound meaning of the *meta-pherein* of difference); if the virtual repeats itself in the actual, it is through a process of differentiation that amounts to a difference in kind or to a radical heterogeneity between the repetition and the repeated. Not all repetition is mimetic; not all iteration responds to the logic of identity governing relations of resemblance. The relation is indeed genetic, even ontogenetic (as was the case in the Greek problematic, whether Platonic or materialist), but it is also *hetero*-genetic: the virtual generates or engenders the actual *out of* its intrinsic differentiability and *through* differentiation. And it is because ontogenesis is heterogenesis, because every process of actualization amounts to the production of *new*

differences through which a multiplicity is actualized, that Deleuze, following Bergson's conception of a *creative* evolution, characterizes such a process as "creation": "For a potential or virtual object, to be actualised is to create divergent lines which correspond to—without resembling—a virtual multiplicity."⁷

In mobilizing the concept of creation anew, Deleuze also wrests it entirely from any demiurgic or divine intervention, and this means also from any structure of imitation and resemblance. Genuine creation is always *ex nihilo* as it were, if by *ex nihilo* one understands the fact that the differences thus produced are in no way the mere actualization of *possibilities* which they resemble, but differences born of pre-individual, conditioning differences, and altogether heterogeneous to such differences.⁸ This is where the originality of Deleuze's position lies: in its ability to construct a transcendental ontology, yet one that is concerned to bring out the real (or virtual)—and not merely possible—conditions of existence of the phenomenal. Doing so, it breaks with the Kantian presupposition according to which existence differs only formally from the concept of a thing, while also breaking with the logic and principle of identity governing the mimetic-genetic account, for which the actual, while differing from its origin and its set of pre-individual conditions, does so only in degree. In short, the virtual is actualized through a process that is itself neither virtual nor actual, and that involves the creation of differences; the actual differs essentially or in nature from the virtual, while entirely generated from within the virtual. In other words, the difference in nature between the virtual and the actual is not so much given as it is produced by difference itself. It is a difference that belongs to nature itself.

Between the two sides of the object, then, or of the real, there is a passage, a movement—yet one that should not be mistaken for a mediation. Mediation takes place within the field of already individuated entities, not in the passage from the pre-individual to the individuated. This passage or movement, best described as a medium, is one of actualization. Actualization is thus the other aspect of the phenomenon, or rather the very process by which the phenomenon is individuated in its final state:

Whereas differentiation determines the virtual content of the Idea as problem, differentiation expresses the actualisation of this virtual and the constitution of solutions (by local integrations). Differentiation is like the second part of difference, and in order to designate the integrity or the integrality of the object we require the complex notion of different/iation. The *t* and the *c* here are the distinctive feature or the phonological relation of difference in person.⁹

Later on, we shall have to see in what this process of differentiation consists. For the time being, however, and simply from reading the quotation

just cited, let us simply note that the process of actualization or of differentiation is also described as one of “resolution” through “local integration.” This should come as no surprise, given the fact that, in Chapter 4 of *Difference and Repetition*, Deleuze described the field of the pre-individual as the field of problematicity, in which Ideas were defined in terms of a *potential* determined through reciprocal, *differential* relations, and this in such a way that differential calculus could provide the *form* in which to think the problematic. Now, the term “local” adds a specificity and a dimension that should not be overlooked. Indeed, it carries a sense of spatiality, different from the one on which we have focused so far in our analysis of state space. Every solution is local (it has a *here* and *now*); every phenomenon brings a local solution to a problem, which, while intrinsically spatial, is not localized. An organism, for example, “is nothing if not a solution to a problem, as are each of its differentiated organs, such as the eye which solves a light ‘problem.’”¹⁰ The two elements in which processes of individuation are actualized, namely, extensities and the qualities found therein, denote the sense in which we must understand “local” in this context. The sense of space brought about in the process of actualization is actual, extended space, or *extensum* (extensity). As we saw in the previous chapter, though, this space is not originary, but derivative. Equally, it would be a mistake to interpret the term “local” in purely spatial terms. And although we have focused so far primarily on physical systems in their spatial constitution and genesis, we are eventually going to need to recognize the temporal aspect involved in the difference “between” the virtual and the actual as constitutive of difference, and so of the event of being.

In this chapter I shall want to show how the thinking of actuality or presence, as *generated* through a twofold process of differentiation and from a horizon of virtual being, coincides with an overcoming of its spatio-temporality as mere extension and permanence. It is the sense of being as presence—the very sense discussed at length by both Heidegger and Derrida as constitutive of metaphysical thought as such—that is at once superseded and accounted for in onto-heterogenesis. At the same time, the representational concepts of space and time, while somewhat dislocated, are also reinscribed, ultimately giving way to a complex rethinking of the spatio-temporality of individuation. Let me now turn to the analysis of actualization (or differentiation) as *individuation*.

1. Spatial Differentiation

Insofar as virtual multiplicities designate *tendencies* within a system and delineate systems by way of potentials, they do not *by themselves* account for the *actual* states of such systems. For this, we need to look elsewhere. Now, such a problematic is, of course, reminiscent of the Scholastic

debate, inherited from Aristotle, around the question of individuation. This is a debate I have already touched upon on several occasions. In using this term, however, and in following the way in which it is taken up by Deleuze and Simondon, we need to be careful to distinguish it from the context in which it was traditionally used. The distinction here is three-fold. To begin with, the Deleuzian conception of individuation breaks with Scholasticism, to the extent that it does not consist in a relation between form and matter; it is not a question of knowing whether individuation takes place by way of form only, or matter, or a combination of the two. Virtual tendencies are precisely not “forms.” And if they are Ideas (or concepts), it is in the precise sense thematized in the previous chapter, and not in the sense of a self-identical ἰδέα or εἶδος. From which it follows, second, that because matter is not inert and passive, but self-generated, the process of information is purely immanent, and thus material through and through. Third, and still as a consequence of the first point, the move from the pre-individual to the individual is not a move from universality to particularity or from essence to existence, but from pre-individual singularities to individuated phenomena.¹¹ Ultimately, then, if the question of individuation as providing the real conditions for the actualization of virtual multiplicities is indeed revived, it is also radically transformed, and wrested from its classical, Aristotelian framework.¹²

What does individuation involve? Intensities or, more precisely, *quantitative* intensities. These are intensities characterized by differences, but differences understood this time in terms of structural inequalities, or of asymmetries between heterogeneous elements or disparate orders. Typically, they are differences of potential: differences of temperature, for example, or pressure—in short, differences of intensity which, in communicating with one another, produce effects that are yet different from each element or series taken individually. As such, they should not be mistaken for *potential* differences, or even differences that would determine *potentialities*. Rather, they designate a differential in potential that triggers actual effects or forces a system into a definite actual state. It is from within this differential, this intensive field, that a phenomenon “flashes.” These intensive differences sustain and surround the phenomenon as its *field of individuation*. Ultimately, then, we need to distinguish clearly between the virtual or problematic multiplicities of Ideas, what Deleuze also refers to as “*perplexes*,” and the *implicated* multiplicities of intensities or “*implexes*.” Whereas the former are made of differential elements, and refer to the sense of difference brought about by differential calculus, the latter involve relations between asymmetrical elements and are sustained by a sense of difference as “unequality” or “disparity.” And if intensities do indeed direct the course of actualization of Ideas, the *power* of intensities, also referred to as “depth,” or the “*spatium*,” is itself inseparable from the *potentiality* contained in Ideas.¹³ Inseparable, yes,

but not identical: while virtual multiplicities designate tendencies, “implexed” multiplicities or intensities designate levels of energy. Whereas the dialectic is a mathematics, aesthetics is an energetics.

Energy, or, more specifically, the differences constitutive of energy itself, are the source of the actualization of physical and material processes. The difference in question, however, is quite specific, in that it is never experienced as such: what we know or experience originally is a state in which these differences have been canceled out:

We only know forms of energy which are localised and distributed in extensity [*étendue*], or extensities already qualified by forms of energy. . . . Intensity is difference, but this difference tends to negate or to cancel itself out in extensity and underneath quality. It is true that qualities are signs that flash across the interval of a difference. In so doing, however, they measure the time of an equalisation—in other words, the time taken by the difference to cancel itself out in the extensity in which it is distributed. . . . [D]ifference is the sufficient reason of change only to the extent that the change tends to negate difference.¹⁴

We shall see in a moment just how this process describes actual physical and material systems. Yet before we do, let me emphasize the following: what is most peculiar to the process of differentiation is that, while actualizing virtual tendencies, it also tends to equalize, reduce, or negate in actuality those very differences constitutive of the process itself. Such is the reason why, in experience, we know only forms of energy that are already localized and distributed in extension (*extensum*, *étendue*), differences that are reduced or identified, and so intensities (*intensio*, *intensité*) inseparable from their own extensity (*extensio*, *extensité*) and developed within extension. In other words, if differences of intensity are indeed “implexes,” it is precisely insofar as they remain implicated in the counter-movement that accompanies them, in the movement of their own “explication.”¹⁵ Similarly, if they remain “inexplicable,” it is precisely to the extent that they are always and from the very start engaged in their own, actual explication: differences exist only as explicated, as reduced or equalized in the final states to which they gave birth:

It is not surprising that, strictly speaking, difference should be “inexplicable.” Difference is explicated, but in systems in which it tends to be cancelled; this simply means that difference is essentially implicated, that its being is *implication*. For difference, to be explicated is to be cancelled or to dispel the inequality that constitutes it. The formula according to which “to explicate is to identify” is a tautology. We cannot conclude from this that difference is cancelled out, or at least that it is cancelled in itself. It is cancelled insofar as it is *drawn outside itself*, in extension and in the quality which fills that extension. However, difference *creates* both this extension and this quality. Intensity is

developed and explicated by means of an extensity [*extensio*] which relates it to the extension [*extensum*] in which it appears outside itself and hidden beneath quality. Difference of intensity is cancelled or tends to be cancelled in this system, but it creates this system by explicating itself. Whence the double aspect of the quality as a sign: it refers to an implicated order of constitutive differences, and tends to cancel out those differences in the extended order in which they are explicated.¹⁶

And so, if difference un-folds by being drawn outside itself (*mise hors de soi*) into fully actualized or individuated phenomena, this process of explication is not one of cancellation pure and simple, since difference remains entirely, although only virtually *implicated* in the movement of its own explication.¹⁷ Such is the reason why Deleuze speaks of an “illusion” that is at once “transcendental” and “physical” with respect to actualized systems, or to the way in which they are given in experience: what we are given to see or experience, and with which we naturally tend to begin, is in fact only the end or tail of a process that involves a double differentiation (a differenc/tiation) ultimately leading to a process of resolution or reduction of such differences in fully individuated identities. Although “illusory,” the “reduction” or “degradation” of intensive differences is nonetheless *real*:

There is an illusion tied to intensive quantities. This illusion, however, is not intensity itself, but the movement by which difference in intensity is cancelled. Nor is it only apparently cancelled. It is really cancelled, but outside itself, in extensity and beneath quality.¹⁸

These are the points and the general movement that we now need to clarify with respect to concrete physical systems, thus revealing the extent to which modern science can bear witness to Deleuze’s differential ontology. Specifically, and insofar as intensive quantities designate the energetic processes leading to the actualization of physical and material systems, we need to take a close look at the concept of energy. The forms of energy or the systems that Deleuze has in mind in his analysis are primarily those brought to light by thermodynamics. Yet although the terms “intensive property” and “intensity” belong primarily to thermodynamics,¹⁹ they may be extended to cover other areas, in order to designate a general energetics.²⁰

A crucial way in which thermodynamics states the distinction between the intensive and the extensive is by emphasizing the fact that while two extensive properties add up in a simple way, intensive properties do not add up but *average*.²¹ Placing two bodies with different temperatures into contact will trigger a spontaneous diffusion process that will eventually *equalize* the two temperatures at some intermediate value. This is why temperatures or pressures cannot be divided in extension. A

particular value of temperature or pressure, being an average, will remain the same when the body possessing these properties is broken into two or more parts.²² Now, intensive (or *internal*) differences, unlike the external differences that distinguish one fully formed individuated phenomenon from another, and that are viewed in essentially negative terms as a *lack of similarity*, are *positive* and *productive*: they form the basis of simple processes of individuation. As a result, the intensities defining a particular physical system may indeed be “divided,” but the differences that result change the system in kind.²³ The system will then move from a state of equilibrium, where differences are canceled, to a state of non-equilibrium. Moreover, if these differences are made intense enough, a critical threshold may be reached, and the physical system in question will undergo a phase transition, its extensive properties suffering a radical change in nature. And so, rather than indivisibility, the key concept in the definition of the intensive is *productive difference*, as well as the related concepts of endogenous stable state (the state of thermodynamic equilibrium, for example) and critical transition between states.

Yet the situation with which Deleuze deals throughout the fifth chapter of *Difference and Repetition*, and to which the passage quoted above testifies, seems rather different, if not entirely opposite. This is the situation to which all physical and material systems are ultimately subjected, namely, the situation whereby productive intensive differences cancel themselves out in extended individuated phenomena, inequalities equalize themselves, and states of non-equilibrium tend toward equilibrium. In other words, Deleuze confronts the situation formalized by the second law of thermodynamics, which stipulates that intensive differences resolve themselves or produce extended identities, and concrete universals or virtual multiplicities conceal themselves in individuals. Any area that is in thermodynamic equilibrium is an area in which intensive differences have canceled themselves out. The second law of thermodynamics stipulates that the “quality” Heat is increasingly evenly distributed, that it naturally tends to distribute itself evenly in a system with an initial differential in temperature. At the cosmic level, this would seem to mean that the universe is headed toward the cancellation of all differences in heat, differences that alone allow for the constitution of new physical systems. In the long run, we would have to conclude that the universe is finite, that its ability to generate order is itself finite. Heat death and disorder would seem to be the rule. In thermodynamic systems that have reached their point of equilibrium, equilibrium is associated with the collapse to the most probable, or the least ordered, states. In the case of living organisms, this state is called death.

However, as one specialist of complexity theory has attempted to demonstrate, we must not forget that the universe is rich with order “for free” and that this extraordinary wealth of local differences may very

well be what accounts for the extraordinary display of self-organization (particularly in the biosphere).²⁴ So that, in the end, to contradict the hypothesis of an ultimate general heat death, and in order to “save difference,” it is in no way necessary, Deleuze argues, to imagine highly “improbable” phenomena. For such phenomena are plentiful, as life in the biosphere makes amply clear. Yet, as Kauffman puts it, in recognizing this, “no laws of thermodynamics are violated or even contested.”²⁵ This is because, while natural and spontaneous, the order for free displayed in open thermodynamic systems is also always “paid for” thermodynamically by exporting heat to the environment. Whatever the domain under consideration, “the cancellation of productive difference and the erasure of the differentiation produced still constitute the law of explication, which is manifest in physical equilibrium as well as in biological death.”²⁶ The vocabulary, therefore, needs to be refined. If Deleuze is correct, difference is not simply erased in its explication. Rather, it remains implicated in its very explication. This, in turn, means that it is still “there,” if not actually, at least virtually. Similarly, order does not simply vanish into disorder, but finds itself implicated in a certain relation with it. On one level, then, and on Deleuze’s reading, while absolutely *real*, the increase in entropy is illusory (it is, Deleuze argues, *objectively* illusory): it focuses on an effect, or on a final state, which it measures accurately, but fails to raise the question of its transcendental or differential horizon. This is at the core of complexity theory’s *différend* with the second law of thermodynamics considered in isolation from “the stunningly abundant free energy available for performing work in the universe.”²⁷ As Kauffman makes explicit, when it becomes a question of understanding the origin of the ordered complexity in the universe, we can only conclude that our universe is one “that is not in equilibrium, where instead of the featureless homogeneity of a vessel of gas molecules, there are differences, potentials, that drive the formation of complexity.”²⁸ In Deleuze’s philosophical vocabulary, we must therefore be careful to distinguish between a transcendental principle (intensive quantities) and an empirical law (degradation of energy, negation of differences). For if the principle of degradation indeed “explicates” everything, quite literally and transitively, it accounts for nothing:

While local increases in entropy may be compensated by a more general degradation, they are in no way comprised in or produced by the latter. It is of the nature of empirical principles to leave out the elements of their own foundation. The principle of degradation obviously accounts for neither the *creation* of the most simple system nor the evolution of systems.²⁹

The empirical principle of degradation, while unquestionable, does not account for complex phenomena such as the creation and evolution

of life. This diagnosis, initially inspired by Léon Selme's essay on the second law of thermodynamics,³⁰ seems to be confirmed by Prigogine and Stengers, who believe that "we have to free ourselves from the idea that the entropy producing activity amounts to a degradation, a leveling of differences."³¹ In other words, despite the fact that classical thermodynamics yielded valuable insights into the importance of intensive processes, this branch of physics did not provide the foundation needed for a theory of individuation, given its exclusive focus on the *final* equilibrium state of a system. The problem with concentrating on the final state is that it overlooks both the virtual, problematic, or dialectical dimension of the system, which can only be seen as such during the pre-individual, differentiating phases leading up to the state of *actual* equilibrium, and the intensive nature of this system, which alone accounts for its actualization. Now, during this pre-individual, and nonetheless individuating, phase, the equilibrium is indeed *real*, since it is actively attracting the successive states of the system toward itself. What it is not, however, is *actual*. Thus, if thermodynamics underestimates the intensive differences presiding over the states of equilibrium, "forgetting" as it were the intensive beneath the extensive, it is because the process that it describes is real. In other words, in downgrading the intensive and concealing the virtual, certain scientific discourses only amplify an *illusion*, an illusion that is nonetheless objective or structural, at once "physical" and "transcendental." The fact that this illusion is *real* in the sense I have just evoked is precisely what makes it difficult to overcome.

Now, if a certain interpretation of the laws of thermodynamics, which prevailed toward the end of the nineteenth century, emphasized the horizon of identity, in which all differences were canceled,³² the contemporary field of *far-from-equilibrium* thermodynamics, of which, as we already saw in Chapter 6, Prigogine is a prime representative, seems to focus not so much on systems in their actual final states of equilibrium as on intensive differences within such systems:

It is now an easy matter to extend our discussion to nonequilibrium states. . . . They can be *transient*. . . . But they can also be permanent if we wish to establish and maintain appropriate conditions, which we refer to as constraints. Thus, a temperature difference applied between two sections of a slab . . . will result in nonequilibrium situations in which the system is never allowed to identify itself with its environment—for example, the state of the biosphere which is subjected to an energy flux that arises from the balance of radiation between the sun and the earth.³³

Under certain experimental constraints, therefore, far from equilibrium, open thermodynamic systems exhibit remarkable features, features that seem to coincide with those intensive differences mentioned by Deleuze.

The thermodynamic distinction between systems near and far from equilibrium needs to be related to a mathematical distinction we have come across already, namely, that between linear and nonlinear systems. Remember that the variety of attractors that a system can have depends on whether its dynamics are linear or nonlinear. While linear systems possess the most simple distribution of singularities, nonlinear systems tend to have multiple attractors. As Prigogine and Nicolis put it, “without the maintenance of an appropriate distance from equilibrium, nonlinearity cannot by itself give rise to multiple solutions. At equilibrium detailed balance introduces a further condition that restricts and even uniquely fixes” the solution.³⁴ In order to exhibit their full complexity, nonlinear systems need to be driven away from equilibrium, or, more accurately perhaps, appropriately large differences in intensity need to be maintained by external constraints and prevented from being canceled or made too small. It is only in this state of non-equilibrium, as Prigogine and Nicolis remark, that “the potentialities hidden in the nonlinearities, potentialities that remain dormant at or near equilibrium” are revealed.³⁵ This potential, best exemplified in self-organized systems, unfolds between equilibrium and non-equilibrium, or, in the words of Kauffman, “at the edge of chaos.”

This point is already clearly made by Simondon, who transposes the ontological problematic from the stability of systems in their final state of equilibrium to what he calls their meta-stable (and not simply unstable or ordered) state. Stable equilibrium does not allow us to think being as such, such a state doing away with becoming by corresponding to the lowest levels of potential energy. It merely corresponds to the state when all possible transformations have been realized, when the potentials have been actualized, and the system has reached its lowest energetic level and so is unable to undergo any further transformation. To illustrate the point, Simondon takes as his example a relatively simple case of individuation: the process that leads to the formation of a salt crystal from an oversaturated solution. The genesis of the crystal is a progressive process of individuation, one that proceeds through a liminal structuration of the fluid medium, and that Simondon characterizes as “transductive communication”: “as soon as a first layer of amorphous substance has become crystal around the germ, it plays the role of germ for another layer, and the crystal can thus unfold from one layer to the next [*de proche en proche*].”³⁶ This structuration brings into relation (through “internal resonance”) differences in the order of magnitude and energy (“disparateness of potentials”), differences that force the system to reorganize itself into a more stable state (through a “forced movement”). In this creative process, the singularities of the initial “meta-stable” system, namely, the topological configuration of energies, the state of intensive gradients, etc., play an active role in the genesis of the individual. Contrary to the claims

of the Aristotelian, “hylemorphic” model—a model born of a simple and reductive interpretation of simple technological operations, such as the molding of a brick—the individual is not the result of a molding which, in a single blow as it were, provides a homogeneous and formless matter with its determinate form. Rather, it is a *temporal process* through which the crystalline form acts like a “recurrent germ of information” in a medium already rife with singularities and energetic differences.³⁷ Yet the process of individuation does not exhaust the pre-individual reality, insofar as a certain *potential* always remains, and further individuations are still possible.

When it comes to systems far from equilibrium, we are suddenly able to explain the real, physical source of what Deleuze describes as the objective, physical (albeit transcendental) illusion linked with fully individuated systems. If, following de Landa’s analysis, we take a linear system with a single attractor, its virtuality is relatively easy to grasp: while the system is moving toward this attractor, the unactualized final state is there already, actively attracting the process. Once the process is over, however, it becomes easy to overlook the virtual nature of the end state, even though the system will never actually reach the attractor, but will only ever fluctuate in its vicinity. A nonlinear system with multiple attractors, on the other hand, continues to display its virtuality even once the system has settled into one of its stable alternative states. Why? Because the other alternatives are there all along, *coexisting* with the one that happens to be actualized, for reasons external to the virtual dynamic of the system itself. All we have to do in order to reveal their virtual presence is to give a large enough shock to the system to push it out of one basin of attraction into another.

A system with multiple attractors has a greater capacity to express or reveal its virtual being, then. But this expressive capacity will depend, in turn, on the thermodynamic “zone of intensity” in which the system operates: at low intensities (near equilibrium), a nonlinear system will in effect be linearized, that is, its potential complex behavior will not be revealed. As de Landa goes on to remark, this procedure has become routine in physics whenever troublesome nonlinear effects need to be eliminated: one simply studies the system in question at very low intensity values for the trouble-making variable.³⁸ However, by following procedures like this and systematically neglecting the high-intensity values at which nonlinear effects are fully expressed, physicists promote an *illusion*, which is originally objective, but which has now become subjectively amplified. On the other hand, the study of systems that are both nonlinear and far from equilibrium, systems, in other words, where the objective illusion of identity is at its weakest, literally opens up windows onto the virtual.

Which areas of the world testify to the virtual thus defined? Having

already introduced the work of Prigogine on physical systems far from equilibrium in Chapter 6, I want now to focus on the example of embryology, as emphasized in the work of biologists such as Kauffman, and as presented in de Landa's book.³⁹ This should ultimately allow us to clarify what Deleuze means by individuation through differentiation. Although the "topological egg," in its movement of differentiation leading up to fully constituted and differentiated organs, is a concept borrowed from embryology, it will turn out to designate the very movement of the real. As such, this example will allow us to give a concrete sense to the twofold movement of explication or extension mentioned at the start. Thus far, I have clarified only the concepts of intensity and extensity. You will recall, however, that Deleuze goes one step further in defining the negation or canceling of difference by referring to *quality*: "this difference tends to negate or to cancel itself out in extensity and *underneath quality*."⁴⁰ Qualities are further ways in which individuals can be said to differ from one another. Actual individuals differ from each other not only in their extensity (spatial structure and scale) but also in their qualities. A species, for example, possesses both an *extensive* aspect, defining its distribution in space (its division into several reproductive communities inhabiting different ecosystems), as well as a *qualitative* aspect, defined by population-level qualities distinct from those of individual organisms, such as playing a role in a food chain or having a particular reproductive strategy.

For the longest time, biological categories tended to be created by observing similarities (or technically, homologies) among the anatomical parts of *fully formed* or fully individuated organisms. To the extent that this ignores the process of individuation that generates these organisms, these essentially *static* classifications conceal the dynamic and virtual horizon from out of which they unfold.⁴¹ This is the problem to which Deleuze draws our attention when he claims that, so long as we classify differences by identifying a common trait that allows us to group beings within an identity of resemblance, we remain under the authority of a purely empirical conception of "class" or "kind," one that can never make the move from actual, already individuated systems, to their field of individuation and their virtual reality. This, we recall, was precisely the problem with the Aristotelian conception of science, which aimed to define physical beings in their essence by way of genera and specific differences. By contrast, the development of nonlinear dynamics, and of a nonequilibrium approach to embryology in particular, has revealed a different, more dynamic way of creating classifications. A good example of this, to which de Landa refers, is the *tetrapod limb*. This is a structure that can take many divergent forms, ranging from the bird wing, to the single-digit limb in the horse, to the human hand and its opposed thumb. Now, it is hard, if at all possible, to define this structure by looking at the properties

common to the various, fully grown life forms, in other words, by concentrating on homologies at the level of the final product. Focusing instead on the embryological *processes* that produce this structure allows the creation of a more satisfactory classification. In the words of one commentator, this new approach “sees limb homology as emerging from a common *process* (asymmetric, branching and segmenting), rather than as a precisely repeated archetypal pattern.”⁴² One and the same “virtual limb” is unfolded through different intensive sequences, some blocking the occurrence of particular bifurcations (those leading to the branching out of digits, for example), some enabling a full series to occur, resulting in very different final products.

Simondon’s own theory of individuation says much the same thing when it shows that individuation cannot be explained simply in terms of the elements discovered in the analysis of the individual *after* the process of individuation. The energetic condition of a system (the condition of the state of the constitutive system) cannot be grasped in the constituted individual. Individuation cannot be induced from the individuated. It is an *event*, and an operation that takes place within a reality that is richer than the fully individuated entity resulting from it. And so, the true principle of individuation is the system itself and as a whole in which the individual is generated.⁴³ This is why Simondon draws a distinction between the *individual*, or the self-individuating individual, which exists only so long as the formation of the system takes place, and the *individuated being*, which corresponds to a state of the system that is slowly degrading. The true individual is that which preserves its own system of individuation, amplifying its singularities. And what is remarkable with respect to biological systems, whether as organisms or species, is their ability to *perpetuate* themselves, to outlive themselves—in short, to evolve. Unlike a non-living individual, a crystal, or a brick, the individuation of which takes place in a single, unified time, a living individual is a set of habits that have the singular ability to perpetuate themselves in time and to synthesize repeated intakes of energy (whether luminous, sonorous, or chemical) in perceptive, nutritive, or kinetic processes. The temporal, in fact, durational, dimension of the real is most evident in living systems.

This process can be clarified further by looking at the development of a single organism, from its initial embryonic stage to its fully differentiated final state. An organism is defined both by its spatial architecture as well as by the different materials (bone, muscle, etc.) which give that architecture its specific mechanical qualities. In order to illustrate Deleuze’s reference to these two aspects of extendedness and qualities, let me follow de Landa in his analysis of two embryological processes, one behind the spatial structuration of organisms through cellular migration, folding, and invagination, and the other behind the *qualitative differentiation* of

neutral cells into fully specialized muscles, bone, blood, nerve, and other cell types. Throughout, though, it will be a matter of identifying the processes, or, in Deleuze's words, the spatio-temporal dynamisms, behind extensities and qualities. In other words, it will be a question of revealing how difference or intensity remains implicated in its own explication:

How does actualisation occur in things themselves? . . . Beneath the actual qualities and extensions [*étendues*], . . . there are spatio-temporal dynamisms. These are the actualising, differentiating agencies. They must be surveyed in every domain, even though they are ordinarily hidden by the constituted qualities and extensities. Embryology shows that the division of an egg into parts is secondary in relation to more significant morphogenetic movements: the augmentation of free surfaces, stretching of cellular layers, invagination by folding, regional displacement of groups. A whole kinematics of the egg appears, which implies a dynamic.⁴⁴

An egg may be compared to a topological space that undergoes a progressive spatial and qualitative differentiation to become the metric space represented by a fully formed or individuated organism. More specifically, the fertilized egg, defined mostly by chemical gradients and polarities, as well as the early embryo defined by neighborhoods with fuzzy borders and ill-defined qualities, may be viewed as a topological space that acquires a rigidly metric anatomical structure as tissues, organs, and organ systems become progressively better defined and relatively fixed in norm.

But how are distinct spatial structures created? Individual cells aggregate into different neighborhoods or collectives through a variety of adhesion processes. Now, these neighborhoods do not have a well-defined metric structure. Within any one neighborhood, the exact location of a cell is immaterial as long as there are sufficiently many cells with a shared history located nearby. Similarly, the exact number of neighbors is not important and, at any rate, is always subject to statistical fluctuations. What is important are the local, *adhesive* interactions between cells (or between cells and their extracellular matrix during migration), interactions which are typically nonlinear (small changes may lead to large consequences) and statistical. Now, these local interactions yield two stable states for collectives: cells may be *tightly* linked to each other by adhesion molecules into *sheets* (called "epithelia") or be *loosely* associated via minimal interactions into *migratory groups* (referred to as "mesenchyme"). These two stable states are related to each other by a transformation that closely resembles a phase transition and leads to two different types of cellular motion: migration and folding.

Whereas cellular migrations move entire collectives into new places, where they can interact with different collectives, cellular folding and invagination create a large variety of three-dimensional structures that

constitute *the external and internal spatial boundaries of an organism*. Where exactly a collective migrates and what extensive structures and borders will be formed is determined, in part, by intensive relations: not only the rates of synthesis and degradation of the different adhesion molecules, but also the birth and death rates of cells within a collective. There is no detailed genetic control of the exact number of cell divisions, or of the exact number of cell deaths; rather, there is a nonlinear feedback relation between birth and death rates and the processes of migration and folding: these processes are affected by the rate at which new cells are born and die and, vice versa, the rates are strongly place-dependent and hence affected by migratory and folding motions.

Thus, there is a well-defined sense in which the spatial relations characterizing an egg or the still developing parts of an embryo are nonmetric, or quantitatively imprecise. As Deleuze emphasizes, however, it does not mean that they are not rigorous. They are in fact absolutely *rigorous* and *anexact* processes. Indeed, such is the rigor of intensity that it gives birth to extraordinarily precise phenomena through processes that themselves defy quantitative exactitude. However, as migration and folding begin to yield finished anatomical structures, these nonmetric relations become progressively replaced by a less flexible set of metric ones. The fully individuated product is a spatial structure adapted to specific functions. Like a building or a bridge, for example, an animal must be able to act under gravity as a load-bearing structure. Yet the *spatial* structure of an organism is not the only factor that determines its capacity to bear loads. The *qualities* of the materials making up that architecture also matter: the qualities of muscle that allow it to bear loads in tension, the qualities of bone that allow it to bear loads in compression. And the intensive processes that create these materials are another example of a process of progressive differentiation, one that starts with a population of *relatively undifferentiated* cells and yields a structure characterized by qualitatively distinct cell types.

When cells begin their embryological development they are *pluripotent*, that is, they are capable of becoming any of the different types of cells that characterize the adult individual. The question, then, is one of knowing how they become this type of cell rather than that (while bacteria have two different types of cells, and jellyfish between 20 and 30, human beings have about 254). This takes place through a complex exchange of chemical signals leading to the enhancement or suppression of cellular differentiation. Stuart Kauffman has focused on the number of cell types into which a particular cell can directly differentiate.⁴⁵ Given a cell with a specific history and a certain signal which can change its fate, the outcome of their interaction will depend on how many other attractors there are in the state space of the cell (or, more exactly, in the state space of the network of genes within the cell). In other words, far from

directly determining the qualities of a differentiated cell, these signals (called “inductive”) act as *triggers* that cause cells to switch from one attractor to another one nearby, *guiding a process of qualitative differentiation* that follows attractors like so many stepping stones.

Thus, it is of the utmost importance to emphasize how the component “parts” used in biological assembly, unlike the parts of an industrial product assembled in a factory, are defined less by rigid metric properties than they are by their *topological connectivity*: the specific shape or size of a cell’s membrane—as opposed to a vehicle part in an assembly line—is less important than its continuity and closure, and the specific length of a muscle less important than its attachment points. This topological connectivity is precisely what allows component parts to be not inert but adaptive, so that muscle lengths can change to fit longer bones, and skin can grow and fold adaptively to cover both. Ultimately, then, even if, unlike a developing embryo, a fully individuated organism has more specialized tubes and channels and some of its components lose adaptability and rigidify, this “metrization” is never quite complete. A remarkable example of this radical incompleteness is provided by the platyhelminth, the flatworm which, when cut in many pieces, has the ability to reconstitute or “repair” itself entirely on the basis of only a few stem cells held in reserve from its inception. Other organisms, such as the triton, annelids, or zebra fish, arrive at the same result by converting into stem cells the fully “differentiated” adult cells constituting their skin, muscles, or any other tissue. The latter process is known as “de-differentiation.” Both processes would have no doubt caught Deleuze’s attention. For do they not point, within a single organism, to a capacity for invention and re-creation born of an ability to exploit non-actualized virtualities, or even to counter-effectuate the process of differentiation itself? What is highly significant is that, at least in the case of multicellular animals, if organisms were not individuated in an intensive environment that is not rigidly metric (if they were to be individuated within a system resembling that of an assembly line, for example), their capacity to evolve would be greatly diminished. Simondon was not saying anything different when he emphasized the fact that living organisms, unlike other physical or even technological systems, constituted their own “theatre of individuation” and individuated themselves at their periphery, by constantly “dephasing” themselves.

By turning to concrete physical systems, and to the example of embryology in particular, as it appears in de Landa’s work, I hope to have clarified the exemplary and programmatic passage from *Difference and Repetition* with which we began. I want now to return to this passage, in an attempt to tease out its general ontological conclusions, and reveal the extent to which it applies to all systems. Ultimately, it is a question of understanding how, for Simondon as well as Deleuze, individuation is a process that

applies to all aspects of being: physics and biology, perception and language, society and love, etc. As one commentator rightly points out,⁴⁶ in the human being, the ontogenetic process of individuation is extended in a complex and interwoven set of activities: nutritional, perceptive, linguistic, cultural, etc. All such individuations are habits preserving and deepening the individuality of the living, according to its vital and social milieu. Both in its origin, as well as in its biological, psychological, social, and cultural existence, each individual is dependent upon an originary and singular difference which functions like its essence. This essence is the principle of its own identity, of its structured habits. At the same time, it is the very reason of its irreducible *openness*, of the necessarily incomplete nature of its syntheses. Through its affects, its love affairs, its sensible or intellectual passions, an individual is open to other individuals, to a world of differences. And the difference that characterizes every individual is never entirely "developed." It always retains a non-individuated aspect that forces the individual into new syntheses, new individuations: "The individual thus finds itself attached to a pre-individual half which is less the impersonal within it than the reservoir of its singularities."⁴⁷

If difference is "inexplicable," then, it is because it explicates or explains *itself*, because it is the very movement of self-explication or self-explanation. In explicating itself, however, it cancels itself. Such is the reason why the movement of explication, of unfolding and explanation, is also a movement of identification. Difference, at least on one side of itself, is always engaged in its own reduction, in its own self-transformation and negation into an other (identity). Such is the reason why the operation of thought cannot be one of explication. On the contrary: it consists in a movement back into difference as self-explication; it consists in a movement upstream, from explication back into implication. Far from tuning itself into the explicated world of identification, into the fully individuated world of actual identities, thought takes its point of departure in the phenomenal world and yet manages to develop an ear for its transcendental and pre-individual horizon. In other words, thought runs counter to the general movement of being, from identities, or explicated systems, back into their differential constitutive horizon, or their virtual conditions of existence. This, thought can do, because difference implicates itself *while* explicating itself and withdraws while inscribing itself: "the being of difference is implication."⁴⁸ If the virtual is always in the process of becoming actual, if difference is always explicating itself in identities, it is as a result of its essentially implicated structure: explication follows from implication, identity from difference: "it is within difference that the phenomenon flashes, that it explicates itself as a sign, and that movement is produced as an 'effect.'"⁴⁹ Now, this means that difference does not simply cancel itself altogether in this process of explication: it is canceled only insofar as its movement is a becoming other, only insofar as its pre-individual differen-

tial potential, its power to generate actuality, is realized or resolved *in* extension and *in* the quality that fills this extension. Yet it is crucial to note that such an extension or spatiality and such a quality do not exist prior to the operation of difference itself. Difference generates them. This means that extension—traditionally taken to be the most fundamental sense of space and equated with the essence of matter since Descartes—is itself generated. It means, then, that extension is not primordial but only derivative, and born of a heterogeneity, and indeed a spatio-temporality, which it does not resemble. Extension is only the phenomenal tip of a “phenomenon” without phenomenality that exceeds it through and through: it is only the end of a road or a dynamic that tends to cover up its own track, to erase its own genesis as it actualizes itself.

What explicates itself in extension is an intensity, it is difference itself *qua* intensity. And every intensity is a measure of the unequal, of a difference in potential, energy, height, etc. Intensity is born of inequality, which is its very differential. Intensity explicates or *develops* itself into an other, and this movement outward, this *extasis*, is one of *extensio* or extensity: it coincides with the movement of difference being drawn outside itself. Intensity is thus inseparable from extensity, in much the same way that the problematic is inseparable from its solution: they are the two sides of the real, the complete picture of the movement of being as genesis. Being is this irreducible assemblage, intensity/extensity.⁵⁰ But intensity, or difference, is canceled in extensity, or identity. This means that the inequality, or the differential that presided over the genesis of an object or a quality in extension, erases itself as it resolves itself in and as this system which it creates. And so, yes, on one level, it is true that difference tends to cancel itself (as intensity) in the system that it creates, and that always implicates extension. True, inequalities tend to resolve themselves, by averaging one another out, by finding the middle ground or point of their differences, and thus by engendering a solution that is different from both terms, that is, born of the difference between them. But it is still difference, as intensity, that creates the system by explicating itself, and the solution is not so much the negation of difference as it is its affirmation, even though it is also its erasure.⁵¹

Hence the ambivalent or duplicitous aspect of the phenomenon itself: if it is a “sign,” it is because it refers back to, or indicates, an implicated order of constitutive differences, a virtual past of which it is the actual yet heterogeneous expression. At the same time, however, it erases or flattens these differences in the order of extension in which they are explicated. All phenomena are thus “effects” of differences or intensities, manifestations of a broader system or field of individuation that continues to sustain them. This, however, is where “we” are, and where “we” must begin: we are surrounded by phenomena, by effects, the invisible side of which we still feel and to which we are still subjected. We always presup-

pose the differential past or origin of this invisibility. We always remain exposed to this ontological surplus which we can access only through its own erasure *in* and *as* the phenomenon: "The vanishing of difference is precisely inseparable from an 'effect' of which we are victims."⁵² Were we to retain the vocabulary of phenomenology, we would say that the "reduction" wrests us from the realm of phenomena as merely given, and so from the effects themselves, in order to free us for their very givenness or their genesis. But the transcendental horizon to which phenomena are returned is nothing like the transcendence of a constitutive consciousness (however non-empirical), or even of an ecstatic and existent temporalizing (itself a principle of individuation). Phenomena are not so much constituted or given as they are generated or produced, not by external causes and first principles, not by some agent to be conceived along the lines of a traditionally poietic model, but by a pre-individual differential complex that is entirely immanent to the system in which it explicates itself, a set of conditions that are far more impersonal than phenomenology will have ever allowed.⁵³ This, in what seems to amount to a mere Platonism or an unashamed idealism, is what allows Deleuze to speak of the phenomenal as "illusory."⁵⁴ But the illusion in question is not (just) that of the sensible: since Descartes, we have grown accustomed to such empirical illusions. Rather—and this is what brings Deleuze in great proximity to Plato—the illusion in question is "transcendental." It is, once again, a "transcendental physical illusion." This means that, if there is indeed something illusory about the physical realm, if phenomena in space and time can be said to be "illusions," it is because of the transcendental horizon from out of which they are born and from which they continue to detach themselves. It is the very structure of the real, the very unfolding of being, that produces such illusions. So the illusions cannot be characterized as such in relation to a sphere of being or a dimension that would be less illusory, more real, really real as it were, as if phenomena were the pale expression, the faded and distorted image of their distant origin, itself given in full, intact and unspoiled in some other realm. Such a view would amount to nothing less than the crudest of Platonisms, in which phenomena could be understood and grasped only in terms of their relation—a relation of mimesis and reproduction—to an original, a model that they would simultaneously resemble and betray. If phenomena can be characterized as illusions, it is only insofar as they are simulated, and not copied, produced, and not simply reproduced. Such is the reason why Deleuze also calls them *simulacra*.⁵⁵

A simulacrum is ontologically distinct from a copy, or a reproduction, as Plato himself was very well aware. Whereas the image images only from out of its relation to some original, as a shining or a manifestation of the original that it presupposes as its principle of identity and to which it refers only as an image, the simulacrum is simulated or produced from a

set of conditions or principles that bear no resemblance to it. It is, as it were, the expression of conditions to which it is entirely heterogeneous. And if these conditions do indeed repeat themselves in the simulacrum, it is only through a process of differentiation, in which they become other. Repetition is essentially different from reproduction, precisely to the extent that difference alone repeats itself, whereas reproduction is always a matter of the same. The move from the logic of the image to that of the simulacrum is essential and captures the singularity of the Deleuzian enterprise: for it is not a move from one kind of image to another; rather, it is a move from one kind of ontology to another: from an onto-tauto-logy, in which phenomena are always referred back to some principle, which they resemble, to an onto-hetero-genesis, in which phenomena are grasped as the surface effects and the repetition of an ontological depth whose entire, already differentiated essence consists in its ability to differentiate itself and, in the process, to produce actual effects to which it bears no resemblance. Whereas onto-tauto-logy, beginning with Plato and Aristotle, incessantly declares that only what is alike can differ (only two things which in some respect are the same can be said to differ from one another), onto-hetero-genesis declares that only differences are alike. At stake in such a move is nothing less than the possibility of an overcoming of Platonism or representation.⁵⁶ And so, for example, when Deleuze talks of the Hegelian account of difference, developed in terms of opposition and contradiction, as “illusions,” we must understand him as saying something far more complex and subtle than what might seem at first to be the case. We must understand him as suggesting that Hegelian thought unfolds at a (literally) superficial level, that is, at the level of those surface effects that the renewed transcendental philosophy is intended to expose as such by providing their *genesis*. At that superficial level, at the phenomenal or actual level, there is no doubt that the mechanisms Hegel describes are real: illusions are not nothing; they are real, yet only one side of the real. Illusions are not errors, as Kant clearly pointed out, and as Deleuze does not cease to insist. Errors relate to solutions only, whereas illusions take place primarily in the realm of problems, to which they refer back. Errors are only ever empirical, whereas illusions are transcendental. And so, with respect to Hegelian dialectic, Deleuze’s central concern is to expose it as the mere effect of a virtual horizon that covers itself over in the field of actuality onto which it opens: contradiction, opposition, mediation, are all concepts born of a simulation; they are all literally superficial concepts.

2. Temporal Differentiation

In one aspect, space can be associated with extension, with metric space: differences resolve themselves, intensities explicate themselves in extension. Equally, though, Deleuze argues, extension does not account for

the individuations that take place within it. Why? Because it is itself engendered, because it cannot count as a *principle* of individuation, only as a space or a medium for individuation. But if extension is itself generated, if it is itself the space for effects that presuppose their own “cause” or differential horizon, we also need to raise the question of the “essence” or the origin of extension, of the spatiality or the spatializing that is proper to the very movement of explication or individuation. There is, as I have repeatedly suggested, a spatiality “prior” to that of extension. And all forms of questioning, beginning with Cartesianism itself (which, remember, begin with phenomena as already individuated in extensive space, identifying their spatiality with extension alone), succumb to the transcendental physical illusion of space. The experience of space as extension, and the purely empirical concept that follows from it, presupposes its transcendental condition, in the same way in which identities and identifications presuppose difference. And if we are going to respect the structure set up by Deleuze, then between condition and conditioned, there should be no resemblance: the “essence” of extendedness is itself nothing extended. It is something (which, once again, is no-thing, *non-ens*) “implicated”: an “implex.” Deleuze also calls it the “spatium” and associates it with the depth of the pre-individual. This is a dimension that is *qualitatively* different from those of extended space: it is a quantity that differs qualitatively from other spatial quantities, even though, once again, it is only ever realized in them — not an *extensive* quantity, then, but an *intensive* one. And all extensive quantities (length, height, width), in short, extensity itself, follow from *the pure form of space*, originary depth, the *absolute* with respect to which all other dimensions are relative:

It is depth that explicates itself as right and left in the first dimension, as high and low in the second, and as figure and ground in the homogenised third. Extensity does not develop or appear without presenting a left and a right, a high and a low, an above and a below, which are like the dissymmetrical marks of its own origin. The relativity of these determinations, moreover, is further testimony to the absolute from which they come. Extensity as a whole comes from the depths. Depth as the (ultimate and original) heterogeneous dimension is the matrix of all intensity, including its third dimension considered to be homogeneous with the other two.⁵⁷

Bergson already spoke of time (or duration) as the *absolute* that metaphysics knows absolutely, from within, and not, as science does, only relatively, by analyzing it as a function of something other than itself — as a function of something spatial.⁵⁸ Here, though, the absolute turns out to be as spatial as it is temporal. Space and time, as depth, as intensive quantities, cannot be separated. The absolute that metaphysics seeks to describe, whether through “intuition” or “learning,” consists in a specific assemblage of time and space. While entirely immanent to the

phenomenal world, this absolute is not simply “here” and “now”; while not indicative of another world, beyond ours, of another reality, beyond the one we know and experience, it is also not just phenomenal. The absolute is entirely incarnate, yet never *actually* given, entirely immanent, yet never simply present. Yes, metaphysics is a quest for the absolute. Not every metaphysics, though, is a metaphysics of presence (or absence). There is also the metaphysics of the otherwise than presence, the metaphysics of virtual being, from which presence, and the metaphysics of presence itself, originate. We understand why, following Bergson, Deleuze equates his *true* or *superior* empiricism with the metaphysics of the absolute: while entirely embedded in sensible, material being, thought is provoked to tease out the Idea that is the very ontological lining of the sensible.

Depth is the original dimension from which three-dimensional space unfolds. In explicating itself, depth, as an intensity, always takes on the form of extensity and is always three-dimensional. But this three-dimensionality, the dimensionality of extension, or ordinary metric space, unfolds from a more primordial spatiality, a pure, *ontological spatium*, one that, irreducible to extension, designates the intensity within extensity. As extense, every phenomenon unfolds in extensity. It is “spatial.” Yet this spatiality spatializes itself from a horizon which, while itself spatial, is not of the order of extension. It is the intense within the extense, the implicated within the explicated, or difference within identity. All dimensions within extension are “relative.” Why? Because they always relate back to their unconditioned condition, or to their absolute. Yet the absolute is declared to be such only to the extent that it provides the necessary conditions for the production of systems in actuality, or for individuations. These conditions are themselves not relative to the conditioned, are themselves unconditioned, and are therefore absolute. Extension, then, extends itself only from the depths of the transcendental itself, in the same way in which the sensible detaches itself from the problematic: if the world, or beings, is not flat, a pure surface against which things are extended, it is because its extantness is born of the depths of being, which continues to animate it as it “reduces” or resolves itself in it. The world is only flat for the gaze that remains riveted to the extended in the phenomenon. As Deleuze insists, however, the phenomenon is not reducible to its final, fully individuated state. It is enveloped by a system (a *milieu d’individuation*) of which it is only the realization, the tip as it were. It is akin to a “bright-eyed water-sprite hidden inside an emerald.”⁵⁹ Every individuated phenomenon is caught up within a system, which it continues to reveal as its own theater of individuation and which continues to sustain it, a system that is itself irreducible to its spatial extension. This depth of the phenomenon, this depth in, from, and through which the phenomenon flashes, is this primary dimension that effaces itself as it reveals

the water-sprite; it coincides with the twofold operation of difference, or the very movement of being itself. Depth is said of difference, first and foremost, and it is difference as such, or being, which is deep. And yet, depth flattens itself out, intensity extends itself, and, in this movement, a profusion of local individuations take place, a manifold of worlds is born.

But this theater of individuation, this depth from out of which phenomena flourish, is not just spatial. The unity of the great scene of the world is not just a unity of place. It is also a temporal unity. Depth unites the two dimensions of space and time in a new configuration of space-time. And the unity of the two constitutes the “theatre of all metamorphosis.”⁶⁰ The spatio-temporal dynamisms within the fields of individuation alone decide the Ideas to become actual in the differentiated aspects of the object. From this point of view, we need to distinguish between what befalls space and what befalls such temporal dynamisms. Whenever an Idea is actualized, there is a space and a time of actualization. The combinations vary. On the one hand, since the Idea has two sides (its differential relations and singular points), the time of actualization refers to the first side, and the space of actualization to the second. On the other hand, if we consider the two aspects of the actual, namely, its qualities and extensities, qualities result from the time of actualization: what is proper to qualities is that they last, and last long enough for an intensive system to allow its constitutive elements to communicate. As for extensities, they result from the space of actualization, or from the movement through which singularities are incarnated. We see how, in biology, for example, differential rhythms determine the organization of bodies and their temporal specification.

Enough has been said in relation to space. In relation to time, the following question must be raised: how are we to envisage it, if the time of actualization is indeed different from that of actuality, and if that difference is that of a “solution” of the time of individuation in the time of actuality? What time other than that of the present (albeit “modified” in the present and future) is there?

If the explication of difference in extensity unfolds in the present, which Deleuze characterizes as the “first synthesis of time,” if the present is the temporal form of extension, the implication of difference, the intensive horizon on the basis of which it explicates and extends itself, presupposes a form of time that is altogether irreducible to the present. Since, in a way, the present itself pre-supposes this other dimension of time, the latter, it would seem, would need to be equated with the past. But, in much the same way that the space of intensive multiplicities or “problems” cannot be reduced to any *actual* dimension of space, the past that is here in question is altogether different from not simply the present (which it does not presuppose), but the past itself as one of the three so-called temporal dimensions. This past is purely virtual: it is a past without present, a past

that was never present in the first place, only then becoming “past.” It is, in short, the pure form of time. Between the past, as the pure form of time, or as the temporal form of being in the process of its differentiation, and the present, the order and the relation is not a sequential one. Paradoxically, one cannot say that, between past and future, there is a relation of “before” and “after.” For such determinations are themselves rooted in the present, are valid only for a sequential or chronological conception of time. There is no denying that such a sequential order is real, that Chronos exists. It encapsulates the world of facts. And yet, in envisaging the present itself as conditioned, sustained, and traversed by an event which itself is never actually present, we recognize something like a doubling of the present in the past, something like a co-existence of past and present.⁶¹ This doubling is no mere mirroring, though. Or if it is, it is so only in the sense of Alice’s mirror in *Alice in Wonderland*, which reproduces an image in the order of extended spatiality only by adding a dimension of depth that exceeds any relation of resemblance and so of original and copy. If the past indeed doubles the present, if it repeats it, this doubling is not a reproduction or a representation, it is nothing like what is made present in the present: between (virtual) past and (actual) present, the relation is *hetero-genetic*. The past repeats itself in the present, only differently: its repetition is production, its reiteration creation.

And if, following Bergson, we can associate the past, or the virtual as intensive temporality, with the *memory* of the actual or individuated present, it is only to the extent that the memory in question remains pre-individual, that it designates the very figure of the pre-individual and the impersonal, and so is entirely pre-conscious: the past is the very unconscious of the real, or the very form in which unconscious Ideas are given. This unconscious, though, is one that precedes any individuation, including that of the human psyche. It is a cosmic unconscious, as it were.⁶² The past is *there*, in the present, but it is only *virtually* there. As such, the past does not so much come *before* the present as *with* it. It conditions it, not according to a conception of time that is exclusively chronological, not as an actual cause conditions an actual effect, or a fact another fact, but as its virtual horizon of reality: it *insists* in the effect as it produces it, implicating itself *in* it as it explicates itself *as* it. Past and present are thus absolutely contemporaneous, but only as heterogeneous, ontologically distinct forms of time. The co-existence of past and future is a paradox for representational thought alone, since it is only representational thought that presupposes that time unfolds from out of the present into the past and future. Representation is a mode of thought whose image or plane is rooted in the present and in extension. So long as thought begins with the present, and raises the question of its genesis from the present alone, and this means from systems already individuated within it, it will never be able to question them with respect to their ontological origin. It will never

be able to raise itself to the thinking of being *as* difference. It will only and always reduce difference to identity, virtual being to actual beings, and intensive configurations of singular points to extended instances of general forms. For what is the differentiating factor within difference, what is the power of differentiation implicated in the difference *between* being and beings, what, in other words, is the operation presupposed behind the “between” itself, if not a temporal dynamic, irreducible to that of a sequence? What does Deleuze mean with the words difference, differentiation, and the differentiator [*le différenciant*], if not the operation of spatializing *and* temporalizing that presides over all individuations and that is constitutive of all identities *present* in space and time?

If such is indeed the case, then there can no longer be any question of seeing an irreducible dualism in the division of the real between virtual and actual, and of identifying an aporia in the question regarding the passage between two planes separated by a difference in nature.⁶³ For it is precisely a matter of understanding how differences in kind have always already begun to resolve themselves in differences of degree, and how the process leading to the extension of intensity in space and time does not coincide with the question regarding the passage from virtual time (or duration) to extended space. There is only one process, one voice, the voice of difference itself, which is simultaneously intensive and extensive, spatial *and* temporal within intensity *and* extensity. In other words, it is a question of understanding difference itself, and this means the very process whereby systems are constituted and actualized, as a single, unified process involving various phases, or various spatio-temporal dynamisms. In that respect, it no longer makes much sense to ask whether, between intensity and extensity, between difference and identity, or between pre-individual, impersonal being and fully individuated phenomena, there is a difference in kind or a difference of degree: for if the general movement—the movement of ontogenesis itself—is from differences in nature to differences of degree, if differences in nature produce or resolve themselves in differences of degree, then we can only conclude that, paradoxically, differences in nature (intensity) equalize themselves in differences of degree (extensity). We do not have two separate “realms,” but a single process of becoming. And the “difference” between the two “kinds” of difference is difference itself, or intensity:

In short, there would no more be qualitative differences or differences in kind than there would be quantitative differences or differences of degree, if intensity were not capable of constituting the former in qualities and the latter in extensity, even at the risk of appearing to extinguish itself in both.⁶⁴

And it is with this intensity, with this difference, that thinking must begin. For with it, or from it, everything else happens.⁶⁵

The dividing line has undergone a decisive shift: there is no longer a difference between time and space, quality and quantity (this has been replaced with a difference between intensive and extensive quantities), differences in kind and differences of degree; there is only one difference, or a single process of double differentiation, which involves both kinds of differences on either side: time is both virtual and actual, space is both actual and virtual, and time-space is the membrane or contact zone between virtual and actual. This move is absolutely decisive, since it provides a way out of the residual dualism in Bergson, a dualism which Heidegger and Merleau-Ponty, each in their own way, had already succeeded in overcoming.

Time (and space) must now be thought from out of difference itself, as an intensive process that is erased as it unfolds. And so, if the space of actuality is indeed extension, and the time of actuality the present, we need to ask about the transcendental horizon on the basis of which extension and the present are made not only possible, but also actual. We need to ask about this other transcendental physical illusion, that of time as a sequence of presents, and that of space as extension. How is such an illusion produced? By illusion, let us recall that we should not understand semblance, or unreality, but an effect that erases its cause as it inscribes it, the very movement of the real itself, as unfolding. We have already seen how this horizon is the *spatium*, or depth. Space, as individuated, metric space, presupposes something that is entirely heterogeneous to it, and with respect to which extension is the actual field where it unfolds in its becoming, or in its resolution. Likewise, time, as actual time, must presuppose a “deeper” time, an “intensive” time of which actual, chronological time would be the resolution, the cancellation, *and* the affirmation. For the moment we are heading in the direction of a general understanding of depth as involving a temporal dimension. But we do not know what “time” is, just as, at first, we did not know in what the intensive nature of space consisted. All we know is that we must begin with difference as intensive quantity, and this means, in the vocabulary of *Difference and Repetition*, as “pure” energy or “energy in general.”⁶⁶ But energy itself needs its transcendental principle. We cannot simply transpose — for reasons that I have already made clear — the empirical principle of energy into the transcendental field; we cannot delineate that field after the empirical; we need to learn to decipher or decode the transcendental *in* the empirical. We need to show how empirical, individuated energy presupposes its transcendental or problematic form.

In order to carry out such a delicate task, allow me to quote at length and then comment on a passage from *Difference and Repetition*,⁶⁷ in which the relation between the transcendental and the empirical is most clearly articulated in its complexity, and from out of which the question of time and space in their pre-individual unity can be envisaged. Toward the end

of the passage, time appears in the form of eternal recurrence. The question, insofar as we have not yet come across time in its futural aspect, will be to know how the eternal return, or the pure form of the future, relates to the virtual past, or to memory as the pure form of the past. It will be to know how the present of actuality emerges as the identification of this differential past/future, how the present presupposes as its condition of reality temporal modes that are altogether different from it, and the very difference of which engenders the present. The passage in question circles back on the other passage I began by quoting in an earlier attempt to understand the movement of actualization through differentiation. This is a passage that brings together the different threads of the fabric of being thus far encountered, weaving them in a coherent yet complex whole.

It begins like this:

When we seek to define *energy* in general, either we take account of the extensive and qualified factors of extendedness—in which case we are reduced to saying “there is something which remains constant,” thereby formulating the great but flat tautology of the Identical—or, on the contrary, we consider pure intensity in so far as it is implicated in that deep region where no quality is developed, or any extendedness deployed. In this case, we define energy in terms of the difference buried in this pure intensity and it is the formula “difference of intensity” which bears the tautology, but this time the beautiful and profound tautology of the Different.

The avowed goal here is to define energy in general. But this cannot be done by looking at energy as already extended and qualified, insofar as energetic systems are always individuated on the basis of intensive processes irreducible to their extensive solutions. Whenever the transcendental principle of energy, or the principle for a transcendental energetics, is derived from actual, individuated systems, then the principle of conservation of energy prevails. This, of course, holds for the classical view of dynamics, which posits the conservation of potential and kinetic energies. It also holds for closed thermodynamic systems. This is a view governed by the primacy of the identical within extended and qualified energetic systems. If, however, we shift the focus to the standpoint of intensity, prior to any actualization, then energy can be envisaged as governed by a principle of difference, or by the differential processes that lead to its resolution in actual physical systems. What we have, then, is a differential that remains “buried” in the qualified energy. The energy that is at issue is not energy at rest, equal in its quantity, or the system as it stands in its final state, at equilibrium. The latter, as we know, does not allow for any further transformation: it is at an end and indicates the final state of any given process of individuation. Such a state, however, is not indicative of the reality of *all* systems. As “reduced” or “identified” in this way, it always conceals its own intensity, its differential or problematic

horizon, of which it is the “solution.” In such a system, the quantity of energy—heat, for example—is evenly distributed, and the differential that presided over the individuation of the system has been drawn from outside itself. In short, the system is “complete” to the extent that it has reached its state of thermic equilibrium. But behind this actualized, externalized, and evenly distributed energy (in extension and its qualities), there is energy in general, which acts as the theater for all transformations, and which is at the origin of order and life. This is what Deleuze calls the *spatium*. By that, Deleuze means the transcendental principle that presides over all empirical concepts, the spatio-temporal conditions for the generation of cosmic reality. By *spatium*, we need to understand the transcendental horizon, far from equilibrium, on the basis of which systems at equilibrium are decided and formed, the field of intensive differences constituting the energetic conditions of existence of individuals.

The passage continues as follows:

Energy in general will not then be confused with a uniform energy at rest, which would render transformation impossible. Only a particular form of empirical energy, qualified in extensity, can be at rest; one in which the difference in intensity is already cancelled because it is drawn outside itself and distributed among the elements of the system. However, energy in general or intensive quantity is the *spatium*, the theatre of all metamorphosis or difference in itself which envelops all its degrees in the production of each. In this sense, energy or intensive quantity is a transcendental principle, not a scientific concept.

From this identification of a transcendental energetics as providing the ground for the constitution of ontology as heterogenesis, there follows a general definition of the empirical as distinct from the transcendental and, with it, the possibility of a rigorous distinction between philosophy, as the science of virtual multiplicities, and the natural sciences, as the creation of purely empirical concepts. Every domain, that is, every field of solution of a problematical horizon, is governed by empirical principles. But this domain, and these principles, are the effect of the erasure or the “reduction” of a difference of intensity. The domains of solution, the “regions” of nature as well as the laws governing them, are always distributive, and this means local and specified. The space of pure intensity, on the other hand, remains absolutely general, and the transcendental principle governing it does not rule over any specific domain. Empirical concepts and principles alone govern areas of nature.

But then, we might ask, what does this transcendental principle do? It *gives* the domain to be governed to a given empirical concept:

In terms of the distinction between empirical and transcendental principles, an empirical principle is the instance that governs a particular domain.

Every domain is a qualified and extended partial system, governed in such a manner that the difference of intensity that creates it tends to be cancelled within it (*law of nature*). But the domains are distributive and cannot be added: there is no more an extensity in general than there is an energy in general within extensity. On the other hand, there is an intensive space with no other qualification, and within this space a pure energy. The transcendental principle does not govern any domain but gives the domain to be governed to a given empirical principle; it accounts for the subjection of a domain to a principle.

Thus, the transcendental principle “provides” the empirical concepts with their corresponding domain; it opens up an empirical field or a region of nature. As such, it is a *real* principle of donation, albeit an impersonal and pre-individual one. The “reduction” of the transcendental in the individuated phenomenon is at the same time the “donation” of its domain. And that it does precisely by differentiating itself. The identity of a phenomenon, or of a system at equilibrium, like the identity of the concept (*law of nature*) that governs it, is the effect of a “deeper” difference, in which this difference is resolved. And so, whereas the laws of nature govern the *surface* of the world, a surface teeming with simulacra, and presuppose the reduction, or the equalization of differences of intensity, intensity, as a transcendental principle, governs its *depth*. The spatium is this volcanic chaos which, from the bowels of the earth, erupts and, in this eruption, creates the world and its individuals. “Nature” is both world and earth, surface and depth, cosmos and chaos: *chaosmos*. Nature is this movement, this arrow, from depth to surface, and chaos to cosmos. Even in a world of leveled differences and extended intensities, however, differences remain implicated, and virtualities unactualized. Beneath the surface of nature (world) and the empirical concepts of science, there rumbles the depth of nature (earth), and the transcendental principle of pure becoming:

The domain is created by difference of intensity, and given by this difference to an empirical principle according to which and in which the difference is cancelled. It is *the transcendental principle which maintains itself in itself, beyond the reach of the empirical principle*. Moreover, while the laws of nature govern the surface of the world, the eternal return ceaselessly rumbles in this other dimension of the transcendental or the volcanic *spatium*.⁶⁸

In the end, the difference between the transcendental and the empirical would amount to the difference between a system—one that is constituted by heterogeneous series or differences that are made to communicate through difference alone (the differentiator, also referred to by Deleuze as the “dark precursor”)—and the “resolution” of this communication in identity. And yet, as we have already seen, this process of reduction or identification is never quite complete: differences return and, by

doing so, generate new assemblages (whether physical, biological, aesthetic, social, etc.). As a result, beneath the surface of the world, and the empirical laws it reveals, for which things recur identically, we need to acknowledge the other “law” of nature (as earth), according to which differences only return. A detailed examination of this difficult question cannot take place within the limited scope of this book. Such a discussion would involve a close examination of Deleuze’s texts on Nietzsche leading up to *Difference and Repetition*, as well as analyses of the second and third “syntheses” of time in that text.⁶⁹ Here the following remarks will suffice.

A moment ago, Deleuze was contrasting the “flat” tautology of extensity, which governs the laws of nature and the purely empirical concepts (or “functions”) of science, with the “deep” tautology of intensity, characterized by its differential economy. This is the point at which energy becomes a transcendental principle, one that carries within itself the sole potential for change and transformation, for pure *becoming*. A fully individuated system can no longer transform itself, and this precisely to the extent that its differential potential has been exhausted. This is precisely the point at which a link with time can be established. For it is only as an *intensive* quantity that energy, as constitutive of processes of individuation, can mark the site of a becoming. Specifically, intensive quantities, differences, mark the possibility of becoming only to the extent that they are made to communicate or to enter into a relation through a “differentiator,” a *Sich-unterscheidende*, which is precisely not a unifying principle or a common denominator through which differences would be joined together, but the very measure of their difference:

Given two heterogeneous series, two series of differences, the precursor plays the part of the differentiator of these differences. In this manner, by virtue of its own power, it puts them into immediate relation to one another: it is the in-itself or difference or the “differently different”—in other words, difference in the second degree, the self-different which relates different to different by itself.⁷⁰

In the vocabulary of physical or biological systems, we would say that this “disparate” (*dispars*) precipitates the system into a new state by provoking a “resonance” of the series and forcing its movement. For Simon-don, and in the case of the salt crystal, the external element that leads to the transformation of the system is the grain of salt, which, one molecule after the next, precipitates the oversaturated solution into a new crystalline structure.

But the system in question might as well be literary. Let me depart from science for a short while and turn once again to Proust’s *A la recherche du temps perdu*. There, Deleuze argues, we have a number of series, echoing one another: for example, the former present (Combray as it was lived) and the present present in the experience of the madeleine. Be-

tween the two, there is evidently a resemblance (the madeleine, breakfast), and even an identity (the actual taste of the madeleine, self-identical across the two moments). But the question, and indeed at first the mystery, is to know how these two series, which do indeed resemble one another, communicate. By virtue of what principle? Their resemblance and identity? No, for then there would be no mystery, and none of the extraordinary depth of feeling experienced by the narrator. So long as we merely look at what is actually there in the series, at the qualities and their similarities, so long as we are able to only compare between two fully individuated experiences, we cannot access the mystery of their communication. What allows them to resonate and communicate is a third term, which disappears in the process of this communication, and which, when grasped, only in and through the work of art, will precisely be grasped as that which, nowhere actually given, constitutes the form of donation itself: pure time ("a little time in its pure state"):

The taste [of the madeleine] possesses a power only because it *envelops* something = x , something which can no longer be defined by an identity: it envelops Combray *as it is in itself*, as a fragment of the pure past, in its double irreducibility to the present that it has been (perception) and to the present in which it might reappear or be reconstituted (voluntary memory). This Combray in itself is defined by its own essential difference, that "qualitative difference" which, according to Proust, does not exist "on the surface of the earth," but only at a particular depth.

This is the depth of the transcendental I have been referring to and which, according to Proust, the work of art alone is in a position to recover. Deleuze goes on:

It is this difference which, by enveloping itself, produces the identity of the quality that constitutes the resemblance between the series. Identity and resemblance are therefore once again the result of a differentiator. And if the two series succeed one another, they nevertheless coexist in relation to Combray in itself as the object = x which causes them to resonate.⁷¹

Insofar as the precursor is that through which the series communicate and generate an actual experience, it is also the time in which they co-exist: not only do they co-exist in the precursor, in this time other than chronological, but this other time is equally (non-)present in them (displaced and disguised); it is itself their anoriginary, a-temporal temporal origin; it is present in each, "there" in a way, but as a non-present presence, a *virtual* presence. Nowhere to be found as such, it nonetheless allows the sense to communicate, and to produce an effect which alone can signify the differentiator. And if, as Deleuze emphasizes, the series are able to co-exist through their difference, it is no longer possible to conceive of

one as originary and the other as derivative, as model and as copy, respectively. For it is absolutely simultaneously that the series are grasped as co-existing, outside any condition of succession in time, and as different, outside any condition under which one would enjoy the identity of a model, and the other the resemblance of a copy. Once again: identity and resemblance are only the effects, not the condition, of the operation of difference, which alone is “originary.” And this, Deleuze insists, is precisely the aspect under which “the eternal return is revealed as the groundless [*sans fond*] ‘law’ of this system.”⁷² If the eternal return is a “law,” it is precisely a law in quotation marks: not a law of nature, or an empirical principle, but the law of originary chaos, the system of differences that grants empirical principles—specifically those of identity and resemblance—their domain of application:

The eternal return has no other sense than this: the absence of any assignable origin—in other words, the assignation of difference as the origin, which then relates different to different in order to make it (or them) return as such.⁷³

If the eternal return is indeed a “law,” it is the law of groundlessness itself, the metaphysical background against which the sensible ungrounds itself (*s’effonde*). It is with the repetition of difference as eternal return that the metaphysics of *effondement*, which I began by identifying with the Deleuzian enterprise as a whole, is truly achieved:

For eternal return, affirmed in all its power, allows no installation of a foundation-ground [*fondation-fondement*]. On the contrary, it swallows up or destroys every ground which would function as an instance responsible for the difference between the original and the derived, between things and simulacra. It makes us party to a universal *ungrounding* [*effondement*]. By ‘ungrounding’ we should understand the freedom of the non-mediated ground, the discovery of a ground behind every other ground, the relation between the groundless [*sans-fond*] and the not-grounded [*non-fondé*], the immediate reflection of the formless and the superior form which constitutes the eternal return.⁷⁴

What returns, and keeps on returning, is the dark precursor, not this or that precursor, but the form of the precursor as the pure form of time, as that through which time comes about, that through which there is becoming. It is the point at which past and future merge into one another, the point at which time is identified with the eternal recurrence of difference. For the eternal return is precisely and only that of difference, of the differentiating in difference, which allows everything to co-exist: the present with the past, the past with the future, in a cycle or a wheel without beginning or end, origin or term, or only that of an irreducible chaos spiraling into eternity.

With Nietzsche’s eternal return, it is the very mystery of becoming that

is unveiled. It alone forces being to become, it alone causes the singular event that shakes a system and forces time to step outside itself and rush toward the future. The destiny of an individuated or differentiated system is to de-differentiate and disaggregate itself, and thus to run counter to its own entropic death. What is preserved of the present, what is preserved as past, is therefore precisely what will be reactualized in a new present, in a new process of individuation. What is preserved are the individuating factors which every individual carries with it:

At the moment when they are explicated in a system (once and for all) the differential, intensive or individuating factors testify to their persistence in implication, and to eternal return as the truth of that implication. Mute witness to degradation and death, the centres of envelopment are also the dark precursors of the eternal return.⁷⁵

What returns, then, or what accounts for becoming, and with which being coincides, thus allowing ontology to reconcile itself with time, is the dark precursor that brings differences together, expresses them. What returns is difference itself, or the differentiating of difference. This is what is repeated. Specifically, this is what, in being repeated, accounts for actual change. For there is also the repetition of the identical, the laws of nature, which govern superficial repetition, repetition as individuated. What returns, and always differently, are the virtualities, and the individuating factors:

The eternal return is not the effect of the Identical upon a world become similar, it is not an external order imposed upon the chaos of the world; on the contrary, the eternal return is the internal identity of the world and of chaos, the Chaosmos.⁷⁶

Yet here we must be very careful and acknowledge the essential difference between two orders of temporality: the temporality of the actual, or extended temporality, and the temporality of becoming and change, or intensive temporality. We need to distinguish between two orders of time, which do not run parallel, as two radically distinct orders, but which are in a relation of *production* and *presupposition*, and thus of repetition without identity. And such is the difference between the temporality of univocity, which presupposes repetition without identity, and the temporality of analogy or equivocity, which can think of time only within the parameters of reproduction and identification. We need to acknowledge the irreducibility of time to the present of an actual realization, since the present alone cannot account for the transformation of the present into a past, or indeed for its transformation into another present in the future. And so, beneath the literally superficial temporality of the world, which governs and assembles facts and states of affairs, there rumbles another

temporality, a volcanic energy from the other side of the world. Beneath or perhaps in the very lining, as the very lining of the world and of its actuality, there lies its transcendental shadow—the shadow of earth. The world itself, then, even in its scientific conceptualization, is one that presupposes this other dimension, at once canceled, withdrawn in the unfolding of the world, and implicated in it.

But doesn't this amount to yet another form of Platonism? Is the transcendental, as envisaged by Deleuze, ultimately not yet another form of transcendence, albeit a transcendence of the underworld, a transcendence of earth? Isn't the eternal return the most metaphysical of thoughts, as Heidegger argued at length?⁷⁷ Is transcendental philosophy *as such* not ultimately a philosophy of transcendence?⁷⁸ These questions need to be taken seriously and would require a long and patient response to Heidegger's deconstructing of Nietzsche's idea, and to the way in which it is taken up by Deleuze, as well as to Badiou's critique of the Deleuzian conception of immanence. Unfortunately, such responses cannot be developed here. Regarding the first point, suffice it to say that the Deleuzian conception of the eternal return is consistent with his Bergsonism, and so with his attempt to identify a level of time over and beyond that of chronology and presence. As for the second critique, I do not think that the very *form* of the transcendental, where and when it identifies conditions of reality, and accounts for a genesis of beings as a whole, amounts to denying the possibility of radical immanence. Indeed, to identify something like an excess, a "reserve," or a supplement at the heart of the actual—one that the actual itself cannot reduce, but of which it is the reduction—to envisage the present itself, and all individuations that take place within it, on the basis of a spatio-temporal process that is itself in excess of any actual present does not amount to reinscribing an autonomous and independent first principle that would resemble what it produces and conditions. The condition here is itself not individuated; it is pre-individual and impersonal, and so cannot be assimilated to any thing or being, to any actual, existing order of reality. In the passage I have just quoted, Deleuze makes very clear that the transcendental is not a separate domain, but only the process that constitutes a domain for an empirical principle. It is therefore not *another* and perhaps *higher* reality, the intelligible world, for example. Rather, it is the other, invisible side of the phenomenon, the shadow of the world.

Time, then, seen not as the individuated time of the actually present phenomenon but as the pre-individual and impersonal time of the virtual from out of which the present is born, is itself the time of *becoming*. The distinction between becoming and actual, sequential time is absolutely decisive and is one of the most fruitful concepts opened up by Deleuze. Of course, it is not a concept invented by Deleuze, whose own conception of becoming is shaped only through a series of readings and

appropriations of some of the most significant thinkers of becoming, among whom Nietzsche, Bergson, and the Stoics figure prominently.⁷⁹ The specificity of his thought on that point, however, has to do with the transformation of that concept into a transcendental principle on which, ultimately, an entire ontology rests. Yet whether the source of inspiration is Bergson, Nietzsche, or Stoicism, the fundamental idea remains the same: with respect to time, any discourse that takes its point of departure in the present alone, and derives the other two dimensions from it, identifying them as mere “modifications” (to use a phenomenological vocabulary), will lead to an essentially sequential and chronological conception of time. In the same way that the identity of the actual phenomenon is not a variation of the identity of its essence, in the same way that difference does not follow from the identity of the concept, past and future are not modifications of the lived, phenomenological, or actual present. Rather, it is the identity of the present that follows from the essentially differential or virtual nature of the pure past as memory and the pure future as eternal return which alone can account for becoming as the possibility of transformation and evolution. The privileging of the actual present lies at the very heart of the representational conception of history, and this means, also, of philosophy itself as a historical process. It inevitably leads to a “historical,” and actually historicist, interpretation of change and evolution, which negates the reality of becoming: representation (metaphysics) is historical in essence. We saw how Heidegger’s own conception of *Geschichte* is an attempt to move away from this sort of chronological conception of time, and from what he calls the metaphysics of presence, and how he attempts to distinguish a “history” (*Geschichte*) of being from any actual, sequential, and present-based conception of *Historie*. Something very similar is going on in Deleuze, who opposes an essentially geological (or stratigraphic) conception of time to the merely linear or chronological one (the time of facts and world events). The present, and so the entire representational discourse that springs from it, is only an effect, indeed, the surface effect of a temporal phenomenon, the temporalizing of which is infinitely more complex than that of the mere succession of present moments. The time of the world, the time of clocks, measurable and recognizable, the time of individuated phenomena, is merely the surface effect of a subterranean, or perhaps a truly earthly, reality, after whose quasi-volcanic activity philosophy is to map itself. This intensive time, beneath the extended time of the present, is the time of earth, the time of the shadow or the *oscuro* from which the *chiaro* of the phenomenon comes forward. It is always against the background of the obscurity of earth that the clarity of the phenomenon shines forth. For it is indeed against the backdrop of this spatio-temporal event prior to any present, which is the horizon of eventuality or eventfulness as such, that phenomena unfold. We have seen how this is the

case with respect to actual physical systems, the event of which is decided in a problematical or dialectical space and time that is irreducible and heterogeneous to that of their aesthetic solution. But this process holds for all phenomena, whether physical, biological, social, or aesthetic.⁸⁰

The suspicion of Platonism has perhaps not entirely vanished, though. Why? Because in identifying such a transcendental principle, in isolating this “other” time, is Deleuze not simply projecting something onto the order of reality? Is he not reiterating the philosophical gesture that consists in positing a reality behind, beneath, or above the actual, in order to account for it? Should we not, once and for all, come to the realization that the actual is the whole of the real, as Hegel insisted? On what authority can Deleuze claim that the eternal return “is not a law of nature,”⁸¹ and consequently that there is something in excess not of nature itself, but of its laws, something that escapes the rule of law? Would the virtual as described by Deleuze not be a last and desperate attempt to save the noumenal and the possibility of ontology with it? With the vanishing of those worlds posited behind the phenomenal, is philosophy itself not condemned to disappear, at least as ontology, and to become only what Quine called a dequotation, or what Churchland thinks of as the abstract or conceptual formalization of the scientific truths? In other words, is there still room for ontology, and this means for a philosophy that is not just ethical, or political, or epistemological, etc.?

Difference is the only recurring feature of being, the only trait of being that keeps on recurring. It is, if you will, the essence of being. Yet because it is difference alone that recurs, it recurs always *differently*. The eternal recurrence of being is the exact opposite of the eternal repetition of identity: it is, rather, the recurrence of the Same *as* difference. And, by definition almost, difference recurs only by reinventing itself, by producing new lines of divergence and new cases of difference. If the eternal return is not a law of nature, but a transcendental or ontological principle, it is precisely to the extent that it is neither qualitative nor extensive, but purely intensive:

It is because nothing is equal, because everything bathes in its difference, its dissimilarity, and its inequality, even with itself, that everything returns—or rather, everything does not return. What does not return is that which denies eternal return, that which does not pass the test. It is quality and extensity which do not return, in so far as within them difference, the condition of eternal return, is cancelled. . . . So too the identical, the similar and the equal, in so far as these constitute the form of indifference.⁸²

Clearly, Nietzsche was interested in the energetics of his time, and it is here that much of his vocabulary finds its origin. What he took from the science of intensive quantities, however, was a genuinely philosophical

and specifically ontological possibility—the possibility of affirming the reality, and the *highest* reality of chaos. Only the thought of eternal return could affirm this reality. And such is the reason why, for Deleuze, after Nietzsche, the thought of eternal return constitutes the highest thought, *der gross Gedanke* and the highest form of affect, *die hohe Stimmung*.⁸³ It is the form of sensibility, the disposition that corresponds with the thought of the being of the sensible, with this superior form of empiricism I began by evoking. With this thought the univocity of being is given a temporal dimension, and difference and repetition, or the chaos behind and beneath the order of the world, can be affirmed: “Representation essentially implies an analogy of being. However, the only realised Ontology—in other words, the univocity of being—is repetition.”⁸⁴ Repetition could not be opposed to representation more clearly. Whereas the latter stands for the thinking of identity and the analogy of being, the former is made to coincide with the highest possibility for thought. The prefix has changed meaning and direction: in representation, difference is said only with respect to identity, whereas in repetition the univocal is said with respect to that which differs. What returns, and always returns, is the originary and singular event, the event of being, the chaos that, in returning, creates order.

Let me take a step back and see where our analysis of Deleuzian thought as it unfolds in and around *Difference and Repetition* leaves us. I began by saying that what interests me the most, in light of the general ontological problematic that governs this book, is the way in which Deleuze is able to give a new impetus to philosophy’s relation to science. This new impetus involves a radical transformation of the nature of philosophy itself, one that distances itself from both a metaphysics in the modern, Cartesian sense of the term, and a philosophy of science in the more contemporary sense. Philosophy is neither metaphysics, in the sense of laying and securing the ontological ground for the practice of natural science, nor philosophy of science, in the sense of merely clarifying and exposing the concepts of science. There is no longer a ground, a subjectivity, a thinking thing, qualitatively different from the real itself, and to which the real would be *given*. There is only the real, which is univocal. And if philosophy continues to identify a transcendental horizon of the real, that horizon is entirely immanent to it—immanent, and yet somehow in excess of it. It is this excess or surplus of immanence that Deleuze calls the virtual. This excess is not a transcendence, since it is or unfolds only in the explication of the actual itself. The sense of being that is presupposed here marks a decisive departure from the metaphysics of substance and essence. Ontology in a Deleuzian sense is not *ousiology*. The sense of being that Deleuzian ontology brings out revolves entirely around the concept of difference. This is a

concept that, first of all, designates the space of philosophy as situated between being and beings, and characterizes the nature of their relation. This relation is one of production through differentiation. Nature, as revealed in natural science, testifies to this fundamental heterogeneity, to this principle of difference. And because being (or the virtual) is not the self-identity of substance and essence, because it is eventful, it is not the ground of beings, but that in which beings unground themselves. Being is the ground without ground, the abyss or the originary chaos whence order, identity, and continuity emerge. Deleuzian ontology is a metaphysics of ungrounding. It is not fundamental ontology, but, we could say, non-fundamental ontology. It is an ontology of groundlessness. This also means an ontology that no longer shies away from becoming as the one and only modality of being. Philosophy, then, aims to describe being as it unfolds; it bespeaks a reality *in the making*. And this is where it *encounters* science. It does not produce science; it does not ground science—it encounters it. What does this mean? It means that, from its own horizon and its own concepts, it intersects with the path of science itself. We need to be more precise still. We have seen how modern science reveals a sense of being, or a modality of nature that can no longer be associated with the central metaphysical concepts of substance and accidents, extension and actuality, form and matter. We have seen the extent to which science describes a nature in itself, yet a nature that is not or no longer object-like. This is a nature that seems essentially open, and the openness of which testifies to this excess of immanence Deleuze calls the virtual. Science concerns itself with the modes of actualization of the virtual. It follows the movement of the real itself, from the virtual to the actual; its functions and equations formalize precisely this passage, this transformation. Philosophy, however, is concerned primarily with the virtual; its path is opposite to that of science: from the actual, it returns back to the virtual, which it sees as still implicated or folded into the actual. Science unfolds from the virtual to the actual, and philosophy from the actual to the virtual. In its own movement, philosophy unveils something like the unthought of science itself, something which science itself cannot think, but from which it thinks. There is, then, in science itself, something that science cannot circumvent: a past horizon, a source from which it flows, and which it cannot look back upon. Both ontogenesis and science are on the same side of the massif of being; both are attached to being in itself. Nonetheless, they differ in their expression of it. Philosophy will always want to return to the virtual, to the problem before the solutions, where it believes everything is played out. Such is the reason why, for Deleuze, questions and problems really define philosophy. Questions and problems must be very carefully constructed. They require time. They are never given. What is given is always the

solution, the actual. The work of thought begins with the return upstream, the climb back up on the massif of being.

Science, which operates with functions and with a view to establishing what Deleuze and Guattari call “a plane of reference” for natural phenomena, follows the path of virtual actualization.⁸⁵ This a path that leads from the chaotic, in which potentials are being constituted, to its actualization in states of affairs. This is the movement I have tried to trace, following for the most part Deleuze’s analyses in *Difference and Repetition*. Whereas the scientific function *effectuates* the real, the philosophical concept *counter-effectuates* it. As I have already suggested, science is able to sketch a plane of reference for states of affairs by ascribing them functions that describe their trajectories along a set of coordinates. It is able to do this only by taming the chaos, by slowing down processes that are infinite in speed. As Prigogine and Stengers have convincingly stated, using the example of the crystallization of an overly melted liquid, liquid at a temperature inferior to that of its crystallization: “In such a liquid, small germs of crystal take shape, but these germs appear and then dissolve without any consequences.”⁸⁶ What characterizes chaos, then, is not so much its lack of determinations as the infinite speed with which they take shape and vanish. Chaos is not so much disorder as the infinite speed with which all burgeoning forms within it dissolve. It is not so much an absolute void, or a nothingness, as a *virtual* reality, containing all possible particles and drawing out all possible forms, which spring up only to disappear immediately, without reference. And it is precisely the task of science to give such particles and forms their plane of reference. Science extracts from virtual chaos a plane of reference, which describes phenomena not in their virtual state, but in their actualized state, in what Deleuze refers to as their state of affairs. Science relinquishes infinite speed in order to gain a reference that has the capacity to actualize the virtual. Deleuze emphasizes this *slowing down* of the virtual, with respect to both the constitution of matter and the invention of the scientific function: it is indeed through a slowing down that matter is actualized, but it is through the same slowing down that scientific thought is able to penetrate it with functions.⁸⁷ And even where, as in the case of particle accelerators, science approaches the speed of light, it is precisely with a view to revealing how matter was actualized through a series of slowing-downs. Similarly, a particle will have a position, an energy, a mass, and a spin value, but only on the condition that it receives a physical existence or actuality, or that it “touches down” in trajectories that can be grasped by systems of coordinates. But these presuppose proto-limits constituting the slowing-down within chaos, and on the basis of which we can count and draw a plane of reference. The speed of light, absolute zero, the quantum of action, the Big Bang all constitute such limits, and act as the condition for the originary slow-down. A function, Deleuze argues, drawing on cinematographic

imagery, is a Slow-motion (*Ralenti*), and the plane of science is a freeze-frame (*arrêt sur image*). These images need to be clarified. For it is not as if, as Bergson once affirmed, science deals with the “already-made” and philosophy with the “being-made.” Science thinks movement and individuation as such, and not just individuated systems. Its functions describe critical thresholds at which transformations take place and systems evolve. The difference is rather one of speed: science slows down the real, whereas philosophy speeds it up. And the acceleration of philosophy, its movement and rhythm, opens onto the domain of becoming. Becoming has nothing to do with time, at least with the time of the world, the time of facts strung together along the succession of instants. But this time, linear time, is not even the time of (contemporary) science: it is a time invented by philosophers. The time of science is indeed not the stratigraphic time of philosophy, where “before” and “after” are superimposed, and not juxtaposed. Equally, though, it is not the time of the sequence of instants on a single line. Rather, and as we have seen in connection with living organisms as well as with thermodynamic systems, science displays a time described by Deleuze as “serial” or “ramified,” that is, a time in which “the before (the previous) always designates bifurcations and ruptures to come, and the after designates retroactive reconnections.”⁸⁸ This is a time of ruptures and bifurcations, but one in which, retroactively, later phases can appear as particular cases of earlier phases, or vice versa. And the history of science, with its string of proper names, follows such a pattern. Its list of proper names marks a *juxtaposition of reference*.⁸⁹

This is unlike the history or, more accurately perhaps, the *time* of philosophy, whose proper names designate a *superimposition of layer*. And this is because philosophy is entirely concerned with the reverse process of that of science. It is concerned with providing *consistency* to chaos. As Deleuze emphasizes, the virtual is no longer the same: it is no longer the chaotic virtual, but the virtual rendered consistent. It is concerned with extracting from everything that happens, and thus from states of affairs, bodies, and even lived experiences, not *references*, but the *Event*, this share of the real that eludes its own actualization. And the event is not so much what takes place or unfolds *between* two instants, two temporal coordinates that would allow us to map its trajectory, as it is the *entre-temps* or the inter-stitial *topos* of pure becoming. This time of becoming is thus an *hors-temps*, a *temps mort* or a time-out, in which nothing takes place, for it has already taken place and is always also to come. Nothing *happens* there, yet everything *becomes* and changes. In short, it is the “immensity of empty time” as co-existing absolutely, yet never quite coinciding with the instant, with the actual time in which it is actualized.⁹⁰

By consistency, then, we need to understand the virtual plane from out of which order takes shape, but which is never given as such and as a whole, which always needs to be wrested from the virtual. Philosophy is

the activity that consists in articulating a field of immanence, not from the phenomena themselves (for this always leads to the reinscription of transcendence, to the privileging of one being or individuated instance among others), but from the virtual itself. The virtual is there, given, but its immanence and consistency must always be extracted or wrested from it. The philosophical concepts come to populate the plane of consistency as marking the singular points, the events that are proper to it and decisive for it. Such is the extent to which concepts designate events, which are neither essences nor states of affairs. For Deleuze, concepts are virtual realities, and as such can be confused neither with the transcendence of essences or forms, nor with the immanence of things. And if the concept is, as Deleuze admits, “vague” or “fuzzy,” it is not because it is imprecise or not distinct, but because it has no *reference*, whether to the states of things (with which science is concerned) or to the lived experience (*le vécu*) of a consciousness, a being-in-the-world or a flesh, as phenomenology believes. The concept, like the Idea or the problem as described in *Difference and Repetition*, is essentially nomadic, or vagabond.

And so, we need to distinguish clearly, and retrospectively as it were, with respect to my own analysis of *Difference and Repetition*, between two things. On the one hand, there is the movement of the real, or the emergence of individuated order out of virtual chaos, which takes place by way of differentiation. This is a process in which space and time are slowed down, and thus *metricized*, and actual physical systems generated through phase transitions. These are the systems or phenomena which the sciences describe, and for the description of which they develop a number of propositions. On the other hand, there is the counter-effectuation of this process, or the movement of thought itself, which returns from the finite, coordinated existence of physical systems, or states of affairs in general, to their infinite virtual horizon, populated with intensities or events alone. Scientific thought moves from the virtual to the actual by slowing down the real; philosophical thought (along with artistic thought) moves from the actual through the virtual, or from states of affairs to events, through acceleration. The speed of thought is infinite, or better said perhaps, otherwise than finite: such is the reason why the work of thought seems so slow at times, why its rhythm seems to be out of beat with the speed of the world and our increasingly fast pace within it. We must not confuse the rhythm of thought with that of “life,” the time of earth with that of world, the speed of the concept with that of the function. Everything seems to be taking place much faster in the world of “facts” and in the community of scientific researchers. But the *actual* slowness of philosophical thought must not be mistaken for the infinite speed at which philosophical concepts operate *virtually*. The rhythm of philosophical thought is simply unlike that of the world and scientific thought.

Once this has been established, we see how the path of the scientific function and the philosophical concept differ but also intersect. Whereas the scientific function articulates a plane of reference for states of affairs by extracting that plane from virtual chaos, whereas, following the movement of the real itself, it moves from the virtual to the actual, which it describes as taking place within a world of coordinates, the philosophical concept articulates a plane of consistency in which impersonal and pre-individual singularities or events are the ultimate reality. This is a reality in which the principles of classical metaphysics no longer rule: to the identity of essence, we have substituted the difference of singularities; to the permanence of substance, we have opposed the chaotic rumbling of being; to the opposition between the actuality of substance and its accidents, we have substituted the creation of physical and chemical systems as crystallizations of virtual events. The movement of thought is not the movement of the real, therefore; and it is perhaps the illusion of speculative dialectics to have believed that it was, when, in fact, it was only that of the actual. Not even that: for science, with its emphasis on processes of differentiation, extension, and adjunction, has proven to be closer to actuality than dialectical thought.

Science, as I have tried to show, is the heir of classical metaphysics, which it extends and in which metaphysics consumes itself. It is the metaphysics of after metaphysics, the science of actuality as devoid of transcendence, or the becoming matter of spirit. Of that which is *actual*, or even in the process of being actualized, there is nothing, at least in principle, which science cannot clarify, once it has liberated itself from the principles of identity and permanence, as well as from the concepts of essence and extensity. Yet the movement of thought is altogether different from that of science, and the creation of concepts needs to be distinguished from the invention of functions: it is counter-natural (and, at the most decisive level, literally para-doxical), in that it *counter-effectuates* the real. It moves upstream, while the scientific function moves downstream, with the real itself. The real indeed runs downstream: from the chaotic virtual to individuated states of affairs. But thought, like art and poetry, runs upstream. *Retour amont (Return Upstream)* is the title of a collection of poems by René Char. But it is also, perhaps, the definition of poetry and thought itself, the very designation of the movement of thought and art. Like art, thought runs and moves at infinite speed, and its run takes place not in time, in the successive time of instants, but behind time as it were, between states of affairs as individuated in time. Its time is that of the event, which takes place not so much in space and time as in the atopic space and the achronic time of the virtual. This is the time of pure intensity, for which no coordinates and no reference can be provided.

Conclusion

The path has been arduous and demanding, and the time has come to bring these pages to a close.

I began by claiming that philosophy's most dangerous temptation today consisted in presupposing its own object, in regulating its discourse on the discourse of other disciplines, in short, of constituting itself as a meta-discourse (and not a metaphysics) grafted onto the discourses of other disciplines. Much of philosophy today seems like a great lady fallen into destitution, who knocks at every door, and especially at that of the sciences, begging them to give her some function, some task to keep her busy, however modest it may be; for that is better than disappearing altogether. But is it? Philosophy would rather become business ethics, or transcen-*dental* ethics, than vanish in the face of the overwhelming successes of the natural sciences and the omnipresent reality of the business paradigm. It will undergo the most meaningless metamorphosis rather than give up or reinvent itself. At a time when there are literally dozens of branches of philosophy, each specializing in one aspect of what used to be a unified field, each limiting itself to being philosophy *of* science, or art, or ethics, or economics, etc., I wanted to investigate the possibility that philosophy be *of* everything. What does this mean? It doesn't mean that philosophy must become encyclopedic, that it must take it upon itself to synthesize the totality of existing discourses. It is not the sum of all meta-discourses. Nor does it mean, for that matter, that it must take beings as a whole for its object, and question them from the point of view of their essence or beingness. This is precisely what distinguishes it from classical metaphysics, or *ousiology*. In that respect, then, and in a certain sense, philosophy is more of nothing than of everything. For its object, which is

at once everywhere and nowhere, is precisely not a thing, precisely not an object. If anything, philosophy is “of” the question and the problem, not because it asks questions and raises problems (the police also ask questions, and experts in communication also raise problems), but because the problematic, or the transcendental, is where or that on the basis of which one begins to think. As such, philosophy is indeed “of” everything: of the sciences and of art, of ethics and politics, of the mind and of the *socius* . . . And if it is “first” philosophy, it is no longer so as the science regarding the highest principles, the first causes, and the worthiest being: in other words, it is no longer so as onto-theology, but as ontogenesis *and* onto-epiphany. “First” designates here the *a priori*, pre-individual, and impersonal which philosophy brings out in every phenomenon. Philosophy is concerned with the condition of reality (and not of possibility) of all things real, the horizon which, while operative in all aspects of the natural and spiritual world, cannot be limited to a single aspect of it. It is as such that philosophy is ontology. This, however, as I have tried to demonstrate, it can be (or become) only by twisting free of the classical and dominant interpretation of ontology, which I labeled *ousiology*, or onto-tautology. This is the discourse that, while aspiring to take being as its object, well, does precisely that, that is, turns it into an object, thinks it as if it were a thing, thus eradicating its very point of departure and vocation, namely, the difference between being and things, reducing it to the identity of substance and presence. And so, naturally, the ontico-ontological difference defined the limits of our problematic. This is where, I claimed, philosophy is truly at home. In establishing its residence there, it was seen to undergo a double transformation, which we saw carried out in the thoughts of Heidegger and Deleuze, respectively.

With Heidegger, we witnessed a radicalization of phenomenology as well as a complete renewal of ontology. The greatest achievement of phenomenology, Levinas once argued, in what was already a Heideggerian interpretation, is to have freed a different conception of being.¹ Against naturalism, which constituted the dominant ideology at the turn of the twentieth century, and which conceived of being in terms of the object of physics alone, Husserl revealed a sense of being intimately bound up with the lived experiences of intentional consciousness. This, phenomenology argues, is the sense that naturalism itself presupposes, the very soil on which it grows, but which it fails to acknowledge. This is the very soil that art seeks to bring to the fore, the soil it seeks to present more directly, as Merleau-Ponty, among others, and after Heidegger, made abundantly clear. Following the Husserlian demand that we return philosophy to the things themselves, that we overcome naturalism by returning it to its hidden origin, Heidegger was concerned to think the primordial sense of being, as it unfolds for us, pre-theoretically. In so doing, he pushed the boundaries of ontology and phenomenology ever further, further away

from consciousness and into existence, and then from existence into the truth of being as such. The “sense” of being, once anchored in the life of consciousness, and subsequently in that of the existent being (*Dasein*), progressively came to be identified with the operation of difference itself, that is, with difference as the originary event of being, as the key to understanding the enigma of presence. Specifically, difference came to designate the spatial-temporal dialectic, irreducible to that of presence or actuality itself, from within which the event “world” occurred. And it is also in the process of developing this differential ontology that Heidegger came to redefine the boundaries and the destiny of the human itself, in a way not seen since Nietzsche. Specifically, the human came to be seen as the being exposed to the openness of the truth of being, destined to become the founder and preserver of that groundless event. *Ereignis* is the name that Heidegger gives to this immemorial and literally decisive assemblage between being and man.

While recognizing the uncircumventable nature of Heidegger’s move and its philosophical potential—and while attempting even to radicalize it—it also became a matter of knowing whether, in the light of much of twentieth-century science, the anti-naturalistic position of the Husserlian legacy should not be revisited, and perhaps even called into question. In other words, through a relatively detailed account of the state of contemporary physics and biology, it became a matter of asking whether, first, contemporary science, while heir to modern science and even classical metaphysics, was not also overcoming some of its most entrenched metaphysical presuppositions, and, second, whether in doing so it didn’t also reveal its own ontological and differential. By turning to the thought of Deleuze, we became in a position to locate our ontological problematic within science itself. I have tried to show the extent to which, when understood productively (and this means beyond its ontological constraints), and not from the point of view of systems already individuated within matter, nature could be unified under the concept of difference as designating processes of differentiation. Material nature, it turned out, is generated through a series of differentiations, both pre-individual and individuating. Science, too, it turned out, can be seen as a happening of truth, and not simply in the sense of the unfettered unfolding of its *non-essence* (*Un-wesen*), as Heidegger claimed. Beside the ontology of the *for us*, then, in which the fate of the human is decided, and in which the human, indeed reinvented, continues to play the role of a receiver and an interlocutor, a correspondent and an irreducible pole of the unfolding of being, a space needed to be freed for another ontology, or another side of being, not so much for us as *in itself*. From the perspective of the latter, being is no more “at home” in the human, or in the artwork, than it is in the dog on the street, or the rock on the mountain. From this other, material side of nature, all beings are strips or phases of a single, generating

reality, and there can be no privileging of the assemblage man-being over other assemblages. All partake in the same Event. By turning to Deleuze's thought, then, I hope to have shown that ontology can and must be as open to naturalism as to phenomenological intuitionism, as open to science as it is to art.

There is no synthesis, no third moment that brings the two sides of being together. Nor is there something like an order of grounding and derivation between them. The structure that relates the two sides of being is not so much vertical as it is horizontal, not so much one of superimposition as one of juxtaposition. It is a matter of two sides or slopes, two faces of one and the same massif, which communicate with one another only in and through their difference. There is no movement, no progression from one side to the other, but a co-existence of differences. Thought is equally present on both sides. It has no ambition other than to extract the share of eventfulness that is contained in every phenomenon. It "redoubles" science as well as art. It moves upward on the slope that the real moves downward. It begins with the phenomenon, in order to reveal the noumenon that forgets itself in it. It situates itself on the cusp of the phenomenal and the noumenal, of the actual and the virtual. Whether epiphanic or genetic, poetic or mathematical, difference is the difference between being and beings, the difference between the pre-individual horizon of being and the individuated being, to which being is at once immanent and transcendent. In both instances, difference unfolds between actual space-time, the space and time of the world and its phenomena, and the space-time that is simply otherwise than present—the space and time not of actuality, but of virtuality, not of the world, but of the earth, not of the phenomenal alone, but of the noumenal, too, which hides beneath the phenomenal, while enabling it to be. Ultimately, difference is the name for the other space and the other time—the time and the space that unravel in the phenomenon as the phenomenon unravels in actual time and space. In both instances, being signifies the spatio-temporal dimension "before" beings, the pre-individual horizon from out of which the individual is being shaped. This is the sense in which being is an event. Being has come to define and identify the very process or the very coming about of beings. It has come to define the eventfulness, or the spatio-temporality that presides over the coming about of actual phenomena. Naturally, almost inevitably, the analysis came to focus on the spatio-temporal dynamics and dynamisms constitutive of poetic and mathematical nature, of truth and production, of epiphanic phenomena and material systems. It came to focus on time and space (and their interaction) as the field in and through which events crystallize, the world takes shape, and transformations occur. What Heidegger calls the "moment," and Deleuze "depth," are precisely not a point along the chain of chronological time, but fields of individuation,

that is, intensive boundaries within which processes of individuation occur. These are the processes that regulate nature, no matter from which side we look at it, whether for us or in itself, whether as *aletheia* or *genesis*, as truth or production. Space and time are the only two attributes of nature. Its modes and its events all presuppose time and space, which, in their interaction, constitute the event of all events.

I began this conclusion by claiming that philosophy's object is at once everywhere and nowhere. This is the reason why it too is at home everywhere and nowhere at the same time. It does not settle in any field or discipline, but moves freely between them. It does not survey or unify them from above, but traverses them all. It does not appropriate their content and boundaries, but extracts this share of reality which they themselves cannot think. Philosophy is concerned with the unthought within each field, this unthought from which they think. This share bears the name "being." We can call it God, if we wish, but this God exists only in its becoming nature. We can call it earth, but this earth exists only in its becoming world. This, however, does not mean that God and nature, earth and world amount to the same thing, that they are identical. On the contrary. Between them, there is precisely the space of Difference itself, this difference that is the very measure of being. Only that which differs can be said *to be*. Being is said of difference alone. Between being and its other, there is precisely the space of the between, the originary Between where thinking finds its source. Thought is at home only in this Between, where nothing is yet fixed, yet where everything is being decided. And this is the reason why it is nowhere at home: essentially itinerant and nomadic, it traverses all territories, exposing them to their own, enveloped horizon, to their own, folded past.

The question regarding what it means to be human, or where the human belongs, is entirely bound up with its relation to the placelessness of being. Earlier on, in connection with Heidegger, I alluded to something like an ethics of thought based on the human's exposedness to that which, in a way, it cannot contain, and yet is always made to respond to, that which, in a sense, exceeds it, and yet defines it in its very responsibility. It is with this ethics—a word I do not particularly cherish, given the abuse to which it is subjected—that I would like to finish. This ethics can only be provisional, irreducibly tentative. For it is an ethics of placelessness, of the abyss and the middle. It is only at the cost of linking its own fate to this placelessness, its own place to this abyss (*Abgrund*, *effondement*)—according to a gesture always to be revived—that the human reaches the dignity of its own essence. In a sense, as Heidegger once suggested, ethics can only mean this attempt to return man to his "proper dignity" (*eigentliche Würde*).² The sense of the human, and the possibility of fulfilling one's humanity, begins with the realization that the human, far from being its own ground, far from constituting itself as this absolute

on the basis of which its power over the world radiates, exists only in taking up that which exceeds it, and to which it is from the start exposed. What is great in and about the human is that it is made to enter into a relation with that which is greater than it, which it can neither generate nor circumvent, neither appropriate nor contain, yet which is the very condition of its own freedom and power. Today, man experiences his absolute foundationlessness, his irreducible exposure to the abyss. Today, man has no choice other than to surrender to this groundlessness and its vertigo as to his own destiny, as to that which does not cease to come his way. This abyss is the “place” where we must learn to hold ourselves. “Thought” is the name that can be given to such an apprenticeship. It is the probe immersed in the depths of being.

Notes

Introduction

1. H. Bergson, *La pensée et le mouvant* (Paris: Presses Universitaires de France, Edition du Centenaire, 1959), p. 45. Trans. M. L. Andison as *The Creative Mind* (Totowa, N.J.: Littlefield, Adams, 1965), p. 45; henceforth *The Creative Mind* with page number in the Centenary Edition followed by page number in the translation.
2. R. Descartes, *Discours de la méthode*, in *Œuvres et lettres* (Paris: Gallimard "Pléiade," 1953), p. 130.
3. A. Koyré, *Études d'histoire de la pensée scientifique* (Paris: Gallimard "Tel," 1973).
4. *Ibid.*, pp. 185–86.
5. Descartes, *Principes de la philosophie*, in *Œuvres*, p. 557.
6. *Ibid.*, p. 566.
7. *Ibid.*, p. 567.
8. In relation to Hume, what I have in mind is the following: while declaring the science of human nature, with which philosophy is identified, as underlying all other sciences, and as presupposed in all sciences, and while equating this new science with the possibility of proposing a "compleat system of the sciences, built on a foundation almost entirely new," it is striking to see that the methodological principles ("experience and observation") and scientific aspirations of this new science are borrowed from the empirical sciences themselves, thus presupposing, at least in its method, the very science which philosophy is to provide a foundation for; see D. Hume, *A Treatise of Human Nature* (Oxford: Oxford University Press, 2000), Introduction. Furthermore, as §2 of Book 1, Part 1 of the same treatise clearly — albeit intriguingly — indicates, the very task of philosophical inquiry, as concerned with the nature of ideas, presupposes the investigation of their origin in sensations, which is itself a matter not for philosophers, but for "anatomists and natural philosophers."
9. Bergson, *The Creative Mind*, 43/43.
10. H. Cohen, *Kants Theorie der Erfahrung*, 3rd ed. (Berlin: Bruno Cassirer, 1918), pp. 526–27.

11. Ibid., p. 179.
12. P. Natorp, *Philosophie und Pädagogik* (Marburg, 1909), p. 235.
13. It is Hermann Cohen who, in his 1883 essay on infinitesimal calculus, formulates the idea according to which mathematics alone, in the guise of infinitesimal calculus, can provide the law and the force of thought itself, thus elevating it to the status of a method valid for the whole of the natural (physical) world. See H. Cohen, *Das Prinzip der Infinitesimal-methode und seine Geschichte* (Frankfurt am Main: Suhrkamp, 1968). See also A. Philonenko, *L'école de Marbourg (Cohen—Natorp—Cassirer)* (Paris: Vrin, 1989), especially p. 53ff.
14. H. Cohen, *Logik der reinen Erkenntnis*, 3rd ed. (Berlin: Bruno Cassirer, 1918), p. 34.
15. P. Natorp, *Die logischen Grundlagen der exakten Wissenschaften* (Leipzig: B. G. Teubner, 1910), p. 219.
16. O. Neurath, "The Scientific Conception of the World" (1929), in *Empiricism and Sociology* (Dordrecht: Reidel, 1973), p. 316.
17. Ibid., p. 317.
18. S. Critchley, *Continental Philosophy. A Very Short Introduction* (Oxford: Oxford University Press, 2001), p. 95.
19. Natorp, *Philosophie und Pädagogik*, p. 237.
20. For what Bergson, in a very inspired passage, wrote about the tendency of philosophy to become this general practice, see *La pensée et le mouvant*, 134–36.
21. G. W. F. Hegel, *Encyclopädie der philosophischen Wissenschaften, Werke*, Vol. 8 (Frankfurt am Main: Suhrkamp, 1971), §1; henceforth *Encyclopaedia Logic*.
22. M. Merleau-Ponty, *La nature* (Paris: Seuil), p. 121.
23. Ibid., p. 122.
24. On this issue, see Koyré, *Études d'histoire*, pp. 166–95.
25. See E. Husserl, *Ideen zur einer reinen Phänomenologie und phänomenologische Philosophie. Book 3: Die Phänomenologie und die Fundamente der Wissenschaften*, ed. M. Biemel (The Hague: Nijhoff, 1953), p. 117. Trans. T. E. Klein and W. E. Pohl as *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy. Book 3: Phenomenology and the Foundation of the Sciences* (The Hague: Nijhoff, 1980), p. 104; henceforth *Ideas . . . III* followed by German and English pagination. Merleau-Ponty, *Le visible et l'invisible* (Paris: Gallimard, 1964), p. 151 ff. Trans. A. Lingis as *The Visible and the Invisible* (Evanston: Northwestern University Press, 1968), p. 112ff.; henceforth *The Visible and the Invisible* followed by French and English pagination.
26. The concept of ungrounding is inseparable from Deleuze's critique of the concept of ground, which, through its twofold principle of identity and presence, coincides with the metaphysics of representation. For a detailed account of Deleuze's conception of the operation of grounding, and its difference from the deeper groundlessness whence it originates, see *Différence et répétition* (Paris: Presses Universitaires de France, 1968), pp. 349–55. Trans. P. Patton as *Difference and Repetition* (London: Athlone Press, 1994), pp. 272–77; henceforth *Difference and Repetition* followed by French and English pagination.

1. The Origins of Onto-tauto-logy

1. See J.-F. Vernant, "La formation de la pensée positive dans la Grèce archaïque," in *Mythe et pensée chez les Grecs* (Paris: Éditions la découverte, 1994), Vol. II, pp. 95–124.
2. See Plato, *Timaeus*, 52a.
3. On the sources regarding this formulation attributed to Heraclitus, see M. Conche's edition of Heraclitus's *Fragments* (Paris: Presses Universitaires de France, 1986), pp. 467–70.

4. Heraclitus, Diels-Kranz fragment 49a.
5. See *Physics*, Books VII and VIII.
6. *Metaphysics*, E, 1, 1026a29–32; A, 1, 1069a30–b2.
7. Ibid., Γ, 3, 1005a29–b2; E, 1, 1026a27ff.
8. Ibid., Γ, 3, 1005a34.
9. On the question of the ontological background to Aristotle's *Physics*, see L. Couloubaritsis, *La physique d'Aristote* (Brussels: Ousia, 1997), Chapter II ("Les fondements ontologiques de la physique").
10. For a definition of movement, see *Physics*, Book III, 201a10ff.
11. See *Physics*, Book IV.
12. *Metaphysics*, A, 1, 981b29.
13. *Metaphysics*, A, 3, 983a28. At this stage in the proceedings, let me simply emphasize the fact that, in his formulation, Aristotle leaves it entirely open as to whether οὐσία, or beingness as such, must be equated with being in the sense of essence (τὸ τὶ ᾧν εἶναι). This identification is precisely what is at issue in the *Metaphysics*. I must therefore disagree with the translations of both Tredennick (Loeb) and Ross (*The Basic Works of Aristotle*, Random House), who read Aristotle's καὶ as marking an equivalence between both terms.
14. *Metaphysics*, Γ, 2, 1004b20.
15. Ibid., Γ, 1, 1003a21–22.
16. A. Stevens, *L'ontologie d'Aristote au carrefour du logique et du réel* (Paris: Vrin, 2000), p. 220ff.
17. Ibid., 1003b33.
18. "Being is said in many ways, but always with respect to a unique term, a single nature" (*Metaphysics*, Γ, 2, 1003a33). We should note, in passing, the use of the term "nature" here—a term which has entered into ordinary language—insofar as it relates to the being or principle proper to this or that being, rather than to the entirety of so-called "natural" phenomena. Not only does the philosopher study reality as a whole, he also studies it ἥ πέφυκεν, that is, insofar as it possesses a certain nature. The expression is equivalent to ἥ ὄν. Consequently, like the term "being," which designates at once a being and its essence, the concept of nature is also double. And it is in the doubling of this double that the relation between the physical and the metaphysical comes into play. On the question of the homonymy of being, see P. Aubenque, *Le problème de l'être chez Aristote* (Paris: Presses Universitaires de France, 1962), p. 163ff.
19. *Metaphysics*, Z, 1, 1028b2–7; emphasis added.
20. *Metaphysics*, Γ, 2, 1003b6ff.
21. If, as we shall see, such a translation will prove as disastrous as it was inevitable, it is not just on its own account, but insofar as it will only be established at the cost of an opposition with the notion of *essentia*, which alone will retain its explicit relation to being (*esse*), binding itself to it in a relation of identity or coincidence. This translation, then, is not so much a function of the Latin itself as of a particular interpretation (that other sense of translation) of Aristotle's text. As E. Gilson remarks (in *L'être et l'essence* [Paris: Vrin, 1981], pp. 339–44), pre-Christian Latin philosophers, with Seneca at their head, and in the wake of Cicero, from whom the former is reputed to have borrowed the word, use it to designate sometimes the very fact of being, sometimes the nature of what is, and sometimes the substance which possesses this nature. Be that as it may, *essentia* is rarely used in this period. In fact, it is with Augustine in the fifth century, and with his *De Trinitate* and *De Civitate Dei* in particular, that the term *essentia* achieves common currency as the equivalent for the Greek οὐσία.
22. Aubenque, *Le problème de l'être*, p. 338.
23. Ibid., p. 414.

24. *Physics*, I, 2, 185a12.
25. *Physics*, VIII, 8.
26. Aubenque, *Le problème de l'être*, p. 367.
27. *Physics*, IV, 12, 221b3.
28. On the various senses of ἀρχή, see *Metaphysics*, Δ, 1.
29. *Metaphysics*, Z, 1, 1028a14–15.
30. *Ibid.*, Z, 1, 1029b13. Of all the translations and interpretations I was able to consult, Aubenque's still seems the most convincing. Accordingly, it is the one I follow here.
31. *Prior Analytics*, I, 27, 43b1–11.
32. It is precisely because philosophy envisages events not as they actually are, but as they ought to be, that is, from the point of view of their essence, that, according to Aristotle, philosophy remains superior to history. What is valid in relation to history also holds in relation to the science of nature. One will have to wait for many centuries, and for a genuine revolution in the very concept of science itself, in order to witness the birth of a physico-mathematical science of chance beyond Newtonian dynamics, one based on the calculus of probabilities and known as *statistical mechanics*.
33. *Metaphysics*, Z, 4, 1030a10–16.
34. See, for example, *Posterior Analytics*, I, 4, 73a35–b24; *Metaphysics*, Z, 4, 1029b13ff.
35. *Metaphysics*, Z, 4, 1029b14–15.
36. Aubenque, *Le Problème de l'être*, pp. 456–72.
37. It is interesting to note that, in Aristotelian language, the expression τὸ τί ἐστι frequently refers to the genus.
38. See, for example, Aquinas, *De ente et essentia* (Paris: Vrin, 1965), p. 79. But this translation goes back to Boethius's own translation of Aristotle's *Categories*, to which we shall return.
39. Aubenque, *Le problème de l'être*, p. 467.
40. *Ibid.*, p. 468.
41. *Metaphysics*, Δ, 1018a10–11.
42. *Ibid.*, I, 3, 1054b23–27.
43. *Ibid.*, I, 4, 1055a4–9.
44. *Ibid.*
45. "Primary truths are those which assert the same of itself or negate the opposite of itself. For example, A is A, or A is not non-A. If it is true that A is B, it is false that A is not B, or that A is non-B. Likewise, everything is what it is; everything is similar or equal to itself; nothing is greater or less than itself. These and other truths of this kind, though they may have various degrees of priority, can nevertheless all be grasped under the name of *identities*." In L. Loemker, ed., *Gottfried Wilhelm Leibniz. Philosophical Papers and Letters*, 2nd ed. (Boston: Reidel, 1969), p. 267. See also "Monadology" in *Philosophical Writings* (London: Everyman, 1995), §31.
46. *Topics*, IV, 1–2, 122a2–7.
47. *Metaphysics*, Δ, 28, 1024b4–10. This passage repeats almost word for word a previous passage from the same book: "Quality, in one sense, can be said of a difference in the essence [τῆς οὐσίας]; for example, a man is an animal of a certain quality, insofar as he is two-footed" (*Metaphysics*, Δ, 14, 1020a33).
48. *Topics*, IV, 6, 128a24.
49. *Categories*, V, 2b7–14.
50. *Metaphysics*, I, 8, 1057b35–1058a7.
51. Porphyry's commentary on the *Isagoge*, along with the translation by Boethius, which was to exercise a considerable influence on the whole of medieval thought and set up the debate between realists and nominalists around the question of the universal, can be found in Porphyry, *Isagoge* (Paris: Vrin, 1998).

52. Ibid., III, 1.
53. Ibid., III, 13. Boethius translates ἐν τῷ τὸ ἦν εἶναι as *in eo quod quale*. The distinction between a thing determined *in quale* and a thing determined *in quid* will of course become seminal for the whole of Western philosophy, from Aquinas to Ockham and early modern philosophy.
54. Scotus, *Ordinatio* I, d. 3, q. 3, §131.
55. This, in spite of the fact that the concept of being had been broadened in order to go beyond the thesis of the analogy of being which, whether in its Thomist formulation or that of Henry of Ghent, had been dominant until then.
56. I shall return to this question of univocity in Duns Scotus, and to that of his opposition to Henry of Ghent, in the first chapter of my analysis of Deleuzian ontology. It was Ockham who first succeeded in widening the concept of univocity so as to include individual beings, that is to say, beings in their passions and ultimate differences, thereby breaking with the traditional theory of individuation. For Ockham's refutation of Scotus's thesis regarding ultimate differences, see *Ordinatio*, I, d. 2, q. 9.
57. See O. Boulnois, "Genèse de la théorie scotiste de l'individuation," in P.-N. Mayaud, ed., *Le problème de l'individuation* (Paris: Vrin, 1991), pp. 51–77.
58. Besides a series of literal commentaries or "expositions" on Aristotle's *Categories* and *De Interpretatione* and on Porphyry's *Isagoge*, known in the late Middle Ages as *Expositio aurea*, as well as other commentaries on Aristotle's *Physics* and treatises on theological questions (*Quodlibet*), Ockham is also the author of a very important *Summa logicae*, written after the commentaries on Aristotle and Porphyry. It is here that we find a study of Porphyry's "predicables" (Part I, Chapters 18–25) in the context of Ockham's own "terminism" or "nominalism" and his own theory of the sign. The philosophical and theological works of Ockham are edited by the Franciscan Institute of St. Bonaventure University under the general title *Guillelmi de Ockham, Opera philosophica et theologica* (New York: St. Bonaventure, 1974). For an English translation of the *Summa logicae*, Part One, see *Ockham's Theory of Terms*, Part I of the *Summa logicae*, translated and introduced by M. J. Loux (Notre Dame, Ind.: Notre Dame University Press, 1974).
59. See J. Biard's Introduction to his translation of Ockham's *Summa* in *Somme de Logique, Première partie* (Mauvezin: Trans-Europ-Repress, 1993), pp. xvi–xvii.
60. As Alféri shows, there is also in Ockham a theory of matter, very different from that of Aristotle, in that matter is not a pure potentiality awaiting a form, but a real or actual thing, extension, and, on that basis, quantity. By thinking matter in an essentially quantitative way, the ontology of the singular provides a programmatic basis for a knowledge of matter as such. See P. Alféri, *Guillaume d'Ockham. Le singulier* (Paris: Minuit, 1989).
61. Ibid., pp. 29–65.
62. *Summa Logicae*, I, 25, 50–53.
63. Ibid., I, 23, 35–42.
64. A. Arnauld and P. Nicole, *La logique, ou l'art de penser* (Paris: Vrin, 1981), pp. 61–62. *The Art of Thinking* (Indianapolis: Bobbs-Merrill, 1964).
65. I should also mention that much of what I am about to say would find echoes in Derrida's own work on Husserl, even though I shall not engage in any discussion of this work. My remarks arrive at results similar to those reached by Derrida. I am thinking in particular of *La voix et le phénomène* (Paris: Presses Universitaires de France, 1967).
66. E. Husserl, *Ideen zur einer reinen Phänomenologie und phänomenologischen Philosophie. Book I: Allgemeine Einführung in die reine Phänomenologie* (1913), ed. Karl Schuhmann (The Hague: Martinus Nijhoff, 1976). Trans. F. Kersten as *Ideas Pertaining to a Pure*

Phenomenology and to a Phenomenological Philosophy. Book 1: General Introduction to a Pure Phenomenology (The Hague: Nijhoff, 1982); henceforth *Ideas . . . I* followed by German and English pagination.

67. Husserl, *Ideas . . . III*, 77/66.
68. *Ibid.*, 23/21.
69. See the opening chapter of *Ideas . . . I*, entitled “Matter of Fact and Essence” (“*Tatsache und Wesen*”).
70. See *Ibid.*, §2.
71. For a sustained discussion of the two senses or aspects of imagination as phantasy (*Phantasie*) and image-consciousness (*Bildbewußtsein*), see E. Husserl, *Phantasie, Bildbewußtsein, Erinnerung. Zur Phänomenologie der anschaulichen Vergegenwärtigungen. Texte aus dem Nachlaß* (1898–1925), ed. E. Marbach (The Hague: Nijhoff, 1980). See also the discussion in M. Saraiva, *L’imagination selon Husserl* (The Hague: Nijhoff, 1970) and J. Sallis, “Spacing Imagination” and “Intentionality and Imagination,” both in *Double Truth* (Albany: SUNY Press, 1995).
72. Aristotle, *Metaphysics*, Z, 6ff.
73. *Ideas . . . I*, 139–40/168.
74. I. Kant, *Kritik der reinen Vernunft*, ed. Raymund Schmidt (Hamburg: Felix Meiner Verlag, 1956), A 598, B 626.
75. E. Husserl, *Erfahrung und Urteil*, ed. L. Landgrebe (Hamburg: Felix Meiner Verlag, 6th, exp. ed., 1985), p. 410. Trans. J. S. Churchill and K. Ameriks as *Experience and Judgment* (Evanston: Northwestern University Press, 1973), p. 340; henceforth EU followed by German and English pagination.
76. *Ideas . . . III*, 29–30/26.
77. EU, 411/341.
78. *Ibid.*, 416/345.
79. *Ibid.*, 418/346.
80. Husserl repeats the Aristotelian definition, almost word for word. See *Categories*, 5, 3aff. See also, and above all, Porphyry’s *Isagoge*.
81. EU, 418–19/346.
82. *Ibid.*, 421/348.
83. *Ibid.*, 429/354.
84. *Ibid.*, 430/355.
85. There are a few further—yet again brief and elusive—remarks on this question in §§38–40 and Appendix I of *Experience and Judgement*. In §40, for example, and in a way that suggests a change of opinion from §75 of *Ideas . . . I*, where Husserl claimed that phenomenology could only leave individuation out of its analysis, and focus solely on the *Wesensgehalt* of a phenomenon, Husserl now states that “a complete theory of individuation is not now our intention” (203/174). “Not now,” but perhaps later, even though the analysis seems to have been endlessly postponed. And the appendix to that section broaches the question again, only to close it almost immediately: “We will not go more deeply into this matter here” (464/384).
86. EU, Appendix I, 464/384.
87. Such is, at least, the conclusion which one would have to draw from the Husserlian analysis. And yet, Husserl himself resists drawing such a conclusion, given his commitment to the “now” as the initial source point in the constitution of time, to which all subsequent moments remain attached and refer back: “Every now is, as the first-hand character of the existence of the content which through it becomes an individual fact, the source-point of an infinite continuum of pasts; and the totality of pasts, actual and still possible, is so remarkably structured, that all lead back to the one process of original presentation. Every past is unilaterally co-ordinated with an original

- now and its content” (EU, 465/385). It is precisely in his attempt to derive the entirety of time—as a succession of now-points fading away into the immediate past of retentions, and thus constituting the uninterrupted flow of time—from the original present, that Husserl remains unable to think the truly individuating and transcendental power of time, which, in excess of any now, presides over its constitution.
88. This, despite the fact that, in reinterpreting the transcendental problematic of consciousness as one of *Da-sein*, Heidegger was precisely able to confront time as the force of individuation, or as the “meaning” of being.
89. See, for example, M. Heidegger, *Beiträge zur Philosophie (Vom Ereignis)*, *Gesamtausgabe*, Vol. 65 (Frankfurt am Main: Vittorio Klostermann, 1989), Part V (“Die Gründung”), and *Besinnung*, *Gesamtausgabe*, Vol. 66 (Frankfurt am Main: Vittorio Klostermann, 1997), §§25–32, 41, 56, 91–96.
90. Ultimately, though, the concept “*Dasein*” will be mobilized only to translate the Latin *existentia*, that is, only to designate the sheer facticity and brute being of a thing, one which Husserl continues to contrast with the complexity of the constitution of its essence.
91. Merleau-Ponty, *The Visible and the Invisible*, 145–46/107–108.
92. *Ibid.*, 147–49/109–10; emphasis added.
93. *Ibid.*, 49–50/111; emphasis added.
94. *Ibid.*, 150/111–12.
95. *Ibid.*, 151/112–13.
96. *Ibid.*, 152–53/113–14; emphasis added.
97. *Ibid.*, 153/144.
98. Evidence for this influence can be seen in Merleau-Ponty’s lecture notes from 1958–59 on Heidegger. See his *Notes de cours (1959–61)* (Paris: Gallimard, 1996), pp. 98–101.
99. *The Visible and the Invisible*, 153/114.
100. *Ibid.*, 153–54/114.
101. *Ibid.*, 154/115. For further reference to Merleau-Ponty’s discussion of the sense of essence as *Wesen* in connection with Heidegger, see his *Notes de cours*, pp. 104–15. I shall return to the question concerning the verbal nature of Being in Heidegger in Part Two.

2. Absolute Identity

1. F. W. J. Schelling, “Vom Ich als Princip der Philosophie oder über das Unbedingte im menschlichen Wissen,” in *Ausgewählte Schriften* (Frankfurt am Main: Suhrkamp, 1985), Band 1, §16, p. 122.
2. *Ibid.*, §12, p. 84.
3. G. W. F. Hegel, *Wissenschaft der Logik* (1812, 1832). Throughout I shall be referring to the edition in two volumes published by Suhrkamp as Volumes 5 and 6 of G. W. F. Hegel, *Werke in zwanzig Bänden* (Frankfurt am Main: Suhrkamp, 1969), henceforth *Logic*. Although the German pagination will be followed by references to A. V. Miller’s translation, *Hegel’s Science of Logic* (Atlantic Highlands, N.J.: Humanities Press, 1969), I have modified the existing translation on almost every occasion.
4. See J. G. Fichte, *Grundlage der gesamten Wissenschaftslehre*, ed. I. H. Fichte, *Fichtes Werke* (Berlin: Walter de Gruyter, 1971), Vol. 1, especially §§1–3. Let me simply emphasize that if Fichte’s first and absolute principle is the $I = I$, it is because it, and it alone, is at once its own form and content. There is only one instance in which form and content are identical, and this is in the case of an act, namely, the *I*’s own self-positing. The identity of the *I* is not so much a fact as an act, the act through which it

posits itself as such. Yet it is of the utmost importance to understand that the first principle, the $I = I$, is a transcendental illusion in the Kantian sense. It is not real. The $I = I$ is precisely the illusion of the soul denounced by Kant. And it is only in revealing the conditions of possibility of this principle, in deconstructing it as an illusion, that the third and true principle is generated. In the move from the first principle to the third, therefore, a very subtle transition from Kant to Hegel takes place, since Fichte begins with a Kantian conception of the dialectic, as involving the *deconstruction* of a transcendental illusion, and ends up with a Hegelian conception of the dialectic, as involving the *construction* of the real. This compelling interpretation is developed by Jacques Rivelaygue in his *Leçons de métaphysique allemande* (Paris: Grasset, 1990), Vol. I, pp. 156–62. The first principle, the $I = I$, from which the principle of identity can be extracted, generates the second principle: the I can posit itself only by distinguishing within itself an I subject and an I object. But this means that the I can no longer be seen as the absolute it was originally taken to be: if it were absolute, it would contain this difference within itself. It is therefore limited. And it is this limitation that forces it to posit the second principle: the not- I , from which we can extract the principle of contradiction. The initial positing is now faced with a counter-positing, or an *op-position*. It is the confrontation between the first two principles that produces the dialectic, each negating the other. And the juxtaposition of these two principles leads to an apparently unsolvable contradiction: if the I posits the not- I , it seems to be negating itself as I , or as absolute self-positing; at the same time, it seems to be negating the autonomy of the not- I , since the latter is posited by the I . The solution to the contradiction will consist in replacing the qualitative opposition between two heterogeneous realities with a quantitative opposition, or with a limitation. This is what Fichte makes clear with the third principle: the divisible I is opposed to the indivisible not- I within the absolute I . It is only the third principle that constitutes the structure of the real, therefore. From the point of view of the finite or common consciousness, we have an opposition, but this is an opposition that is internal to the absolute I : it is the I itself which, within itself, posited the difference between I and not- I . But whereas Fichte ultimately interprets this absolute, initially taken to be a *real* illusion, as an *ideal* and a demand of *practical* reason, Schelling, and Hegel after him, understand it in real or actual terms. The transcendental problematic gives way to an *ontological* description of the absolute. But whereas Schelling will locate this absolute in a primitive identity (“nature” or “God”) older than that of the I and prior to any opposition and relation, Hegel will understand the absolute in terms of its *self*-constitution through self-relation and self-opposition.

5. G. W. F. Hegel, “Differenz des Fichteschen und Schellingschen Systems der Philosophie (1801),” in *Jenaer Schriften, Werke*, Vol. 2 (Frankfurt am Main: Suhrkamp, 1986), p. 96. See also *Logic*, Vol. I, 74/74: “The analysis of the beginning would thus yield the concept of the unity of being non-being—or, in a more reflected form, the unity of differentiatedness and non-differentiatedness, or the identity of identity and non-identity. This concept could be regarded as the first, purest, that is, most abstract definition of the absolute.”
6. In the account of Hegel that follows, I have drawn on the following sources: on the question of the relation between the *Science of Logic* and the ontological tradition, J. Hyppolite, *Logique et existence. Essai sur la logique de Hegel* (Paris: Presses Universitaires de France, 1961), Part Two, Chapter 1 (“La transformation de la métaphysique en logique”), pp. 69–86; A. Doz, *La logique de Hegel et les problèmes traditionnels de l’ontologie* (Paris: Vrin, 1987), Introduction; H.-G. Gadamer, “The Idea of Hegel’s Logic,” in *Hegel’s Dialectic* (New Haven: Yale University Press, 1976); F. Schick, *Hegel’s Wissenschaft der Logik—metaphysische Letztbegründung oder Theorie logischer Formen* (Freiburg: Verlag Karl Alber, 1994), pp. 27–33. On “The Essentialities, or the Determinations of Reflection in the ‘Doctrine of Essence,’” see J. Biard et al., eds., *Introduction à la*

- lecture de la Science de la Logique de Hegel*, Vols. I (*L'être*) and II (*La doctrine de l'essence*) (Paris: Aubier, 1981, 1983), pp. 48–101; D. Henrich, "Hegels Logik der Reflexion," in D. Henrich, ed., *Die Wissenschaft der Logik und die Logik der Reflexion, Hegel-Studien*, Beiheft 18 (Bonn: Bouvier Verlag, 1978), pp. 203–324; J. W. Burbidge, *On Hegel's Logic. Fragments of a Commentary* (Atlantic Highlands, N.J.: Humanities Press, 1981), Chapter 7 ("The Essentials"), pp. 73–84; Doz, *La logique de Hegel*, Chapter 3 ("De la réflexion de l'essence au fondement de l'existence"), pp. 73–100. On Hegel's interpretation of the judgment and the syllogism in the "Doctrine of the Concept," see G. Jarczyk, *Système et liberté dans la logique de Hegel* (Aubier: Paris, 1980), and Burbidge, *On Hegel's Logic*, Chapters 10 and 11.
7. Hegel, *Encyclopaedia Logic*, §19.
 8. Ibid., §41, Addition 1.
 9. G. W. F. Hegel, *Grundlinien der Philosophie des Rechts, Werke*, Vol. 7 (Frankfurt am Main: Suhrkamp, 1986), §31.
 10. *Logic*, Vol. I, 51/55.
 11. Ibid., Vol. II, 66/433.
 12. Hegel, *Grundlinien*, §31.
 13. *Logic*, Vol. I, 16/28.
 14. Ibid.
 15. Ibid., 52/56.
 16. G. W. F. Hegel, *Hegel-Briefe*, ed. J. Hoffmeister (Hamburg: Felix Meiner, 1953), Vol. I, 293, letter of 5 February 1812.
 17. Hegel, *Encyclopaedia Logic*, §26.
 18. *Logic*, Vol. I, 45/51.
 19. Kant, *Kritik der reinen Vernunft*, A 247/B 303.
 20. Ibid., B 137.
 21. *Logic*, Vol. I, 44/50.
 22. G. W. F. Hegel, *Phänomenologie des Geistes, Werke*, Vol. 3 (Frankfurt am Main: Suhrkamp, 1986), p. 580. Trans. A. V. Miller as *Hegel's Phenomenology of Spirit* (Oxford: Oxford University Press, 1977), p. 483; henceforth *Phenomenology of Spirit* followed by German and English pagination.
 23. *Logic*, Vol. I, 71/71.
 24. Ibid., Vol. II, 465/757.
 25. Ibid., 549/824.
 26. For a thorough analysis of the relation between substance and subject in Hegel, including in its relation to many of its aspects in pre- and post-Kantian metaphysics, see Schick, *Hegel's Wissenschaft der Logik*, Chapter 2 ("Substanz und Subjekt"), pp. 55–182.
 27. *Phenomenology of Spirit*, 22–23/9–10. Further down, Hegel writes: "Being is absolutely mediated; it is a substantial content that is just as immediately the property of the 'I', it is self-like or the concept" (39/21). And toward the very end of *Encyclopaedia Logic*, we read that the Idea, as the result of the journey from being through essence and back into mediated being, with which it coincides completely, "is *at first* just the One and universal *substance*, but its developed, authentic actuality is to be as *subject*" (§213).
 28. Hyppolite, *Logique et existence*, pp. 90–91.
 29. *Logic*, Vol. II, 74/439.
 30. Ibid., 37/410.
 31. Ibid. 36/409.
 32. Ibid.
 33. Ibid., 46–47/417.

34. Ibid., 47/417; emphasis added.
35. Ibid., 47/417–18.
36. Ibid., 47/417.
37. Ibid., 49–50/419–20.
38. Ibid., 55/424.
39. Ibid., 58/426.
40. Ibid., 36/409.
41. Ibid., 56/424.
42. Ibid., 59/427.
43. Ibid., 56/424.
44. Ibid., 36/409.
45. Ibid., 58/426.
46. On the question of Hegel's systematic attempt to overcome the classical form of the proposition, and to replace it with its speculative form, see J.-L. Nancy, *La remarque spéculative* (Paris: Éditions Galilée, 1973), especially the chapter entitled "La proposition spéculative." See also Hyppolite, *Logique et existence*, Part Three, Chapter 1 ("Proposition empirique et proposition spéculative").
47. *Logic*, Vol. II, 59/427.
48. Ibid., 65/431.
49. Ibid., 66/432.
50. Ibid., 75/439–40.
51. Ibid., 75/439.
52. Ibid., 78/442.
53. Ibid.
54. Ibid., 77–78/441.
55. Ibid., Vol. I, 112/106.
56. See "The Doctrine of Being," Section One ("Determinateness [Quality]"), Chapter Two ("Determinate Being"), c. "Infinity" and Section Two ("Magnitude [Quantity]"), Chapter Two ("Quantum"), c. "Quantitative Infinity," in *Science of Logic*.
57. *Logic*, Vol. II, 75/440.
58. Ibid., 76/440.
59. See, for example, Hegel, *Encyclopaedia Logic*, 3rd ed. (1830), §24, Additions 2 and 3.
60. Ibid., §214.
61. Ibid.; emphasis added.
62. *Logic*, Vol. II, 562–63/835.
63. In so doing, I shall be following closely Jarczyk's own analyses in her illuminating *Système et liberté dans la logique de Hegel*, Chapters 2 and 3. For a close analysis of the figure of the syllogism, see her pp. 105–33.
64. Aristotle, *On Interpretation*, 1, 16a14–18.
65. Ibid., 5, 17a10–11.
66. *Logic*, Vol. II, 358/669.
67. "[E]verything rational is a syllogism," "the rational is nothing but the syllogism" (ibid., respectively, 352/664 and 353/665).

3. Eventful Being

1. The first and most systematic treatment of *Ereignis*, on which I shall focus here, is to be found in Heidegger's *Beiträge zur Philosophie (Vom Ereignis)*, GA 65. Trans. P. Emad

- and K. Maly as *Contributions to Philosophy (From Enowning)* (Bloomington: Indiana University Press, 1999); henceforth GA 65 followed by German and English pagination. The existing translation is revised on almost every occasion.
2. Aristotle, *On Interpretation*, 3, 16b21–25.
3. The tale in question is “La Barbe bleue” (“Bluebeard”). About to be sacrificed by her husband for her irreparable curiosity, and hoping that her brothers will arrive in time to save her, the victim begs her sister Anne to climb to the top of the tower of the castle and watch for signs of their brothers’ arrival. She asks: “Anne, my sister Anne, do you see nothing coming?” To which her sister Anne responds: “I see only the sun that *poudroie*, and the grass that *verdoie*.”
4. M. Heidegger, “Brief über den ‘Humanismus,’” in *Wegmarken* (Frankfurt am Main: Vittorio Klostermann, 1976).
5. The texts in question, written between 1937 and 1939, are *Besinnung*, and *Metaphysik und Nihilismus, Gesamtausgabe*, Band 67 (Frankfurt am Main: Vittorio Klostermann, 1999), Part I (“Die Überwindung der Metaphysik”); henceforth GA 66 and GA 67.
6. M. Heidegger, *Die Grundprobleme der Phänomenologie, Gesamtausgabe*, Band 24 (Frankfurt am Main: Vittorio Klostermann, 1979), §22.
7. *Sein und Zeit* (Tübingen: Max Niemeyer, 1967), 133/171; henceforth SZ.
8. Henry Corbin’s rendering of Dasein as “réalité humaine” in his 1935 translation of “Was ist Metaphysik?” (1929) found its way into Sartre’s *Being and Nothingness*, the influence of which can be noted in Beaufret’s letter to Heidegger from 1945, around the question of ethics and humanism. For Corbin’s translation, see M. Heidegger, “Qu’est-ce que la métaphysique?” in *Qu’est-ce que la métaphysique?* (Paris: Gallimard, 1935), pp. 21–44.
9. GA 65, 295/208.
10. SZ, 220–21/263.
11. GA 65, 299/211.
12. Ibid., 301/212.
13. Ibid., 298/210.
14. S. Mallarmé, “Crise de vers,” in *Œuvres* (Paris: Garnier, 1985), p. 279.
15. GA 65, 345/241.
16. Ibid., 322/226.
17. Ibid., 342/240.
18. Ibid., 304/214.
19. Ibid., 318/223.
20. Ibid., 296/209.
21. Ibid., 319–20/224.
22. Ibid., 342/240.
23. Now, whereas Heidegger analyzes some of these institutions of truth in great detail (thinking, poetizing, building, creating, even leading), he is far more elliptical about sacrificing, suffering, and celebrating, most often leaving his reader to guess about the way in which they are indeed institutions of truth.
24. GA 65, 318/223.
25. In his 1929–30 lectures on the fundamental concept of world, Heidegger goes to great trouble to show how Dasein, when seen from the perspective of its essence, cannot be viewed as a special kind of animal or living thing. Between Dasein and all other beings, there is a difference in kind, not degree, the abyssal difference of the experience of the onto-ontological difference. See M. Heidegger, *Die Grundbegriffe der Metaphysik. Welt—Endlichkeit—Einsamkeit, Gesamtausgabe*, Band 29/30 (Frankfurt am Main: Vittorio Klostermann, 1983), Part Two, Chapters 4–6. In his *Contributions to Phi-*

losophy, however, a slight yet decisive shift takes place, insofar as Heidegger is no longer so much interested in identifying something like the “essence” of man as such as he is in intimating or inventing a future for the human, of retrieving the futural (the *Zu-künftige*) in the human, on the basis of the utmost possibility for the human. Thus, in a tone that is decisively Nietzschean, albeit shot through with references to Hölderlin, Heidegger equates the task of thinking with the necessity to “give the historical man a goal: namely, to become the founder and preserver of the truth of beyng, to *be* the ‘there’” (16/12). “Genuine thinking” is now the “thinking that sets goals.” Yet “[w]hat gets set is not just any goal, and not the goal in general, but the one and only and thus singular goal of our history . . . , the *seeking* itself, the seeking of beyng” (17/13). The difference, then, or the boundary is no longer between the human world and the animal world; it is now and more decisively between the human as *Da-sein*, or the human in its utmost and uttermost possibility, and the human as *Weg-sein*. It is no longer a matter of the Human, or of Man, but of the possible man, the man who thinks—whether in philosophy, in poetry, in art, in politics, in science even. As the seeker (*Sucher*), preserver (*Wahrer*), and guardian (*Wächter*) of the truth of beyng, man can now be seen, in a way that throws more light on what Heidegger meant by *Sorge* or “care” in the 1920s, as the caretaker of beyng, such a care-taking involving an irreducible operation of creation. The man with whom Heidegger is concerned is not the man of Aristotle and of Scholasticism, this very man of whom one can give a definition (“the animal with *logos*”), one that is as empty as it is abstract, since no one actually *is* this definition. It is rather the man of and for the future, this rare and precious breed. The dividing line, then, is not between the human and the rest of the living world. It is not a question of providing a “definition” of the human by specifying a genus common to all animated beings. It is not a matter of identifying what differentiates the human from animal life in general. To paraphrase the title of a recent polemical work, I would suggest that today’s man often seems to be “living and thinking like a pig” (G. Châtelet, *Vivre et penser comme des porcs* [Paris: Folio, 1998]). It is not for this man, in his own name, that philosophy invokes the noble name of “man.” It is not so much a question of knowing *what* it is to be human, as to know *who* man is, and this means, in the end, what man is *capable of*. And to this question, to the question regarding what man is capable of, what he *can* (be), to the question regarding his potency, Heidegger will have always responded: being. Man is the being who *can be* (being), the being who has the *ability* and in whose *power* it is to be, who lives his own being in the mode of possibility. As early as *Being and Time*, Heidegger conceived of Dasein in terms of a *Seinkönnen*, of a potency to be (being), to ex-ist it. The being of the human is a *posse* or a *potere* (*potis*, powerful, + *esse*, to be), a *potentia* as well as a *potentas*, and its potentiality, its power is a power to be being. Man is this potency—the “possible” being—through which being is raised to another power. In the meantime, and in the face of the often ignoble reality imagined for “humanity” and carried out in its name, the philosopher has no other choice than, in the words of Deleuze and Guattari, “to play the part of the animal (to growl, burrow, snigger, distort ourselves): thought is itself sometimes closer to an animal that dies than to a living, even democratic, human being” (G. Deleuze and F. Guattari, *Qu’est-ce que la philosophie?* [Paris: Minuit, 1991], p. 103). Yet, at other times, if not at the very same time, genuine thought brings us closer to the gods, turns us toward the divine in turning us toward the silence echoing at the heart of things, this silent echo that resonates from the forever withdrawing truth of beyng. If and when, Heidegger tells us, man stands in the world as a creator, and this means in the between of beyng and beings, if and when, in other words, he manages to dwell in between beyng and beings, then he “stands ready for being used in opening the open” (18/14). And as such, he remains “at the disposal of the gods.” The gods, in this context and in Heidegger’s use of the motif in general, are not to be mistaken for beings, albeit highest and most un-

usual. They are not to be thought “from within ‘religion,’” but “from out of beyng” (508/357), as the very possibility and future around which history pivots and is decided. And so, “at the disposal of the gods” means “to stand far away and outside—outside the familiarity of ‘beings’ and interpretations of them” (18/14). The question, then, becomes to know how remote the goal is, how close or far we are from being able to gain this dwelling stance in between beyng and beings, how close we are from being able to transform the essence of the human, from the being who stands amid beings as amid the obvious and the familiar, to the being who can experience beings from out of their event-ful, question-worthy, and thought-provoking origin. The question, in other words, is to know “how far removed from us is the god, the one who designates us founders and creators” (23/17). And the truly historical decision revolves around the question of “whether in the future man belongs to the truth of being—and thus, from and for this belongingness, shelters the truth as what holds true in beings—or whether the beginning of the last man drives man into a misplaced animality and refuses to grant the last god to historical man” (26–27/20).

26. GA 65, 245/173.

27. Ibid., 251/177.

28. See Ibid., §276 (“Beyng and Language”) and §281 (“Language (Its Origin)”).

29. M. Heidegger, “Der Spruch des Anaximander,” in *Holzwege* (Frankfurt am Main: Vittorio Klostermann, 1980), pp. 317–68.

30. Ibid., 339.

31. Ibid.

32. Ibid., 343.

33. GA 65, 44/31.

34. “Beyng (as Ereignis) needs beings so that beyng may unfold” (ibid., 44/31).

4. Abyssal Being

1. This connection is made most explicit in two texts from 1929, “What Is Metaphysics?” and “On the Essence of Ground,” both published in *Wegmarken*. “Holding itself out into the nothing, Dasein is in each case already beyond beings as a whole. This being beyond beings we call ‘transcendence.’” “Going beyond beings occurs in the essence of Dasein. But this going beyond is metaphysics itself. . . . Metaphysics is the basic occurrence of Dasein. It is Dasein itself” (*Wegmarken*, pp. 15 and 18).

2. GA 65, 13/10.

3. Ibid., 30/22.

4. I shall attempt to provide a genuine understanding of history further on, once I have clarified the nature of time-space. This understanding of history will turn out to be not just different from, but entirely heterogeneous, to history as chrono-logy.

5. “Moirā (Parmenides, Fragment VIII, 34–41),” in *Vorträge und Aufsätze* (Pfullingen: Günther Neske, 1954), pp. 223–48.

6. GA 65, 88/67.

7. Ibid., 375/261.

8. Ibid., 372/260.

9. Ibid., 479/337.

10. See Hölderlin’s *Hymnen* “Germanien” und “Der Rhein,” *Gesamtausgabe*, Band 39 (Frankfurt am Main: Vittorio Klostermann, 1980), pp. 117–19, 123–29, 248–50; henceforth GA 39. The word *Innigkeit* is actually Hölderlin’s own and, on Heidegger’s reading, is a word which, echoing the Heraclitean ἀπουσία (see fragment 51), designates the gathering into a form of intimacy or the power of reconciliation of the conflictual

forces and counter-tendencies that make up the fabric of the real. I shall return to this question, and to Heraclitus in particular, in the final part of this chapter.

11. GA 65, 379/264.
12. See “Die Überwindung der Metaphysik” in GA 67.
13. We can mention here, of course, the famous passage from *Being and Time* referring to “the voice of the friend that every Dasein carries with it [*bei sich trägt*].” See Derrida’s illuminating comments on this passage in “Philopolémologie: l’oreille de Heidegger,” in *Politiques de l’amitié* (Paris: Galilée, 1994).
14. GA 65, 379/265.
15. Ibid., 383/267.
16. Ibid.
17. Ibid., 380/265.
18. Ibid., 382/266.
19. Ibid., 383/267.
20. In that respect, and on a first, preliminary reading, there is no real difference between what Heidegger is saying here and what *Being and Time* thought under the heading of the *Zeitlichkeit* of Dasein, for it too was thought as *Zeitigung* and *Einräumung*.
21. GA 65, 378/264.
22. Ibid., 383/268.
23. Ibid., 380/266.
24. Ibid., 381/266.
25. Ibid., 382/266.
26. Throughout *Contributions*, Heidegger identifies “reservedness” as the fundamental attunement of “the ones to come” (*die Zukünftigen*), the disposition through which Da-sein finds himself attuned to the essential hesitation or tentativeness of being—this hesitation, once again, that is not poverty, but reticence *and* reserve of future and of a beginning otherwise than metaphysical. On reservedness, see §§13, 249.
27. GA 65, 384/268.
28. Ibid.
29. Ibid.; emphasis added.
30. Ibid., 385/269.
31. Ibid.
32. For a more sustained treatment of the notion of echo, and of the role it plays in *Contributions*, see the second “articulation” of that book, precisely entitled “Echo.” See also the Preface to J. Sallis’s *Echoes. After Heidegger* (Bloomington: Indiana University Press, 1990), pp. 1–14.
33. GA 65, 385/269.
34. See *Gelassenheit* (Pfullingen: Günther Neske, 1959), pp. 41–42:

Teacher: Perhaps we are now close to being released [*eingelassen zu werden*] into the essence of thinking . . .

Scholar: Insofar as we wait [*warten*] for its essence.

Teacher: Waiting, all right; but never awaiting [*erwarten*], for awaiting already links itself with a representing [*Vorstellen*] and its represented [*Vorgestelltes*].

Scholar: Waiting, however, lets go of that; or rather I should say that waiting lets re-presenting entirely alone. It really has no object [*Gegenstand*].

Scientist: Yet if we wait we always wait for something.

Scholar: Certainly, but as soon as we re-present to ourselves that for which we are waiting, and bring it to stand [*es zum Stehen bringen*], we really wait no longer.

Teacher: In waiting we leave open what we are waiting for.

35. GA 65, 386/269–70.

36. The dialogue from *Gelassenheit* continues like this:

Teacher: In waiting we leave open what we are waiting for.

Scholar: Why?

Teacher: Because waiting releases itself into openness [*in das Offene sich selbst einläßt*] . . .

Scholar: . . . into the expanse of distance [*Ferne*] . . .

Teacher: . . . in whose nearness [*Nähe*] it finds the abode [*Weile*] in which it dwells [*bleibt*].

Scientist: But dwelling is a returning [*ein Zurückkehren*].

Scholar: Openness itself would be that for which we could do nothing but wait.

Scientist: But openness itself is *the* region [*die Gegnet*] . . .

Teacher: into which we are released by way of waiting, when we think.

Scientist: Then thinking would be coming-into-the-nearness of distance.

Scholar: That is a daring definition of its essence, which we have chanced upon . . .

Scientist: As I see more clearly just now, all during our conversation I have been waiting for the arrival of the essence of thinking. But waiting itself has become clearer to me now and therewith this too, that presumably we all became more waitful along our path. (pp. 42–43)

37. Heidegger, “Letter on Humanism,” in *Wegmarken*, p. 161.

5. Interstitial Being

1. The two volumes in question are GA 66 and GA 67.
2. This formulation is to be found in *Identität und Differenz* (Stuttgart: Günther Neske, 1957), p. 54.
3. F. Hölderlin, “Germanien,” in *Gedichte* (Stuttgart: Reclam, 1963), pp. 152–55. See also Heidegger’s interpretation of this hymn in GA 39.
4. GA 65, 403/283.
5. Ibid., 416/293.
6. Ibid., 411/289.
7. Ibid., 277–78/195.
8. M. Heidegger, *Einführung in die Metaphysik* (Tübingen: Max Niemeyer Verlag, 1953), p. 114 ff.
9. We know that this is not quite true: there is a history of technicity and technics, one that is coextensive with the history or the evolution of what is referred to as the human: from the man of Cro-Magnon to that of Neanderthal and the *Homo sapiens*, the history is one of domestication and control: of fire, of stone, of iron, of the land, and of animal life, through which the human is increasingly organizing and ultimately transforming its environment, which has now become the planet as a whole.
10. This too we know not to be accurate: anyone who has seen the frescoes at Lascaux, dating from approximately 15,000 B.C., is still under the shock of those images signifying nothing short of the birth of art itself. In this cave, older and of a radically different

nature than the one depicted by Plato in the *Republic*, the images are not shadows, semblances of anything: they are shinnings of nature itself, the celebration of its beauty, of the delights of the earth and of life as a whole. They do not seem to symbolize, or even to represent, anything. They seem to incarnate this other mode of dwelling amid things, this poetic inhabitation of the world from out of earth. On Lascaux, see Georges Bataille, “Lascaux ou la naissance de l’art,” in *Œuvres complètes*, Vol. 9 (Paris: Gallimard, 1979).

11. GA 39, 104.
12. GA 65, 471/331.
13. Ibid., 479/337.
14. Ibid., 485/341.
15. *Zur Seinsfrage* (Frankfurt am Main: Vittorio Klostermann, 1956).
16. Hölderlin, *Hyperion, Gesammelte Werke* (Stuttgart: Sigbert Mohn, 1961), p. 470.
17. See Heraclitus, *Fragments* (Diels-Kranz) 8, 10, 51, 54, 80.
18. *Héraclite, Fragments*; the fragment in question, fragment 8, reads τὸ ἀντίζουον συμφέρον καὶ ἐκ τῶν διαφερόντων καλλίστην ἁρμονίαν. The connection between Hölderlin and Heraclitus is one which Heidegger himself thinks through, most notably in the 1934–35 lectures on “Germanien” and “Der Rhein” (GA 39). In those lectures (pp. 123–29), Heidegger mobilizes Heraclitus’s motif of “harmony” (ἁρμονία) in order to understand what Hölderlin means by *Innigkeit*, a word we have already come across. With both words, according to Heidegger, it is a matter of designating the originary intertwining in strife and contradiction of the essential powers of being. Both name being as the most strifely harmony.
19. Heidegger, “Der Spruch des Anaximander,” p. 350ff.
20. GA 66, 15.
21. This, of course, Heidegger does not write in a historical vacuum: in 1938–39, war threatens the whole of Europe and the Anschluss has most certainly taken place. But, Heidegger warns, these world events are not what is in question here. Or rather, to take the full measure of such events, it is necessary to see what they are events of: of Ereignis itself, of the total and unreserved abandonment of and by being to the machinic, of the idolatry of power and the most destructive unleashing of force.
22. Heraclitus, *Fragment 67*.
23. GA 66, 84.
24. M. Heidegger, “Die Sprache,” in *Unterwegs zur Sprache* (Pfullingen: Günther Neske, 1959), pp. 11–33; henceforth US. The pages I am concerned with here run from p. 24.
25. The poem reads as follows:

Window with falling snow is arrayed,
Long tolls the vesper bell,
The house is provided well,
The table is for many laid.
Wandering ones, more than a few
Come to the door on darksome courses.
Golden bloom the tree of graces
Drawing up the earth’s cool dew.
Wanderer quietly steps within;
Pain has turned the threshold to stone.
There lie, in limpid brightness shown,
Upon the table bread and wine.
26. This middle-ground is mentioned last (in the third stanza) in the poem, according to Heidegger, and is gathered around the motif of pain.
27. US, 27.

- 28. On the in-between, see GA 66, §§31, 41, 91.
- 29. Ibid., 321.
- 30. Ibid., 307.
- 31. Ibid.
- 32. Ibid., 314.

6. Physics beyond Metaphysics?

- 1. This, of course, means that my previous claim regarding the emancipation of modern physics from classical (meta)physics must be nuanced: while it is indeed true that modern physics constitutes a decisive departure from the physics of Greek Antiquity and the Middle Ages, it is also true that it remains governed by a metaphysical ideal of permanence and stability, of simplicity and order. And it is with that very ideal that contemporary physics (and biology) forges a decisive break.
- 2. G. Bachelard, *Le nouvel esprit scientifique* (Paris: Presses Universitaires de France, 1999), pp. 57–58.
- 3. See Plato, *Sophist*, 246a–250e.
- 4. Quoted by I. Prigogine and I. Stengers in *La nouvelle alliance* (Paris: Gallimard “Folio,” 1979), p. 57.
- 5. Descartes, *Œuvres*, p. 403; *Metaphysical Meditations, Third Set of Objections with the Author’s Replies, Objection II*, in E. S. Haldane and G. R. T. Ross, eds., *The Philosophical Works of Descartes* (Cambridge: Cambridge University Press, 1964), Vol. II, p. 64; translation modified.
- 6. W. Heisenberg, *Das Naturbild der heutigen Physik* (Hamburg: Rowohlt, 1955), p. 21. Trans. A. J. Pomerans as *The Physicist’s Conception of Nature* (London: Hutchinson, 1958), p. 29; henceforth *Conception of Nature* followed by German and English pagination.
- 7. Bachelard, *Le nouvel esprit scientifique*, pp. 72–74.
- 8. Ibid., p. 73.
- 9. Heisenberg, *Conception of Nature*, 10/12; translation modified.
- 10. Ibid., 11–12/14.
- 11. Ibid., 10/14; translation modified.
- 12. M. Heidegger, *Die Frage nach dem Ding* (Tübingen: Max Niemeyer, 1962), p. 39.
- 13. See M. Kaku, *Hyperspace* (Oxford: Oxford University Press, 1994), Chapter 5: “Quantum Heresy.”
- 14. My main source of inspiration for these remarks on superstring theory is B. Greene, *The Elegant Universe* (London: Vintage, 2000), Chapter 6: “Nothing but Music: The Essentials of Superstring Theory.”
- 15. A. March, *La physique moderne et ses théories* (Paris: NRF “Idées,” 1965), p. 214.
- 16. Greene, *The Elegant Universe*, p. 114.
- 17. Bachelard, *Le nouvel esprit scientifique*, pp. 89–90.
- 18. Ibid., p. 90.
- 19. Heisenberg, *Conception of Nature*, 29–30/41.
- 20. R. Feynman, *QED. The Strange Theory of Light and Matter* (Princeton: Princeton University Press, 1988). This account of Feynman’s interpretation of quantum mechanics is borrowed from Greene, *The Elegant Universe*, pp. 110–11.
- 21. This is what emerges from the famous imaginary example referred to as Heisenberg’s microscope. (I am greatly indebted to the clarity of Paul-Antoine Miquel’s exposition of this experiment.) A monochromatic light with a very short wavelength is used to measure an X component of the electron position, which is an X direction in a focal

plane of a microscope. Why a very short wavelength? Because there is a relation between the wavelength of the light and the resolving power of the microscope. When the wavelength is shorter, the resolving power is greater. But since a monochromatic light is not only a wave, but also several photons, we need to know the photon's momentum if we want to know the momentum of the electron resulting from the collision with the photon. Yet if the photon's momentum is too great, the momentum of the electron itself will be modified, and we will no longer be in a position to observe it with the microscope. Consequently, we need a very small momentum for the photon. Yet the smaller its momentum, the greater the wavelength associated with it. So, if we reduce the photon's momentum in order to grasp the momentum of the electron with greater precision, we need a light with a great wavelength, thus reducing the resolving power of the microscope. As a result, we have a classical phenomenon of diffraction. Now, this phenomenon is well known in optics. Similarly, the mechanical laws of the particle's motion are also well known. But the novelty of the situation here is that we have a light wave, which is also a particle (a photon), and a particle (an electron), which is also a wave. The uncertainty of the momentum of the electron results from considering light as a particle, and the uncertainty of the position of the electron results from considering light as a wave.

22. Quoted in A. Pais's *"Subtle is the Lord . . .": The Science and the Life of Albert Einstein* (Oxford: Oxford University Press, 1982), epigraph.
23. From Einstein, who characterized the idea of the irreversibility of time as an "illusion," to Feynman and Hawking, the vast majority of those working in the field of fundamental physics deny the existence of such an irreversibility, a concept due simply to the limits of our patience in the face of evolving systems.
24. Karl Popper summarizes this situation rather beautifully when he says that classical dynamics was concerned primarily with clocks, and contemporary physics with clouds. See K. Popper, *Of Clouds and Clocks* (St. Louis: Washington University Press, 1965).
25. The function in question is known as the Hamilton function (H) and is expressed in the following way: (H): $dH/dt = 0$.
26. See S. Kauffman, *At Home in the Universe* (London: Penguin Books, 1995), pp. 7–8.
27. Bergson, *L'évolution créatrice* (Paris: Presses Universitaires de France, Edition du Centenaire), Chapter 3.
28. P.-A. Miquel, *Comment penser le désordre?* (Paris: Fayard, 2000), p. 230.
29. Ibid.
30. See *La nouvelle Alliance* (in collaboration with Isabelle Stengers), 1979; *Entre le temps et l'éternité* (in collaboration with Isabelle Stengers), 1988; *Les lois du chaos* (Paris: Champs Flammarion, 1994). The question regarding the arrow of time, and specifically of its irreversibility, is one that runs through the whole of Prigogine's work. It actually constitutes the unifying thread of his work as a whole. His is an extraordinarily ambitious project, as it attempts to point to such an irreversibility, to an asymmetry between past and future, not only in thermodynamic phenomena, but in those phenomena described in the sciences that unfold in the wake of classical dynamics, namely, quantum mechanics and relativity. This is against the explicitly reversible nature of the equations of quantum mechanics and relativity. I am in no position to judge the pertinence of Prigogine's universal attempt at identifying the arrow of time in all areas of nature, and will therefore limit myself to thermodynamic systems.
31. L. Boltzmann, *Lectures on Gas Theory* (Berkeley: University of California Press, 1964), pp. 443–44, 446–48.
32. Prigogine and Stengers, *Entre le temps et l'éternité*, pp. 49–50.
33. Boltzmann, *Lectures on Gas Theory*, pp. 446–48.

34. See M. Hénon, “A Two-Dimensional Mapping with a Strange Attractor,” in *Communication in Mathematical Physics* 50 (1976). A detailed discussion of Hénon’s article, the results of which I have reproduced here, can be found in P.-A. Miquel, *Comment penser le désordre?*, pp. 250–58. See also Prigogine and Stengers, *Entre le temps et l’éternité*, Chapter 4 (“Du simple au complexe”).
35. See B. Mandelbrot, *Les objets fractals* (Paris: Flammarion “Nouvelle bibliothèque scientifique,” 1975).
36. Darwin, *On the Origin of Species*, 6th ed. (Totowa, N.J.: Rowman and Littlefield, 1975), p. 394.
37. *Ibid.*, p. 118.
38. Miquel, *Comment penser le désordre?*, pp. 268–69.

7. The Renewal of Ontology

1. Deleuze and Guattari, *Qu’est-ce que la philosophie?*, p. 133; trans. H. Tomlinson as *What Is Philosophy?* (London: Verso, 1994), p. 140; henceforth *What Is Philosophy?* followed by French and English pagination.
2. In *Bergsonism* (trans. H. Tomlinson and B. Habberjam [New York: Zone Books, 1991], p. 15), Deleuze cites the following passage from Bergson’s *La pensée et le mouvant*: “The truth is that in philosophy and elsewhere it is a question of *finding* the problem and consequently of *positing* it, even more than of solving it. For a speculative problem is solved as soon as it is properly stated. By that I mean that its solution exists then, although it may remain hidden and, so to speak, covered up: The only thing left to do is to *uncover* it. But stating the problem is not simply uncovering, it is inventing. Discovery, or uncovering, has to do with what already exists, actually or virtually; it was therefore certain to happen sooner or later. Invention gives being to what did not exist; it might never have happened. Already in mathematics [and this, by the way, as we shall see later on in connection with the fourth chapter of Deleuze’s *Difference and Repetition*, is the reason why the very form of the problematic will turn out to be mathematical, and specifically differential], the effort of invention consists most often in raising the problem, in creating the terms in which it will be stated” (*The Creative Mind*, 180/87–88).
3. Deleuze, *What Is Philosophy?*, 147/155–56.
4. *Ibid.*, 147/156.
5. C. Péguy, *Clio*, in *Œuvres en Prose* (1909–14) (Paris: Gallimard “Pléiade,” 1961), pp. 93–308. See pp. 230 and 265 in particular. Toward the end of the previous chapter, I claimed that mathematics too can be seen as the science of events. This would seem to be at odds with what Deleuze is claiming. However, I believe we need to distinguish between two senses of event here, which will become more apparent as we go. At this stage, suffice it to say that, for Deleuze, philosophy is concerned with *virtual* events, whereas science is concerned with *actual* events. But what is at issue here is precisely the relation between these two concepts or planes.
6. Deleuze, *What Is Philosophy?*, 25–26/20.
7. *Ibid.*, 36/33.
8. *Ibid.*
9. Duns Scotus, *Ordinatio*. In *Opera Omnia Joannis Duns Scoti Doctoris Subtilis et Mariani*, . . . *Studio et cura Commissionis Scotisticae*, ed. P. Carolo Balic (Civitas Vaticana, 1950). See also *Collatio* 24 in *Collationes VI Oxonienses et Parisienses*, in *Duns Scotus*, ed. C. R. S. Harris (Oxford: Oxford University Press, 1927), Vol. II, pp. 371–78; and P. C. Balic, *De Collationibus Duns Scoti*, *Bogoslovni Vestnik* 9 (1929), pp. 185–219. Deleuze’s major source

- of inspiration for his remarks on Scotus is E. Gilson's *Jean Duns Scot. Introduction à ses positions fondamentales* (Paris: Vrin, 1952). For an exhaustive bibliography on the question of analogy and univocity, see O. Boulnois, ed., *Jean Duns Scot. Sur la connaissance de Dieu et l'univocité de l'étant* (Paris: Presses Universitaires de France, 1988), pp. 472–74.
10. Duns Scotus, *Ordinatio*, Prologue, §142.
 11. *Ibid.*, I, 3, §137.
 12. *Ibid.*, §187.
 13. "In every name being is comprehended."
 14. See Boulnois, *Jean Duns Scot*, pp. 23–30.
 15. Aristotle, *Second Analytics*, I, 1, 71a12–13.
 16. Avicenna, *Liber de philosophia prima*, IV, 2 (209, 84–86).
 17. Henry of Gent, *Summa theologiae* (Paris, 1520), I, 123 E.
 18. *Ibid.*, arg. 1.
 19. *Ibid.*, 21, 2 (I, 124 F); emphasis added. This text is referred to by Scotus in *Ordinatio*, I, 3, §18.
 20. Duns Scotus, *Lectura*, I, 3, §110 (XVI, 265). In *Opera omnia . . .*, Vol. XVI.
 21. *Ibid.*, §113 (XVI, 266).
 22. *Ibid.*
 23. Scotus often uses the term "destruction" as synonymous with "refutation," although this concept implies a greater methodical rigor. In this sense, as Olivier Boulnois remarks in his Introduction (p. 15), the concept of destruction seems to be borrowed from the Latin translation of Algazel (Ghazālī), *Destructio Philosophorum* (*Tahâfot al-falasîf*), a treatise to which Averroes (Ibn Roshd) responds with his own *Destructio destructionum* (*Tahâfot al-tahâfot*). "Deconstruction" may thus have a longer history than originally thought.
 24. Duns Scotus, *Ordinatio*, I, 8, §89.
 25. *Ibid.*
 26. Aristotle, *De Anima*, q. I, §6 (VIII, 477).
 27. See the quotation above from *Ordinatio*, I, 3, §137.
 28. To actuality and potentiality we could add the dyads caused/uncaused, necessary/contingent.
 29. See Gilson, *Jean Duns Scot*, p. 95.
 30. Plato, *Meno* 72 b.
 31. Such is the reason why Deleuze will become so interested in Leibniz's conception of the concept of any given thing, the essence of which includes all of its accidents, and thus, ultimately, all other things too.
 32. Aristotle, *Categories*, I, 1a1.
 33. *Ibid.*, I, 1a6.
 34. Aristotle, *Metaphysics*, G, 2, 1003a33.
 35. *Ibid.*, 1003a34–b6.
 36. See *Difference and Repetition*, 49/32.
 37. *Ibid.*, 53/35.
 38. Of course, it should also be reminded that the thesis regarding the analogy of being was itself an attempt to overcome what was taken to be an irreducible *equivocity* intrinsic to Aristotle's conception of being.
 39. *Difference and Repetition*, 389/304.
 40. *Ibid.*, 53/36.
 41. This is the paradox Badiou latches onto in his short essay on Deleuze—a paradox which, according to him, ultimately testifies to the failure of Deleuzian thought to uphold the challenge of immanence.

42. *Difference and Repetition*, 48/32.
43. *Ibid.*, 79/56. Although this quasi definition of representation applies most significantly to Hegel's thought, against which *Difference and Repetition* as such—if not the whole of Deleuze's work—is directed, it applies also to a number of other figures in the philosophical tradition, among whom Plato, Aristotle, Aquinas, Descartes, and Leibniz figure prominently. At a more precise and complete level, and following Michel Foucault's description of the classical world of representation, Deleuze sees the metaphysics of representation as organized around a fourfold principle or "root": to the identity of the concept, we need to add the analogy of judgment, as well as the principles of resemblance and opposition. Such metaphysical principles also organized—and in some instances continue to organize—the sciences themselves. As Manuel de Landa makes clear in his *Intensive Science and Virtual Philosophy* (London: Continuum, 2002), this fourfold principle governed the classificatory practices common in Europe in the seventeenth and eighteenth centuries, such as those that led to the botanical taxonomies of Linnaeus: "Simplifying somewhat we may say that these classifications took as a point of departure perceived *resemblances* among fully-formed individuals, followed by precise comparisons aimed at an exhaustive listing of what differed and what stayed the same among those individuals. This amounted to a translation of their visible features into a linguistic representation, a tabulation of differences and *identities* which allowed the assignment of individuals to an exact place in an ordered table. Judgments of *analogy* between the classes included in the table were used to generate high-order classes, and relations of *opposition* were established between those classes to yield dichotomies or more elaborate hierarchies of types" (pp. 41–42). We shall have to see how the problematic of onto-hetero-genesis aims to overcome such practices. Specifically, we shall have to see how relations of identity, resemblance, analogy, and opposition are the effects or the results of deeper physical processes, and not fundamental concepts in which to ground an ontology. "Repetition," specifically in the guise of the eternal return, is the concept that Deleuze will offer in place of representation.
44. *Difference and Repetition*, 57/39.
45. The indifferent and neutral aspect of being is a specifically Scotian motif, one most certainly put forward in the face of a danger that follows from the thesis, namely, pantheism. Being is thus "neutralized." The theological, and this means "creationist" perspective within which Scotus situated himself, forced him to conceive of univocal being as a neutralized and indifferent concept. As Deleuze points out, it is only with Spinoza that the being of univocity becomes an object of *affirmation*, that being is wrested from its neutrality, and made coextensive with a problematic of "expression" in the twofold sense of *constitution* and *production*. With the *Deus sive Natura*, the step of pantheism has been crossed: univocal being becomes identical with unique, universal, and infinite substance. Being itself is said in a single unique sense of the substance and the modes, even though the modes and the substance do not have the same sense or do not have that being in the same manner (*in se* or in itself for the substance, *in alio* or in something else for the modes). Nietzsche takes things further by allowing the substance to become absolutely one with its modes, and thus by allowing being to be identified with becoming itself. With this Copernican revolution, identity turns out to be *of* difference, being *of* becoming, and substance *of* its modes. Scotus, Spinoza, Nietzsche constitute the three moments or the three emblematic figures of univocity, and culminate in the thought of eternal recurrence. Returning is being, but the being of becoming, in which differences only recur. We shall come back to the question of becoming and of eternal recurrence toward the end of these analyses. See *Difference and Repetition*, pp. 58–61/40–42. See also G. Deleuze, *Spinoza et le problème de l'expression* (Paris: Les Éditions de Minuit, 1968), Chapters I–III, especially pp. 37–41 and 50–58. By allowing for a *formal* identity between God and His creatures—one that can be

confused with an identity of neither essence nor existence—Spinoza opposes the thesis of analogy and sides with Scotus. Spinoza's attributes, Deleuze claims, are univocal forms of being which do not undergo any change in nature according to the "subject" to which they apply, and this means whether they are predicated of the infinite being or finite beings, of substance or its modes, of God or His creatures. Among the many senses of the word "formal," Deleuze retains and emphasizes that which opposes the words "eminent" and "analogous." In no way must the substance be thought as containing its attributes eminently; similarly, the attributes must not be thought as containing eminently the essences of mode. Attributes are affirmed of the substance and are so affirmed *formally*. They are affirmations of substance, of God, the *logoi*, or the truly divine names. In the analogical approach, however, those names apply to God only analogically, and their meaning pre-exists in God eminently. Such is the reason why, according to Deleuze, Spinoza's thought is a philosophy of affirmation, and why univocity presupposes neither negation nor mediation: the community of being between God and the creatures is neither eminent, nor analogous, but formal. As a result, with Spinoza, the idea of an immanent cause supplements that of univocity, freeing the latter from the indifference and the neutrality in which the theory of divine creation had kept it hitherto. The canonical formulation of immanent univocity is, according to Deleuze, to be found in the Spinozist idea according to which God is said to be cause of all things in the very sense (*eo sensu*) in which it is said to be cause of itself (Spinoza, p. 58). As Agamben rightly points out (in "L'immanence absolue," Gilles Deleuze. *Une vie*, ed. E. Alliez [Le Plessis-Robinson: Institut Synthélabo, 1998], p. 172), the principle of immanence is nothing other than a generalization of the ontology of univocity that excludes any form of transcendence of being. Immanence, Deleuze claims in *What Is Philosophy?*, is "the burning corner stone of all philosophies," insofar as "it takes upon itself all the dangers philosophy must face, all the condemnations, persecutions and rejections it undergoes" (p. 47). With Spinoza, "the prince of philosophers" (p. 49), and his idea of an immanent cause according to which the agent is also its own patient, being is freed from the threat of inertia and immobility which the absolutization of univocity cast over it by making it equal to itself at every point. The immanent cause produces effects while remaining the same, much in the way of the emanative cause of Neo-Platonism; unlike the latter, however, the effects that immanence produces do not extend beyond it. The "plane of immanence" which Deleuze will invoke later on must be understood as a direct continuation of the immanent interpretation of ontological univocity.

46. "With univocity, however, it is not the differences which are and must be: it is being which is Difference, in the sense that it is said of difference" (*Difference and Repetition*, 57/39).
47. *Ibid.*, 52/35.
48. Agamben, "L'immanence absolue." The text which this title refers to is G. Deleuze, "L'immanence: une vie . . .," in *Philosophie* no. 47 (1995).
49. "Immanence is immanence only to itself and consequently captures everything, absorbs All-One, and leaves nothing remaining to which it could be immanent. In any case, whenever immanence is interpreted as immanent to Something [whether this Something be a pure or a transcendental consciousness, a thinking thing, the Other, the Flesh], we can be sure that this Something reintroduces the transcendent" (*What Is Philosophy?*, 47/45).
50. Deleuze, "L'immanence: une vie," p. 4.
51. J.-P. Sartre, "La transcendance de l'ego," *Recherches philosophiques* VI (1936–37). Trans. F. Williams and R. Kirkpatrick as *The Transcendence of the Ego* (New York: Noonday Press, 1957).
52. G. Deleuze, *Logique du sens* (Paris: Minuit, 1969), p. 120. Trans. M. Lester with C.

Stivale as *Logic of Sense* (London: Athlone Press, 1990), pp. 98–99; henceforth *Logic of Sense* followed by French and English pagination.

53. Ibid., 128/105.

54. Ibid., 30/18.

55. Ibid., 149/123.

56. Ibid., 125/102–103.

57. Ibid., 125/103.

58. *Difference and Repetition*, 79–80/56–57; translation modified.

59. Ibid., 286/222.

8. Virtual Multiplicities

1. *Difference and Repetition*, 221/170. See S. Maïmon, *Versuch über Transzendentalphilosophie, Gesammelte Werke*, Vol. 2 (Hildesheim: G. Olms, 1965–76). Maïmon is the first post-Kantian to have advocated the need for a genetic point of view in place of conditioning as a solution to the Kantian aporia regarding the question of mediation between intuition and concept, or between the particular and the universal. Having recognized the two realities as absolutely heterogeneous, an abyss between the particular and the universal is created, one that the transcendental deduction cannot bridge. The Kantian schema refers to a purely external concept of difference, and thus to a purely external harmony between the faculties. Difference does not quite unite (in separating) the two; it is merely a term “between” the determinable intuition and the determining concept. It does not generate them so much as relate them to one another. Maïmon’s contribution, according to Deleuze, is to have forced the two terms of the differential relation into a reciprocal determination, and thus to have understood difference *productively*. While Maïmon’s specific solution can be seen as announcing some of the moves within German idealism, it also accounts for the way in which Deleuze embraces the concept of genesis without retaining the logic of mediation (and of dialectical mediation in particular). It is difference, and difference alone, that comes to characterize such a solution, independently of any principle of contradiction: *dx* (as the symbol of the problematic envisaged as differential value), and precisely not non-A (as the symbol of difference as negativity and contradiction). But Deleuze owes this discovery to Maïmon himself who, in his own attempt to grasp the intuition and the concept in their originary unity, followed a lead left by Kant himself in his remarks on the anticipations of perception. Remarkably, what emerges from this complex analysis is the possibility, in at least one instance, of determining empirical reality not only with respect to its form, but also with respect to its content. This means that, in one place at least, it is possible to deduce *a priori* the particular from the universal. This point of mediation is constituted by the thesis according to which every sensation appears as an *intensive quantity*, or as comporting a degree. It must therefore be conceived as a sum of infinitely small elements, or as an integration of differentials. By reinterpreting and generalizing this principle, that is, by understanding these infinitely small elements as the limited expression of the activity of the I, Maïmon is able to overcome the split between the understanding and sensibility, and bridge their abyss, inasmuch as the sensible is now interpreted as the intelligible in disguise. On this question, see M. Guérault, *La philosophie transcendentale de Salomon Maïmon* (Paris: Alcan, 1929), pp. 53ff. and 76ff., and J.-B. Scherrer, “Présentation,” in *Salomon Maïmon, essai sur la philosophie transcendentale* (Paris: Vrin, 1989), pp. 9–25.
2. See H. Bergson, *Essai sur les données immédiates de la conscience* (1889) (Paris: Presses Universitaires de France, Edition du Centenaire), Chapter II. Trans. F. L. Pogson as

- Time and Free Will* (New York: Macmillan, 1919). For Deleuze's commentary, see *Bergsonism*, 31–42/38–47.
3. On Riemann's theory of multiplicities, see B. Riemann, "Ueber die Hypothesen, welche der Geometrie zu Grunde liegen," in H. Weber, ed., *Bernhard Riemann's Gesammelte Mathematische Werke und Wissenschaftlicher Nachlass* (New York: Dover, 1953), pp. 272–87.
 4. A decisive point is that, when applied to spaces, such multiplicities are not merely opposed to one another: a continuous space is progressively defined, giving rise to discontinuous spaces. As de Landa clearly formulates it: "A space is not just a set of points, but a set together with a way of binding these points together into neighbourhoods through well defined relations of proximity or contiguity. In our familiar Euclidean geometry these geometries are specified by fixed lengths or distances which determine how close points are to each other. The concept of 'length' (as well as related ones, like 'area' or 'volume') is what is called a metric concept, so the spaces of Euclidean geometry are known as *metric spaces*. There exist other spaces, however, where fixed distances cannot define proximities since distances do not remain fixed. A topological space, for example, may be stretched without the neighbourhoods which define it changing in nature. To cope with such exotic spaces, mathematicians have devised ways of defining the property of 'being nearby' in a way that does not presuppose any metric concept, but only nonmetric concepts like 'infinitesimal closeness'" (*Intensive Science and Virtual Philosophy*, pp. 22–23). In his later work, Deleuze refers to metric and nonmetric multiplicities as "striated" and "smooth." The term "smooth space" encompasses all nonmetric spaces: "It is the difference between a smooth (vectorial, projective, or topological) space and a striated (metric) space: in the first case 'space is occupied without counting' and in the second case 'space is counted in order to be occupied'" (*Mille plateaux* [Paris: Minuit, 1980], p. 447, trans. B. Massumi as *A Thousand Plateaus* [London: Athlone, 1988], pp. 361–62; henceforth *A Thousand Plateaus* followed by French and English pagination). One counts a metric space in order to occupy it, in the sense in which sedentary cultures divide the land into measured plots in order to inhabit it. Is it surprising, then, to see Deleuze link his critique of representation, and "good sense" in particular, to agricultural and sedentary practices? To the sedentary way of metricizing space, of dealing with it as essentially extensive, Deleuze opposes an intensive way of occupying space (and not just time, like Bergson), the way a liquid does, that is, occupying it without counting it or dividing it. This alternative Deleuze calls a "nomadic distribution."
 5. Bergson, "Introduction à la métaphysique," in *La pensée et le mouvant*, p. 177. Trans. T. E. Hulme as *An Introduction to Metaphysics* (Indianapolis: Hackett, 1999), p. 30; emphasis added.
 6. Bergson, *Matière et mémoire* (Paris: Presses Universitaires de France, Edition du Centenaire), p. 341; 1939–41 reprints, pp. 231–32. Trans. N. M. Paul and W. S. Palmer as *Matter and Memory* (London: George Allen & Unwin, 1911), p. 206. "As long as we are dealing with space, we may carry the division as long as we please; we change in no way the nature of what is divided." Henceforth *Matter and Memory* followed by French and English pagination.
 7. Deleuze, *Bergsonism*, 36/42.
 8. See *ibid.*, 37–42/43–47. "The heart of Bergson's project is to think differences in kind independently of all forms of negation: There are differences in being and yet nothing negative" (41/46).
 9. Recently, the work of Ilya Prigogine, we will recall, constitutes a very significant attempt at introducing the qualitative, durational aspect of time in physics itself. See Chapter 6.
 10. Bergson, *The Creative Mind*, 51/193.

11. The famous example Bergson gives to illustrate his point regarding the nature of duration is that of mixing a glass of water with sugar and waiting for the sugar to dissolve. While the time the sugar actually takes to dissolve may be measured mathematically, this is not the time we actually experience. Rather, it is duration, and by that we need to understand the temporal dimension that cannot be divided in smaller units without losing its very identity, the time that is marked by a certain impatience to see the sugar dissolve, and by a certain unity with the actual process. It is not so much a bit or a stretch of time that is relative to other bits and stretches as an absolute, nonnumerical (or qualitative) multiplicity.
12. See above, Chapter 1.
13. Bergson, *L'évolution créatrice*, p. 22. Trans. A. Mitchell as *Creative Evolution* (Lanham, Md.: University Press of America, 1983), p. 22; henceforth *Creative Evolution* followed by French and English pagination.
14. *Ibid.*, 259/258.
15. For a more complete account of Deleuze's Bergsonism, see C. Boundas, "Deleuze-Bergson: An Ontology of the Virtual," in P. Patton, ed., *Deleuze. A Critical Reader* (Oxford: Basil Blackwell, 1996), 81–107. In a very different, and ultimately critical vein, see A. Badiou, *Deleuze — "La clameur de l'être"* (Paris: Hachette, 1997). On the more specific question of Bergson's and Deleuze's relation to the question of life and biology, see K. Ansell-Pearson's luminous *Germinal Life. The Difference and Repetition of Deleuze* (London: Routledge, 1999), as well as *Philosophy and the Adventure of the Virtual* (London: Routledge, 2002).
16. *Intensive Science and Virtual Philosophy*. The account of multiplicity given here is indebted to the great clarity and synthetic nature of the first chapter of de Landa's book.
17. Deleuze, *Difference and Repetition*, 236–37/182.
18. G. Deleuze, "La conception de la différence chez Bergson," in *L'île déserte et autres textes. Textes et entretiens 1953–1974* (Paris: Minuit, 2002). Trans. M. McMahon as "Bergson's Conception of Difference," in J. Mullarkey, ed., *The New Bergson* (Manchester: Manchester University Press, 1999), 42–66.
19. H. Bergson, "La vie et l'œuvre de Ravaisson," in *La pensée et le mouvant*.
20. *Difference and Repetition*, 236/182.
21. Bergson, *Introduction to Metaphysics*, 184/26.
22. De Landa, *Intensive Science and Virtual Philosophy*, pp. 13–14.
23. Poincaré identified a number of such singularities, such as "dips," "nodes," "foci," "centers" — terms which Deleuze often refers to.
24. De Landa, *Intensive Science and Virtual Philosophy*, p. 15.
25. *A Thousand Plateaus*, 508/408. This topological space is also that governing all structuralist approaches, according to Deleuze's article from 1972 entitled "A quoi reconnaît-on le structuralisme?," now published in *L'île déserte et autres textes*, pp. 238–69. Structure, Deleuze claims, whether in Lévi-Strauss, Lacan, Foucault, or, I would add, Deleuze himself, especially in *Logic of Sense*, is composed of symbolic elements that neither designate anything extrinsically nor signify anything intrinsically, but have a *sense* (*sens*). This "sense" is only one of *position*. Position, however, signifies nothing like an actual position (*place*) within an extended reality, nor even a place (*lieu*) within imaginary extensions, but positions and places within a structural or *topological* space. What is structural, or even structuralizing, is space, but the space in question is pre-extensive, non-extended. It is, Deleuze says, a pure *spatium*, that is, a space constituted as an order of vicinity, where the notion of vicinity is precisely to be understood as ordinal, and not as taking place within the order of extensity. The decisive point, here, is that within a purely structural space the positions (*places*) come before the things and the real beings that come to occupy them. In biology, for

- example, genes are part of a structure inasmuch as they are inseparable from “loci” or places that can alter their relations within a chromosome.
26. See I. Stewart and M. Golubitsky, *Fearful Symmetry* (Oxford: Basil Blackwell, 1992), Chapter 7, and de Landa, *Intensive Science and Virtual Philosophy*, p. 19.
 27. De Landa, *Intensive Science and Virtual Philosophy*, p. 17.
 28. *What Is Philosophy?*, 148/157.
 29. *Difference and Repetition*, 242/187.
 30. De Landa, *Intensive Science and Virtual Philosophy*, p. 23.
 31. *What Is Philosophy?*, 26/21.
 32. *Difference and Repetition*, 242–43/187, 244/188–89.
 33. All commentators and critics agree that, with the concept of the virtual, we touch on the very nerve and specificity of Deleuze’s thought. But few agree on the meaning and ultimate consequences of this concept. See, for example, the different interpretations of Badiou in *La clameur de l’être*, and Ansell-Pearson, *Philosophy and the Adventure of the Virtual*.
 34. Bergson, *Introduction to Metaphysics*, 214/52.
 35. *Ibid.*
 36. *Ibid.*, 215/52.
 37. *Ibid.*, 215/53.
 38. De Landa’s account draws on R. Abraham and C. Shaw, *Dynamics. The Geometry of Behavior* (Santa Cruz: Aerial Press, 1985), Vol. I, pp. 20–21.
 39. Quoted in G. Deleuze, *Logic of Sense*, 127/345. The reference is to A. Lautman, *Le problème du temps* (Paris: Hermann, 1946), pp. 41–42. Other references to Lautman by Deleuze include *Essai sur les notions de structure et d’existence en mathématiques* (Paris: Hermann, 1938), Vol. II, pp. 148–49, and *Nouvelles recherches sur la structure dialectique des mathématiques* (Paris: Hermann, 1939), pp. 13–15. In *Difference and Repetition*, Deleuze emphasizes Lautman’s threefold characterization of the mathematical problem—a characterization which, according to Deleuze, designates the very nature, dialectical in essence, of all problems: “a problem has three aspects: its difference in kind from solutions; its transcendence in relation to the solutions that it engenders on the basis of its own determinant conditions; and its immanence in the solutions which cover it” (232/178–79).
 40. *Difference and Repetition*, 233/180.
 41. *Ibid.*, 229–30/177; emphasis added.
 42. *Ibid.*, 235/181.
 43. *Ibid.*, 238/183.
 44. *Logic of Sense*, 133/109.
 45. *Ibid.*, 134/110.
 46. Ultimately, then, Deleuze does not elevate differential calculus to the level of a problematic matrix: “Differential calculus in the most precise sense is only a mathematical instrument which, even in its own domain, does not necessarily represent the most complete form of the expression of the problem and the constitution of their solutions in relation to the order of dialectical Ideas which it incarnates” (*Difference and Repetition*, 235/181).
 47. The most significant exception to this general rule is Hegelian thought, which is genetic through and through. And it is precisely because of this that his thought constitutes the greatest immediate challenge to Deleuzian thought, which goes to great trouble to distinguish itself very clearly from a conception of movement, becoming and genesis linked to concepts of negation, opposition and contradiction, as I have attempted to present them. A book-length study is desperately needed on this issue, as Deleuze’s thought is explicitly and from the start constructed as an alternative to He-

gelian speculative dialectics. Needless to say, the concept of virtuality is mobilized explicitly to replace what Deleuze sees as the false movement of the negative with the true movement of individuation. The core of Deleuze's critique, which returns time and again, is that the negative is an "illusion," "only the shadow of the problems." This means that Hegel focuses on actualities, already incarnate solutions to problems, and not on the problems themselves, or on their truly dialectical dimension.

48. H. Bergson, "Le possible et le réel" in *La pensée et le mouvant*, pp. 99–116, and Gilles Deleuze, *Bergsonism*, 6–7/17–18.
49. I. Kant, *Versuch, den Begriff der negativen Grössen in die Weltweisheit einzuführen* (Königsberg: Johann Jacob Kanter, 1763) (AK II, 165–204). Translated as *Attempt to Introduce the Concept of Negative Magnitudes into Philosophy*, in Cambridge Edition I, *Theoretical Philosophy 1755–1770*, trans. and ed. David Walford in collaboration with Ralf Meerbote (Cambridge: Cambridge University Press, 1992), pp. 203–10. Kant draws a distinction between the mere concept of a thing, and this means the possibility of its actuality, and its actual existence. Actuality, existence, is not a *real* predicate, says Kant. It does not add anything to the concept of the thing, but only posits it absolutely in actuality. In the Kantian analysis, the concept of a thing coincides with its possibility. Everything that the thing is, it is conceptually, or *qua* concept. Its very identity is conceptual, and its conceptuality in turn presupposes the literally underlying presence of a self-present and representational subjectivity. And so, the movement from concept to thing is a movement from possibility to actuality. It is not even, as was the case with Plato, Aristotle, and even Lucretius, that the thing in its actuality *resembles* its concept, which is its very condition of possibility. For the actual thing is now absolutely identical with its condition of possibility, one with its concept. It is only *formally*, not substantially or ontologically, that they differ.
50. *Difference and Repetition*, 273–74/211–12.
51. *Ibid.*, 248/191. I shall return to this transformation of the concept of essence in my discussion of Heidegger.
52. *Ibid.*, 286/222.
53. De Landa, *Intensive Science and Virtual Philosophy*, pp. 41–42.
54. *Difference and Repetition*, 244/188–89.
55. *Logic of Sense*, 68–69/53–53.
56. *What Is Philosophy?*, 148/156.
57. *Difference and Repetition*, 188/144. The reference is to Martin Heidegger, *What Is Called Thinking?*, trans. J. G. Gray (New York: Harper & Row, 1968), p. 3.
58. *Logic of Sense*, 151/125.
59. *Difference and Repetition*, 252/195.
60. *Ibid.*, 248/192.
61. *Ibid.*
62. *Ibid.*, 214/165. The (humorous) reference to the monkey is in the context of an experiment which Deleuze mentions in his attempt to distinguish the operation of knowing from that of learning:

A well-known test in psychology involves a monkey who is supposed to find food in boxes of one particular colour amidst others of various colours: there comes a paradoxical period during which the number of 'errors' diminishes even though the monkey does not yet possess the 'knowledge' or 'truth' of a solution in each case: propitious moment in which the philosopher-monkey opens up to truth, *himself producing the true*, but only to the extent that he begins to penetrate the coloured thickness of a problem (*ibid.*, emphasis added).

63. *Ibid.*
64. *Ibid.*, 254/196.

65. Ibid.
66. See Plato, *Meno*. Although the *Meno* is credited with having introduced the dimension of pure time within thought, and thus of having overturned metaphysics at the very moment in which metaphysics is established, this gesture of transgression is ultimately suppressed, and subordinated to the imperatives of representation, thus conforming it to the image of knowledge: “Platonic time introduces difference, and apprenticeship introduces heterogeneity into thought simply in order to subject them again to the mythical form of resemblance and identity, and therefore to the image of knowledge itself” (*Difference and Repetition*, 216/166; translation modified). Thus, in order to wrest learning from knowledge and the image of thought, in order to free time from the time of facts and actuality, and in order to establish thought as pure reminiscence, a new *Meno* is needed. And what would our new *Meno* say? Simply this: “It is knowledge that is nothing more than an empirical figure, a simple result which continually falls back into experience; whereas learning is the true transcendental structure which unites difference to difference, dissimilarity to dissimilarity, without mediating between them; and introduces time into thought — not in the form of a mythical past or former present, but in the pure form of an empty time in general” (ibid., 216/166–67).
67. *Difference and Repetition*, 215/166.

9. Smooth Space and Volcanic Time

1. *Difference and Repetition*, 154/117.
2. Ibid., 276/214.
3. G. Simondon, *L'individu et sa genèse physio-biologique* (1964) (Grenoble: Jérôme Milon, 1995).
4. *Difference and Repetition*, 285/220–21.
5. We need to recall, however, that if Simondon does eventually turn to biological individuation (and even, later on, to psychic and collective individuation), he begins by analyzing processes of individuation in physical systems.
6. The distinction between *complete* and *whole* or *entire* determinateness is Descartes's, from the Reply to Arnauld, in Descartes, *Œuvres*, pp. 440–41. Trans. in E. S. Haldane and G. R. T. Ross, *The Philosophical Works of Descartes*, pp. 97–98: “Similarly, when I said that a thing must be comprehended in a *complete* [*complète*] manner, I meant not that the intellectual operation must be whole and perfect [*entière et parfaite*], but only that it should be distinct enough, in order to know that the thing is complete.” Translation modified.
7. *Difference and Repetition*, 274/212.
8. This logic of creation, intimately bound up with that of a principle of difference (in place of that of identity), is one that runs through the whole of Deleuze's work, including through his conception of philosophy as “creation of concepts.” Such a conception of the philosophical activity is neither a desire to see concepts proliferate, nor an encouragement for everyone and anyone to forge or invent new words for themselves; concepts are and can only be a rare thing, and the process of creation is the most rigorous and exceptional of processes. A concept will be the point of arrival, the solution to a problem, which it itself must be articulated, set up; it will be the indication of a thought that is grounded in the pre-individual; it will itself be the result of a process of different/ciation, itself a difference of differences.
9. *Difference and Repetition*, 270/209.
10. Ibid., 272/211.

11. On the question of individuation in Aristotle and Scholasticism, see Mayaud, ed., *Le problème de l'individuation*, especially the articles by B. Pinchard, "Le principe d'individuation dans la tradition aristotélicienne," and O. Boulnois, "Genèse de la théorie scotiste de l'individuation."
12. Simondon designates this metaphysical framework, which conceives of all things, both natural and artificial, on the basis of a distinction between form and matter, as *hylomorphism*.
13. *Difference and Repetition*, 287/222–23 and 315/244. The notion of "spatium" will be analyzed later on.
14. *Ibid.*, 288/223.
15. Implication and explication, as well as their reciprocal relation, define the movement of the real as such. The word "explication," somewhat at odds with the English language, is far more evocative in the French: while the primary and ordinary meaning of the word *explication* is explanation, it can also suggest the unfolding or explication of something essentially *implicated*. It should therefore be understood as suggesting the self-explanation, the unfolding and resolution of a prior, virtual state, and so the process through which differences are progressively "reduced" to identities.
16. *Difference and Repetition*, 293–94/228; emphasis added.
17. Here, and given Deleuze's insistence on the vocabulary of "negation" in connection with the movement of differentiation, we cannot help but see an implicit allusion to Hegel, and an attempt to turn Hegelian thought on its head: the *mise hors de soi* is reminiscent of the Hegelian *Selbst-Ausserung* of Substance, with the significant difference—and therein lies the irony—that this movement of exteriorization is one of reduction, at least superficially. It is only a superficial movement, one that should be contrasted with the "depth" of intensity itself. As such, the movement is not so much from interior to exterior, as it is from depth to surface. And therein lies the meaning of Deleuze's critique of Hegel: to have operated at the level of surface effects and actuality, at the level of interiority and exteriority, without having grasped the more decisive level of "depth" (intensive multiplicities or differences) and "problems" (virtual multiplicities) implicated within actuality. Hegel falls victim to an "effect" inseparable from the vanishing of difference. He falls victim to the illusion inseparable from the cancellation of intensive quantities in extensive quantities. On Deleuze's critique of Hegel, see *Difference and Repetition*, 301–304/234–36.
18. *Ibid.*, 309/240.
19. According to a classical definition of the distinction between the intensive and the extensive, "[t]hermodynamic properties can be divided into two general classes, namely intensive and extensive properties. If a quantity of matter in a given state is divided into two equal parts, each part will have the same value of intensive properties as the original, and half the value of the extensive properties. Pressure, temperature, and density are examples of intensive properties. Mass and total volume are examples of extensive properties" (G. van Wylen, *Thermodynamics* [New York: John Wiley & Sons, 1963], p. 16). Deleuze's most significant source regarding the distinction between the intensive and the extensive in energetics, and thermodynamics in particular, is J.-H. Rosny, the elder (Boex-Borel), *Les sciences et le pluralisme* (Paris: Alcan, 1922). Deleuze quotes the following passage from Rosny's book: "Energetics shows that all work derives from differences of temperature, potential, or level, just as all acceleration presupposes differences of speed: it is likely that all calculable energy implies the presence of factors of the form E-E', where E and E' themselves hide factors of the form e-e'. . . . Since intensity already expresses a difference, it will be necessary to define more clearly what this means, and in particular to make it clear that intensity cannot be composed of two homogeneous terms but must contain at least two series of heterogenous terms" (p. 18).

20. Following Deleuze, we shall see how they apply to the individuation of species and organisms, as prime examples of *open* thermodynamic systems. In doing so, I shall follow some of the analyses developed in Chapter 2 of de Landa's *Intensive Science and Virtual Philosophy*.
21. I introduced the general thermodynamic context in which to understand these properties and the phenomena they characterize in Chapter 6.
22. De Landa, *Intensive Science and Virtual Philosophy*, p. 60.
23. *Difference and Repetition*, 305–306/237–38.
24. Kauffman, *At Home in the Universe*.
25. *Ibid.*, p. 92.
26. *Difference and Repetition*, 328/255.
27. Kauffman, *At Home in the Universe*, p. 20.
28. *Ibid.*, p. 19.
29. *Difference and Repetition*, 328/255; emphasis added. I have begun to provide answers to this question in Chapter 6.
30. L. Selme, *Principe de Carnot contre formule empirique de Clausius* (Givors, 1917).
31. Prigogine and Stengers, *Entre le temps et l'éternité*, pp. 49–50.
32. This is how Deleuze describes this interpretation, which he opposes, or which he attempts to open to its other, hidden side: "This is the most general content of the principle of Carnot, Curie, Le Châtelier, et al.: difference is the sufficient reason of change only to the extent that change tends to negate difference. It is indeed in this manner that the principle of causality finds in the signalling process its categorical physical determination: intensity defines an objective sense for a series of irreversible states which pass, like an 'arrow of time,' from more to less differentiated, from a productive to a reduced difference, and ultimately to a cancelled difference" (*Difference and Repetition*, 288/223). Thermodynamics, and Boltzmann in particular, he goes on to say, even served as the "furnace" for the alloy that brought together science and good sense. Good sense, with its fascination for (and obsession with) the middle ground, the average and the probable, is thermodynamic in essence. Good sense is the arrow of time, and Boltzmann the apostle of the middle class.
33. G. Nicolis and I. Prigogine, *Exploring Complexity* (New York: W. H. Freeman, 1989), p. 56. Quoted by de Landa in *Intensive Science and Virtual Philosophy*.
34. *Ibid.*, p. 59.
35. *Ibid.*, p. 60.
36. Simondon, *L'individu et sa genèse physico-biologique*, p. 86.
37. *Ibid.*, pp. 83–95.
38. De Landa, *Intensive Science and Virtual Philosophy*, p. 67. See also D. Acheson, *From Calculus to Chaos. An Introduction to Dynamics* (Oxford: Oxford University Press, 1997), pp. 54–56.
39. De Landa, *Intensive Science and Virtual Philosophy*, p. 68ff.
40. *Difference and Repetition*, 288/223; emphasis added.
41. On a very different note, but as a technological example of the same approach, we could mention that it is only when engineers ceased to want to *imitate* a fully formed bird that man was finally able to build flying machines.
42. R. Hinchliffe, "Toward a Homology of Process. Evolutionary Implications of Experimental Studies on the Generation of Skeletal Pattern in Avian Limb Development," in *Organisational Constraints on the Dynamics of Evolution*, ed. J. M. Smith and G. Vida (Manchester: Manchester University Press, 1990), p. 123.
43. Simondon, *L'individu et sa genèse physico-biologique*, p. 61.
44. *Difference and Repetition*, 276/214.

45. Kauffman, *The Origins of Order. Self-organisation and Selection in Evolution* (Oxford: Oxford University Press, 1993).
46. A. Gualandi, *Deleuze* (Paris: Les Belles Lettres, 1998), p. 66.
47. *Difference and Repetition*, 317/246.
48. *Ibid.*, 294/228.
49. *Ibid.*, 80/57.
50. This twofold aspect of being is naturally not without echoes in the Bergsonian distinction between virtual and actual, a distinction that was itself characterized in terms of contraction and dilatation. As we shall see, however, while the Bergsonian account led to an irreducible and highly problematic dualism, in the form of a distribution of differences in kind between quality and quantity, duration and space, memory and matter, the Deleuzian account, particularly with respect to the question of time and space, will attempt to overcome this dualism. The difficulty, then, becomes that of knowing how thought can remain committed to a philosophical monism, and more accurately to the thesis regarding the univocity of being, while retaining the general problematic of the ontico-ontological difference. This is not an impossible or paradoxical task. Indeed, I would go so far as to assert that only by thinking being as difference can we assert the univocity of being and the irreducible nature of the ontico-ontological difference. In that respect, I cannot agree with Badiou's critique of Deleuze's thought as essentially dualistic, and thus as reintroducing an element of transcendence in thought. Badiou is perhaps too quick in identifying Deleuze's thought with a variant of Bergsonism. The issue is most visible in the context of the question regarding the nature of the relation between time and space—a question that is not one question among others, but a very central one indeed, if not the most significant for a thinking of being as difference.
51. In light of such an affirmative conception of difference, one understands, for example, Deleuze's interest in a mathematics without negation, a mathematics which, in the case of irrational numbers, for example, relies axiomatically on an affirmative definition of inequality—not as a lack of equality, and thus as intrinsically deficient, but as an originary inequality that alone generates positive effects. Similarly, in the case of mathematical dissymmetry, Deleuze notes that Curie was eager to replace the implicit presupposition of an absence of symmetry in dissymmetry with a more positive vocabulary. See *Difference and Repetition*, 301–303/234–35.
52. *Ibid.*, 294/228.
53. This, despite the fact that it is precisely against the wall of this question, the question regarding the *nature*—and, I would claim, the necessarily pre-individual and impersonal nature—of the transcendental horizon whence the world phenomenizes itself, that phenomenology ran and continues to run. I have tried to show how Heidegger's thought evolved partly under the insistence of that single question. But we could also turn to Husserl's thought, and ask about the meaning of the “discovery” of time as the unifying, and indeed self-constitutive principle of the transcendental ego. For if consciousness is indeed constituted *qua transcendental* consciousness in and through the self-flowing of temporality, then does time thus defined not constitute a “phenomenon” more originary than the transcendental horizon which supposedly constituted it in the first place? Is the Husserlian analysis not already pointing beyond itself toward a radically pre-individual and impersonal principle of individuation, which we have come to identify as being, or difference?
54. *Ibid.*, 294/228.
55. For an exhaustive account of the question of the simulacrum, particularly in connection with Plato, see Deleuze, *Logic of Sense*, Appendix I, “The Simulacrum and Ancient Philosophy.”
56. On the question of the simulacrum, its distinction from the image of representation,

and the overcoming of Platonism, see Deleuze, *Difference and Repetition*, Preface, pp. 59–69, 126–28; see also *Logic of Sense*, Appendix I, “The Simulacrum and Ancient Philosophy.” In a series of brief but penetrating analyses, focused on the ambiguous status of the image as both icon and phantasm or simulacrum, Deleuze points to the overcoming of Platonism within Plato’s text itself. On the history of the concept of image, and its Platonic articulation, see J. Sallis’s *Force of Imagination. The Sense of the Elemental* (Bloomington: Indiana University Press, 2000). In a way, it is the entirety of Deleuze’s thought that can be seen as a meditation on the simulacrum, as the following passage from the first page of *Difference and Repetition* makes clear: “The primacy of identity, however conceived, defines the world of representation. But modern thought is born of the failure of representation, of the loss of identities, and of the discovery of all the forces that act under the representation of the identical. The modern world is one of simulacra” (p. 1).

57. *Difference and Repetition*, 295–96/229.
58. Bergson, *An Introduction to Metaphysics*, 176–82 /21–24.
59. *Difference and Repetition*, 286/222.
60. *Ibid.*, 310/240.
61. *Ibid.*, 111/82–83.
62. This vocabulary of memory, as well as the entire question regarding the temporal nature of the virtual, is the result of Deleuze’s extensive and decisive engagement with Bergson, beginning with two articles from 1956, “Bergson: 1859–1941” and “La conception de la différence chez Bergson,” both in *L’île déserte et autres textes*. While much of the vocabulary and many of the analyses related to that question in *Difference and Repetition* find their origin and impetus in those two articles, as well as in *Le Bergsonisme*, it would be a mistake to believe that Deleuze’s view on Bergson did not evolve during those years, and that Deleuze was satisfied with simply weaving Bergson’s thought into the fabric of his own systematic work. What we have instead is a singular appropriation of Bergson’s thought, and a careful formulation of a certain distance with respect to it. See, in particular, *Difference and Repetition*, 308–309/239–40, where Deleuze formulates the need to overcome what he sees as an enduring dualism in Bergson, and thus as the specter of transcendence. Deleuze’s relation to Bergson has become the focus of scholarly appraisal in the last few years. See C. Boundas, “Deleuze-Bergson. An Ontology of the Virtual”; K. Ansell-Pearson, *Germinal Life and Philosophy and the Adventure of the Virtual*, especially Chapter 7; P. Douglass, “Deleuze’s Bergson. Bergson redux,” in F. Burwick and P. Douglass, eds., *The Crisis in Modernism. Bergson and the Vitalist Controversy* (Cambridge: Cambridge University Press, 1992), 368–87. On a more critical note, but still in connection with Deleuze’s Bergsonism, see Badiou, *La clameur de l’être*.
63. This, after all, is the core of Badiou’s critique of Deleuze; see *La clameur de l’être*.
64. *Difference and Repetition*, 308/239.
65. This, I believe, is where Deleuze departs significantly from Bergson, and from any temptation to dualize the real, to begin with two pre-given and individuated realms (quality or duration on the one hand, extension on the other), and to distribute the difference between differences (in kind and in degree) along the lines of these two realms. Instead, the goal is to raise the question concerning the genesis of the only world there is—the empirical world. See pp. 308–309 for Deleuze’s critical appreciation of Bergson.
66. At this stage, the following point needs to be made: in *What Is Philosophy?* Deleuze carefully distinguishes between intensities, or virtual multiplicities, and energy. Energy, Deleuze writes, “is not intensity, but the way in which intensity unfolds and cancels itself within an extensive state of things [*un état de choses extensif*]” (26). In *Difference and Repetition*, however, and as we shall see in a moment, Deleuze draws a

distinction that is perhaps more confusing, but decisive nonetheless, between the pure form of energy, or transcendental energy (intensive energy), and energy as extended, as consumed or empirical energy.

67. *Difference and Repetition*, 310–11/240–41.
68. *Ibid.*, 310–11/240–41; emphasis added.
69. This question could lead to a book-length study, the most significant references of which would be the following: on duration and memory: *Bergsonism*, Chapters II (“Duration as Immediate Datum”) and III (“Memory as Virtual Coexistence”); on the eternal return: *Nietzsche et la philosophie*, pp. 50–55, 72–82, 213–22; on the second and third syntheses of time: *Difference and Repetition*, Chapter II (“Repetition for itself”) and Conclusion, especially pp. 297–304.
70. *Difference and Repetition*, 157/119.
71. *Ibid.*, 160/122. Another example of series in Proust’s work is provided a few pages further down: “So it is with the hero of *In Search of Time Lost*: his infantile love for the mother is the agent of communication between two adult series, that of Swann with Odette, and that of the hero become adult with Albertine—and always the same secret in both cases, the eternal displacement, the eternal disguise of the prisoner, which thereby indicates the point at which the series coexist in the intersubjective unconscious. There is no question as to how the childhood event acts only with a delay. It is this delay, but this delay itself is the pure form of time in which before and after coexist” (163/124). Here again, the decisive “event” is not one that ever took place, but one that does not cease to take place in the series it organizes, and in which it is always disguised and displaced.
72. *Ibid.*, 164/125.
73. *Ibid.*, 164/125.
74. *Ibid.*, 92/67.
75. *Ibid.*, 330/256.
76. *Ibid.*, 382/299.
77. M. Heidegger, “Die ewige Wiederkehr des Gleichen,” in *Nietzsche I, Gesamtausgabe*, Band 6.1 (Frankfurt am Main: Vittorio Klosterman, 1996).
78. These questions and reservations constitute the heart of Badiou’s critique of Deleuze, who believes Deleuzianism to be another Platonism, to the extent that, while calling for a philosophy of immanence, it reintroduces transcendence through the back door (in the guise of the virtual). But this critique, or, shall we say, this concern, could also be formulated from a Hegelian standpoint, which would wonder the extent to which such a transcendental principle can ever only be merely *posited* and *presupposed*, and not deduced.
79. The Deleuzian interpretation of Stoicism takes place in *Logic of Sense*, especially in the second, tenth, twenty-third, twenty-fourth, and twenty-fifth series. A significant inspiration for Deleuze in his understanding of Stoicism is V. Goldschmidt, *Le système stoïcien et l’idée de temps* (Paris: Vrin, 1953), in which the author clearly outlines the coexistence and mutual exclusivity of two temporal orders, Chronos and Aion. For Chronos, the present alone *exists* in time. Past, present, and future are not three dimensions of time, insofar as the present fills up the entirety of time. Past and future are dimensions only relative to the present in time. Furthermore, the present measures the action of bodies and causes. Chronos is, in short, the time of the actual world. According to Aion, on the other hand, only past and future *insist* or *subsist* in time, infinitely subdividing the present in past and future, and in both directions at once, thus opening the space not of the “now,” but of the instant, which is itself never here and now, essentially *atopon*. Time thus becomes the place for incorporeal events, the pure empty form of time.

80. Compelling examples of aesthetic individuation, explicitly inscribed within the problematic broached by Simondon, and in a way that resonates with Deleuze's own thought, can be found in J. Garelli, *Rythmes et mondes* (Grenoble: Jérôme Millon, 1991), especially Part IV. A philosopher and a poet, Garelli is concerned to reveal the spatio-temporal "rhythms" implicated in the genesis of actual systems, whether physical, biological, or aesthetic. Taking the example of a sonnet by Paul Verlaine ("Sagesse V," in *Œuvres poétiques complètes* [Paris: Gallimard "La Pléiade," 1954], p. 151), Garelli identifies a number of elements behind the linear unfolding of the poem, which constitute the "reverse" side, or the transcendental horizon through which the desire expressed in the poem is made possible. It thus becomes a question of bringing out an unspoken dimension of and in the poem, which is nonetheless spoken through the linear temporality of the desire actually named. This horizon, this set of moods and affects (solitude/loss, absence/need) arises only laterally as it were, as the very depth and silent memory of that which is actually expressed. The two levels coincide or coexist absolutely, and this in such a way that one cannot be said to be the cause of the other, but only its ontological, or ontogenetic horizon. This horizon expresses itself according to a rhythm and a world in which it resolves itself, but not one in which it reproduces itself.
81. *Difference and Repetition*, 312/242.
82. *Ibid.*, 313–14/243.
83. *Ibid.*, 313/243.
84. *Ibid.*, 387/303.
85. In *What Is Philosophy?*
86. Prigogine and Stengers, *Entre le temps et l'éternité*, 162–63.
87. *What Is Philosophy?*, 112/118.
88. *Ibid.*, 118/124.
89. *Ibid.*, 122/128.
90. *Ibid.*, 149–50/158–59.

Conclusion

1. E. Levinas, *Théorie de l'intuition dans la phénoménologie de Husserl*, 7th ed. (Paris: Vrin, 1994), p. 19.
2. Heidegger, "Letter on Humanism," in *Wegmarken*, p. 161.

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