15 Deleuze's philosophical heritage: unity, difference, and onto-theology

INTRODUCTION

In this chapter, I want to look at Deleuze's philosophical heritage in two different senses. In the first part, I explore his relationship to perhaps the most influential philosopher of the twentieth century, Martin Heidegger. Heidegger plays a central role in Deleuze's early philosophy, and even when in his later collaborations with Guattari their explicit references to Heidegger are dismissive, Heidegger's influence can clearly be detected, particularly in their critiques of other philosophers. In the second part, I look at Deleuze's own contribution to philosophy, and to see how this contribution has been assessed by one of the most influential contemporary French philosophers, Alain Badiou. For Heidegger, Deleuze, and Badiou, perhaps the central problem for philosophy emerges from thinking about totality. For all three, the traditional metaphysical view of totality, derived from Aristotle's concept of paronymy, occludes rather than solves the problem of how we characterize our most general concepts. As we shall see, Heidegger's diagnosis of metaphysics, as constituted by what he calls onto-theology, is shared by all three philosophers, while their responses to this diagnosis differ. Deleuze and Badiou both reject Heidegger's poetics of being in favor of the language of mathematics, but the question I want to explore in the final part of the chapter is, which mathematics? The mathematics of the continuous, or the mathematics of the discrete?

DEFINITION AND THE UNITY OF ANALOGY

For Aristotle, when we want to determine the nature of something, we do so by asking the question, "what is it?"[1] This question calls for an answer in terms of the kind of thing an object is, and an answer in terms of its *essential* properties. We are not concerned with whether Socrates is standing or sitting, for instance, as these characteristics are not essential, and can alter without Socrates ceasing to be Socrates. We might, therefore, say that, essentially, Socrates is a man. In order to explicate this definition, however, we need to ask what the meaning of the term "man" is. Aristotle's answer to this question, which seems a reasonable first approximation, is that the definition of man is a "rational animal," that is, he defines man by saying that he is an animal with a particular kind of property.[2] Likewise, we might say that an animal is a kind of living being with a particular property. When we say that "man" is a "rational animal," man is the species that Socrates belongs to. This species is itself a member of a larger class of things, known as a genus (in this case, "animal"). Now, in order to specify which species of the genus man is, we need to be able to distinguish it from other entities, that is, to say what it is not (to say that it is x, not y). The property that we use to define what something is is a property that divides entities in a wider class into two different kinds (rational and non-rational animals). Aristotle calls this a *difference.* Now if this difference were just an arbitrary difference between any two objects, then while it might allow us to tell one from another, it wouldn't allow us to advance in our definition of a thing. To know that a man is not a horse only gives us a minimal advance in our understanding of what man is. Rather, differences are differences in the kind of thing something is. Thus, for instance, rational and non-rational are both *kinds* of animals. Furthermore, all animals are either rational or non-rational (there is no third class they could belong to). The kind of difference used in definition is therefore essentially an opposition between two kinds (rational and non-rational) that share an underlying identity (animal) in order to allow us to create a taxonomy of species that doesn't allow undefined cases to slip through our system of definition.

Here we come to the problem which I want to explore in this chapter. If each term in the definition is defined by dividing a prior

identity, then we have a hierarchy of terms, moving from the most general to the most specific. If we progress back from the most specific term in the hierarchy, however, then we find that we have a problem when we reach the most general term, being. If each term is to be defined in terms of a higher identity, then how can we define the highest identity in the hierarchy? To posit an identity higher than being would just lead to us reiterating the problem at a higher level. To give up on the concept of being seems to be equally problematic, as this would leave us unable to think the world as a totality, or to develop something like a science of metaphysics that is able to deal with any being, or a science of being qua being. Furthermore, as each term in the hierarchy is dependent on a higher term for its definition, then any failure to define the highest term in our hierarchy of terms will affect all of the terms in the hierarchy.

The importance of this question of the highest genus, and of the standard metaphysical answer to this question, cannot be overstated when we are looking at Deleuze's relationship to his predecessors and successors. At root is Heidegger's claim that metaphysics since the Greeks has been a history of *Seinsvergessenheit* (forgetfulness of being). To see why this is so, we need to briefly turn to Aristotle's own solution to the problem of the highest genus. Aristotle recognizes the problem of the highest genus in the *Metaphysics* as follows:

It is not possible that either unity or being should be a single genus of things; for the differentiae of any genus must each of them have both being and be one, but it is not possible for the genus taken apart from its species (any more than for the species of the genus) to be predicated of its proper differentiae; so that if either unity or being is a genus, no differentiae will either have being or be one.[3]

The essential point that Aristotle is making here is that a difference cannot be the same kind of thing as what it differentiates. If it were, then the question would arise of how we differentiate the difference itself from the class of things it is a difference of. This becomes a serious problem when we turn to the genus, being, itself. If we were to understand being as a genus, then, since differences cannot be of the same type as the genera they differentiate, then differences could not themselves have being or unity. "Remember the

reason why Being itself is not a genus: it is, Aristotle says, because differences are" (*DR* 32). Being, the highest genus, therefore turns out not to be a genus at all. Instead, Aristotle posits ten "categories," or types of being. These are not related to one another as species to a genus, but are rather related to one another by way of what came to be called analogy.[4] To see how this works, we can turn to a more everyday example of analogy, or, more correctly, paronymy, that Aristotle uses:

> Just as that which is healthy all has reference to health – either because it preserves health, or because it produces it, or because it is a sign of health, or because it is capable of receiving health ... so too that which *is* is said in several ways, but all with reference to a single principle.[5]

Here, we can see that there are various ways of something being healthy, for example, a diet may be healthy, or a drug may restore health. In each of these cases, the use of the word "healthy" differs, but all of these uses are related to a central usage, or focal meaning. Thus, each of the terms is dependent on the meaning of health as, perhaps, the proper functioning of the organism. We can use the same kind of structure with the concept of being. Here, the focal meaning will be being as *ousia*, commonly, though somewhat problematically, translated as "substance." Other possible ways of saying that something is, for example, quantity, place, or quality, are all ways of being that essentially take the form of properties, or predicables, and as such are related to this primary sense of being.[6] We can draw out two related claims that will be central to the development of philosophical thought from Heidegger through to Deleuze and beyond. First, the problem of the highest genus emerges as a result of viewing the relation between concepts as being a subsumptive one. That is, concepts are related to one another through relations of predication (as rationality is predicated of animal, for instance). It therefore appears that any hierarchical model of organization structured according to subsumption will run into similar difficulties. Second, the highest genus problem appears to push us away from any knowledge of the nature of being itself, as this now falls outside of the hierarchy. Both these points will be taken up by Deleuze, but before looking as Deleuze's reading of these problems, I want to turn to Heidegger's account of the question of being.

HEIDEGGER AND THE QUESTION OF BEING

Heidegger opens *Being and Time* with a reference to the question of being: "This question has been forgotten – although our time considers itself progressive in again affirming 'metaphysics.'"[7] Furthermore, the reason why the question of the meaning of being has been forgotten can be traced directly to the analysis of being given by Aristotle: "On the foundation of the Greek point of departure for the interpretation of being a dogma has taken shape which not only declares that the question of the meaning of being is superfluous but sanctions its neglect."[8] While there is a certain ambivalence in Heidegger's own work as to whether Aristotle is fully prey to the difficulties he is responsible for, it is nevertheless the case that the question of being has not been raised in subsequent metaphysics. Heidegger gives three reasons why the question of being has not been raised. First, being is the most universal concept. So much so that, as we have seen, "the 'universality' of being surpasses the 'universality' of genus."[9] As Heidegger points out, while analogy does indeed allow being a form of universality, being by no means therefore becomes an empty term. Rather, the relation between the different terms brought into analogy with one another now becomes problematic. Second, and once again with reference to the problem of the highest genus, Heidegger notes that the question of being has not been asked, because being escapes definition: "Being cannot be derived from higher concepts by way of definition and cannot be represented by lower ones."[10] While this fact may be interpreted as ruling out an analysis of being, Heidegger draws a different conclusion, namely, that being cannot be considered to have the same subject–predicate structure that definition presupposes: "'being' is not something like a being."[11] Finally, being is seen to be a self-evident concept, and so not in need of clarification. Even the question, "what is being?" presupposes an understanding of being, insofar as it contains the word, "is." Rather than seeing this as a reason not to enquire into being, Heidegger instead takes the frequency with which this concept is encountered in our thinking to be the grounds for the pressing need for an enquiry into its meaning. At the heart of Heidegger's philosophy is therefore the claim that being cannot be understood according to the terms we

use to understand beings. Rather, there is an *ontological difference* between them:

> As the fundamental theme of philosophy being is not a genus of beings; yet it pertains to every being. Its "universality" must be sought in a higher sphere. Being and its structure transcend every being and every possible existent determination of a being. *Being is the transcendens pure and simple.*[12]

I do not want to explore Heidegger's own enquiry into the meaning of being, except to note that by focusing on our everyday involvement with the world, the ready to hand, Heidegger escapes the kind of subject–predicate understanding of the world that Aristotle's account of definition presupposes. In the process, Heidegger opens up the possibility of a relation to being that does not have to resort to the unity of analogy, at least in the sense that we find it in metaphysics subsequent to Aristotle.[13] This project is contrasted with that of traditional metaphysics, which is governed by the "forgetfulness of the difference [between being and beings]."[14] Rather than focusing on the question, "what is being?," metaphysics concerns itself with a categorial understanding of the principles and grounds of beings. It is concerned with being insofar as it is understood as having a predicable structure ("what is the thingliness of things?"). As such, it is concerned with first principles. This might either be in terms of that which all entities share in common (ontology), or the most exemplary entity that gives a ground to other entities (theology).[15] This mode of forgetfulness is, for Heidegger, constitutive of the entire tradition of metaphysics from Aristotle to the modern technological age.[16] It is labeled by Heidegger "onto-theology":

> Because Being appears as ground, beings are what is grounded; the highest being, however, is what accounts for giving the sense of giving the first cause. When metaphysics thinks of beings with respect to the ground that is common to all beings as such, then it is logic as onto-logic. When metaphysics thinks of beings as such as a whole, that is, with respect to the highest being which accounts for everything, then it is logic as theo-logic.[17]

Before moving on to Deleuze and Badiou, I want to briefly return to the question of analogy. Given the structure of onto-theology, and the difficulties we have looked at with its conception of the highest genus, it should be clear that there is an immanent difficulty with the kind of conception we have been dealing with when it comes

to the question of being. We could say that analogy represents the solution to the limitations of definition, in that it allows the incorporation of being into categorial thought. For Heidegger, however, the fact that it covers over the question of being instead marks it out as a signal of the failure of onto-theology:

The analogy of being – this designation is not a solution to the being question, indeed not even an actual posing of the question, but the title for the most stringent aporia, the impasse in which ancient philosophy, and along with it all subsequent philosophy right up to today, is enmeshed.[18]

DELEUZE AND ONTO-THEOLOGY

All philosophy presents constraints on our thinking as well as opportunities, and the constraints on thinking brought out in Heidegger's analysis of the history of metaphysics are definitive of twentieth-century French philosophy. The uptake of the Heideggerian critique of onto-theology constitutes one of the major fissures separating the twentieth-century analytic and continental traditions. In this respect, it is also a major influence on Gilles Deleuze's philosophy. Deleuze opens *Difference and Repetition* by noting that its subject is "manifestly in the air" with "Heidegger's more and more pronounced orientation towards a philosophy of ontological Difference" (*DR* xix). While Deleuze's question is not the question of being, but the question of difference, Deleuze begins his systematic exposition of this question with a critique of Aristotle's account of difference. As Deleuze notes, for Aristotle, difference can be understood "only in relation to the supposed identity of the concept" (*DR* 31). We have already seen that for Aristotle, difference between species can only be understood in relation to an overarching identity. In this sense, difference is understood in terms of its "predicative power" (*DR* 32) as something that is said of the genus. If difference is understood as the difference within a genus, however, we are once again returned to the problem of the highest genus. As we have seen in the previous couple of sections we cannot form a determinate concept of the highest genus. Without such a concept, any notion of difference which relies on an overarching identity breaks down at this point. Now, this failure of the predicative conception of difference *could* lead us to an

ontology of difference, with something like a Heideggerian distinction between fundamental and regional ontology:

> It is as though there were two "Logoi," differing in nature but intermingled with one another: the logos of Species, the logos of what we think and say, which rests upon the condition of the identity or univocity of concepts in general taken as genera; and the logos of Genera, the logos of what is thought and said through us, which is free of that condition and operates both in the equivocity of Being and in the diversity of the most general concepts. (*DR* 32–33)

This possibility is closed off by the introduction of analogy, however, which allows us to relate the categories to one another, and so to preserve the predicative model. "Difference is crucified" on the "quadripartite fetters" (*DR* 138) of identity, analogy, opposition, and resemblance. In this sense, the question of difference mirrors the question of being, in that both questions are forestalled by the understanding of being as predicative that constitutes onto-theological metaphysics.

In spite of the similarities in the motivations behind the question of being and the question of difference, there are some fundamental differences in the way Heidegger and Deleuze go about answering these questions. For Heidegger, the claim that metaphysics is onto-theology implies that "the origin of the difference [between Being and beings] can no longer be thought of within the scope of metaphysics."[19] "The time of 'systems' is over."[20] In contrast to these claims, Deleuze explicitly maintains a relationship to the philosophical tradition, and with it, to the ideal of systematic philosophy. In doing so, he does not reject Heidegger's analysis of onto-theology, but rather Heidegger's equation of metaphysics with onto-theology: "I believe in philosophy as system. The notion of system which I find unpleasant is one whose coordinates are the Identical, the Similar, and the Analogous" (*TRM* 361). Implicit in Deleuze's claim is a richer conception of the history of metaphysics that includes moments where a genuine thinking of difference was possible. That is, Deleuze recognizes that there are moments in the history of metaphysics where the unity of analogy has been rejected, and on this basis, a line of flight from the aporias of onto-theology has been constituted. For instance, as Tonner notes, central to Heidegger's critique of Descartes is that he preserves an analogical conception of being, understanding finite substance by

analogy with infinite substance, God.[21] As such, Descartes would represent an archetypal example of an onto-theological constitution of metaphysics. Deleuze follows Heidegger in his analysis of Descartes,[22] but argues that Spinoza's philosophy breaks with this analogical conception with his claim that the attributes are predicated of both substances and modes univocally, that is, in the same sense. Concomitant with this claim is the claim that being cannot be understood as *a* being, as only modes are numerically distinct. Being is therefore singular.[23] Spinoza, a figure hardly discussed by Heidegger, therefore breaks with the analogical conception of being, and hence develops an account that comes close to escaping the difficulties of onto-theology: "I believe that Spinoza's philosophy remains in part unintelligible if one does not see in it a constant struggle against the three notions of equivocation, eminence and analogy" (*EPS* 48–49).[24] While Heidegger condemns the metaphysical tradition as a whole, Deleuze recognizes a "distaff" tradition that, by rejecting the unity of analogy, at least holds the possibility of escaping from the shackles of onto-theology. Heidegger is, therefore, one in a series of thinkers to escape analogy, rather than the sole instigator of a new mode of thinking:

[F]rom Parmenides to Heidegger it is the same voice which is taken up, in an echo which itself forms the whole deployment of the univocal. A single voice raises the clamour of being. (*DR* 35)

The failure to see the possibility of an alternative tradition of metaphysics is at the root of Deleuze's critique of Heidegger. Thus, the reduction of metaphysics to onto-theology obscures the possibility that there may be other questions to ask which move beyond a predicative model of thinking besides the question of being, and in fact, the singularity of Heidegger's question risks reinstating an overarching identity (*DR* 66):

From the outset, however, what are these fiery imperatives, these questions which are the beginning of the world? The fact is that every thing has its beginning in a question, but one cannot say that the question itself begins. Might the question, along with the imperative which it expresses, have no other origin than repetition? Great authors of our time (Heidegger, Blanchot) have exploited this most profound relation between the question and repetition. Not that it is sufficient, however, to repeat a single question which would remain intact at the end, even if this question is "What is being?" ["Qu'en est-il de l'être?"] (*DR* 200)

Thus, a philosophy of the question of being is solely one instance of what is more fundamental: a philosophy of the question itself. Turning to Deleuze's own positive philosophy, we can say that in both his early work and his collaborations with Guattari, Deleuze aims to operate within the constraints of Heidegger's critique of onto-theology. The emphasis on univocity in the early work and immanence in the later work both present alternative ways of thinking difference that avoid any reliance on analogy.[25] In *Difference and Repetition*, Deleuze presents a transcendental philosophy governed by a distinction between two modes of organization, the actual and the virtual. We can equate this distinction loosely with the distinction between beings and being, the ontological difference at the heart of Heidegger's philosophy. Actuality is the domain of things, capable of being represented as predicable substances. The structure of the actual is governed by transcendental conditions. Whereas for Kant, these transcendental conditions are understood as conditions of possibility and related to a transcendental unity of apperception (a central identity, if not a thing), Deleuze wishes to avoid both of these structures. The transcendental unity of apperception plays the same role for Kant as God plays for other onto-theologies: "Finite synthetic Self or divine analytic substance: it amounts to the same thing. That is why the Man-God permutations are so disappointing, and do not advance matters one step" (*DR* 58). Similarly, the conditions given by the transcendental cannot be conditions of possibility. Possibility once again operates according to analogy in that we understand a possible derivatively in the same terms as actual substances, merely lacking existence:

Every time we pose the question in terms of possible and real, we are forced to conceive of existence as a brute eruption, a pure act or leap which always occurs behind our backs and is subject to a law of all or nothing. 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? (*DR* 211)

As such, possibility provides grounds (in Heidegger's terms) or hypotheses (in Deleuze's terms) that install a being as the highest principle in our metaphysical system. In order to accomplish what Deleuze calls an "ungrounding," he does not follow Heidegger in

moving from the language of metaphysics to the language of poetry. Rather, he replaces the ground of a principle of sufficient reason with the unground of a "geometry of sufficient reason" (*DR* 162). This reference to geometry is significant, and points to an alternative to the later poetics of being instituted by Heidegger.[26] We have already seen how Deleuze argues that Heidegger is correct to emphasize the importance of the question in the development of his philosophy. In the realm of metaphysics, the impossibility of reducing the question to the structure of predicable being means that each philosopher poses a different question. For Deleuze, this structure is also discovered in mathematics, in the form of a distinction between problems and solutions.[27] The paradigmatic example of the relation between problems and solutions is the differential calculus. Deleuze argues that Leibniz's calculus allows the expression of "problems which could not hitherto be solved or, indeed, even posed (transcendent problems)" (*DR* 177). It allows us to talk about the rates of change of characteristics of bodies in the world, for instance, in a rigorous way simply not possible before its institution. While it therefore generates a wholly new field of solutions, it does so on the basis of foundations that were themselves aporetic, and incapable of being coherently expressed within the mathematical language of the solution. There is thus a difference in kind between the problematic of the calculus, which is non-representable, and the solutions, which are representable, which mirrors the ontological difference between being and beings. In this respect, modern mathematical interpretations that give consistency to the foundations of the calculus do so only at the cost of covering over the problematic nature of its foundations:

In a different manner, modern mathematics also leaves us in a state of antinomy, since the strict finite interpretation that it gives of the calculus nevertheless presupposes an axiom of infinity in the set theoretical foundation, even though this axiom finds no illustration in calculus. What is still missing is the extra-propositional or sub-representative element expressed in the Idea by the differential, precisely in the form of a problem. (*DR* 178)

Modern set-theoretic mathematics is, therefore, for Deleuze, subject to a "natural illusion," whereby the representational and predicable nature of solutions are extended to the problematic itself, in effect once again reducing being to beings.

BADIOU AND ONTO-THEOLOGY

This trend to attempt to escape from onto-theology through mathematics continues in the work of one of Deleuze's most significant critics to date: Alain Badiou. For Badiou, the central problem of the metaphysical tradition, "that in which philosophy is born and buried, phoenix of its own philosophical consumption,"[28] is the problem of the one and the many. Badiou's attempt to provide a novel solution to this dilemma once again rests on advances in mathematics, and is also thoroughly intertwined with the problem of onto-theology. I began this chapter with a discussion of Aristotle's account of definition, but for Badiou, it is certain aporias discovered in set theory that provide the motivation for his philosophy. In (naïve) set theory, class can be defined as a collection of entities that can be defined either enumeratively (by listing its members) or, more normally, in terms of a property that all of its members share. A class is therefore something like a species, albeit without the explicit claim that when we define a class we are defining the essence of the entities it contains. Now, the entities that a class ranges over are arbitrary, so there is no reason why we cannot have a class of classes. In fact, at the beginning of the twentieth century, it was believed that with sufficient ingenuity, the foundations of mathematics could be reduced solely to relations between classes, thus giving mathematics the same intuitive consistency that was thought to be found in set theory. Bertrand Russell, however, showed that by relying purely on this basic conception of what a class is, it was possible to generate an antinomy:

A class will be called "normal" if, and only if, it does not contain itself as a member; otherwise it will be called "non-normal." An example of a normal class is the class of mathematicians, for patently the class itself is not a mathematician and is therefore not a member of itself. An example of a non-normal class is the class of all thinkable things; for the class of all thinkable things is itself thinkable and is therefore a member of itself. Let "N" by definition stand for the class of *all* normal classes. We ask whether N itself is a normal class. If N is normal, it is a member of itself (for by definition N contains all normal classes); but, in that case, N is non-normal, because by definition a class that contains itself as a member is non-normal. On the other hand, if N is non-normal, it is a member of itself (by definition of "non-normal"); but, in that case, N is normal, because by definition the members of N are normal classes. In short, N is normal if,

and only if, N is non-normal. It follows that the statement "N is normal" is both true and false.[29]

The significance of this paradox is that if we allow classes to contain themselves, an antinomy can be formulated within set theory. The obvious solution to this problem was to introduce rules to set theory preventing sets from referring to themselves, and Russell himself developed what he called a theory of types which specified a hierarchy of sets with each set only able to refer to sets below it in the hierarchy. Here, however, we find a parallel with Aristotle's problem of definition, as we can no longer formulate a proposition that refers to all classes (as, at minimum, the class making the assertion must be excluded). The most we can do is make assertions about all classes at a particular level of the hierarchy of types. Moreover, Russell's solution to the problem of universal assertions also mirrors Aristotle's solution to the problem of the highest genus. While Aristotle introduced the notion of analogy, Russell introduces a concept he calls systematic ambiguity:

It will be seen that, according to the above hierarchy no statement can be made significantly about "all a functions" where a is some given object ... In some cases, we can see that some statement will hold of "all n-th order properties of a," whatever value n may have. In such cases, no practical harm results from regarding the statement as about "all properties of a," provided we remember that it is really a number of statements, and not a single statement which could be regarded as assigning another property to a, over and above all properties. Such cases will always involve some systematic ambiguity, such as that involved in the meaning of the word "truth," as explained above.[30]

In modern set theory we once again have a situation where the failure to formulate a concept of totality forces a different kind of organization of the most general concepts. Once again, this organization involves seeing a variety of concepts as systematically related to one another in an analogous or paronymous fashion.

For Badiou, in order to escape from the difficulties of positing an underlying unity we simply need to affirm that "the one is not."[31] That is, being is pure multiplicity. Badiou's claim is that while being is only encountered within a situation, being in its pure state is an "inconsistent multiplicity" which cannot be thought as a unity (understood as a class). That is, what makes it possible for being to be

presented to us is an operation performed on being that "counts as one" the multiplicity, unifying it under central concepts. For Badiou, therefore, ontological enquiry involves meeting two conditions:

1. The multiple from which ontology makes up its situation is composed solely of multiplicities. There is no one. In other words, every multiple is a multiple of multiples.
2. The count-as-one is no more than a system of conditions through which the multiple can be recognized as multiple.[32]

The unity of the many emerges as a result of the operation of counting as one that is necessary to present being in a situation. Thus, it only appears that the object is composed of two moments: the unity of substance and the multiplicity of its properties. Badiou's claim is that in reality there is no contradiction between unity and multiplicity, because they are different in kind – while the multiple has genuine ontological status, unity is not a *kind* of being, but rather an *operation* performed on the multiple. In order for Badiou's approach to be coherent, therefore, it is necessary to provide an account of the multiple which does not present it in terms of unity. The idea of the multiple cannot simply be a form of nominalism of particulars devoid of universals, as in such a case, we still have the notion of unity, in the form of the elements that make it up. As Badiou notes, the impossibility of constructing a set of all sets without contradiction shows the limitation of the operation of "count as one." Such a set is "'too large' to be counted as a set in the same way as the others."[33] Badiou labels Cantor's attempt to think such sets a form of "onto-theology,"[34] since to do so implies that the same kind of structure that applies to sets that are presented to us as unities applies to the multiple as such. If we were to do so, the multiple would be understood in the same terms as beings, thus once again occluding the ontological difference between them. If we are to understand the multiple without counting "it" as one, we need a conception of multiplicity that is not "a multiple of this or that."[35] In order to develop a theory of the multiple that cannot be totalized into an ultimate unity, nor analyzed into its fundamental elements, Badiou draws on the resources of a particular branch of set theory, Zermelo–Fraenkel (ZF) set theory. ZF set theory both proscribes the formulation of a set of all possible sets (totalization), and

the positing of atomic elements from which sets are constructed (it deals solely with the relations between different sets). Badiou takes it to be the singular achievement of modern set theory to give us a consistent account of this kind of pure multiple, thus allowing philosophy to proceed beyond the aporias of classical thinking. Thus, by relying on set theory, Badiou is able to avoid reference to unity at the top of his hierarchy of terms. Furthermore, rather than defining the multiple, which, as Aristotle showed, involves the subordination of a multiplicity to a central unity, set theory merely implies the definition of a multiplicity by specifying the conditions under which it can be constructed. As such, "the theory indicates, without definition, that it does not speak of the one, and that all that it presents, in the implicitness of its rules, is multiple."[36] For Badiou, therefore, axiomatics provides a real alternative to definition, with its reliance on unity. The axioms of set theory provide a model for the constitution of a hierarchy of sets without explicitly providing a definition of sets. By doing so, Badiou avoids the aporia that led to Aristotle's introduction of analogy. Baidou's solution to the problem is therefore in a sense an augmented Kantianism. Unity is a condition of presentation, or of thinking the multiple, but it is not a condition of the multiple itself. We can, nonetheless, specify the multiple using procedures that go beyond presentation. This is the root of his claim that "mathematics is ontology."[37]

CONCLUSION: TWO REGIMES OF MATHEMATICS

Badiou believes that his emphasis on the radically multiple nature of being allows him to escape the kind of onto-theology encountered both in the metaphysical tradition and in apologist interpretations of set theory itself. In presenting a metaphysics of the multiple, Badiou takes on a number of characteristics of Deleuze's own philosophy. First, Badiou accepts the need to think beyond the kind of onto-theology that dominates the metaphysical tradition.[38] Thus for Badiou as well as Deleuze, Heidegger is a major influence, or at least constraint, on how metaphysics can be conducted. Second, both argue that the aporetic nature of classical metaphysics does not necessarily lead us to a rejection of metaphysics in its entirety, but rather to a reformulation of how metaphysics is conducted. Both share what Badiou calls an "active indifference"[39] to the end

of philosophy. Finally, both move to a philosophy of mathematics in order to develop an alternative to the predicative model of definition, and hence an alternative to analogy. It is on the basis of these shared values that Badiou criticizes Deleuze's approach to philosophy. Highlighting Deleuze's indebtedness to Heidegger, Badiou claims that "the question posed by Deleuze is the question of Being. From beginning to end, and under the constraint of innumerable and fortuitous cases, his work is concerned with thinking thought (its act, its movement) on the basis of a precomprehension of Being as One."[40] Badiou's fundamental complaint against Deleuze can be seen as the assertion that in spite of Deleuze's apparent rejection of onto-theology, the central notion of the problem still retains the structure of unity, capable of giving rise to a multiplicity of distinct solutions. As such, Deleuze's ontology preserves a fundamental feature of the onto-theological legacy that can only be expurgated by a move to the kind of radical multiplicity put forward by Badiou.[41] This leads Deleuze to privilege the virtual, as unity, at the expense of the actual, as multiplicity, generating a philosophy of dissolution into the One-All. We can see that this claim rests on two assumptions that misrepresent Deleuze's philosophical intentions, however. First, that in the equation, being/beings, Deleuze is only interested in the former of these two terms. In fact, as we have seen, Deleuze is concerned with ontological difference: the *relationship* between being and beings. As such, a reduction of beings to being would efface difference itself. Second, Badiou implicitly assumes that all unity is of the problematic kind that we discover in onto-theology. In fact, what is problematic about this form of unity is its nature as a highest substance, as predicable. Deleuze's concern with the notion of a problematic is precisely that it is not structured in such a way that it can be understood as supporting properties.[42] Once we relate Deleuze's metaphysics of the question to the Heideggerian constraints that both Badiou and Deleuze operate under, we can see that any claim to the reduction of beings to being is unwarranted.

While Badiou only began to gain influence as a philosopher towards the end of Deleuze's life, in his work with Guattari, *What is Philosophy?*, Deleuze provides the beginnings of a response to Badiou, claiming that "even mathematics has had enough of set-theoreticism" (*WP* 152). Badiou's solution, in Deleuze's terms, is

still caught in the problematic of onto-theology to the extent that it fails to realize a true difference in kind between the structures of states of affairs and the structure of that which gives rise to states of affairs:

By starting from a neutralized base, the set, which indicates any multiplicity whatever, Badiou draws up a line that is single, although it may be very complex, on which [logical] functions and [philosophical] concepts will be spaced out. (*WP* 152)

Ultimately for Deleuze, Badiou's reduction of ontology to axiomatic mathematics repeats the kind of error discovered in classical metaphysics. Despite the sophistication of Badiou's metaphysics, being is understood purely according to one category: the set. As such, Badiou forestalls the possibility of any enquiry into the nature of ontological difference.

NOTES

1   See Aristotle, *Posterior Analytics*, in Jonathan Barnes (ed.), *The Complete Works of Aristotle* (Princeton University Press, 1991), 93b29.
2   See *ibid.*, where a definition is itself defined as "an account of what a thing is" (93b29).
3   Aristotle, *Metaphysics*, in Barnes (ed.), *Complete Works*, 998b.
4   Strictly speaking, the relationship here is one of paronymy, but will become an analogical relationship when taken up by the scholastic tradition.
5   Aristotle, *Metaphysics*, 1003a.
6   "Of things said without any combination, each signifies either substance or quantity or qualification or a relative or where or when or being-in-a-position or having or doing or being-affected." Aristotle, *Categories*, in Barnes (ed.), *Complete Works*, 1b25.
7   Martin Heidegger, *Being and Time*, trans. Joan Stambaugh (Albany, NY: SUNY Press, 1996), p. 1.
8   *Ibid.*, p. 1.
9   *Ibid.*, p. 2.
10 *Ibid.*, p. 3.
11 *Ibid.*
12 *Ibid.*, pp. 33–34.
13 I am here following Philip Tonner, *Heidegger, Metaphysics and the Univocity of Being* (London: Continuum, 2010), in claiming that while

analogy plays a role in Heidegger's conception of being, it is nonetheless fundamentally univocal.

14 Martin Heidegger, *Identity and Difference*, trans. Joan Stambaugh (University of Chicago Press, 2002), p. 50, translation modified.

15 "One might indeed raise the question whether first philosophy is universal, or deals with one genus, i.e. some one kind of being; for not even the mathematical sciences are all alike in this respect, – geometry and astronomy deal with a certain particular kind of thing, while universal mathematics applies alike to all. We answer that if there is no substance other than those which are formed by nature, natural science will be the first science; but if there is an immovable substance, the science of this must be prior and must be first philosophy, and universal in this way, because it is first. And it will belong to this to consider being *qua* being – both what it is and the attributes which belong to it *qua* being." Aristotle, *Metaphysics*, 1026a28–33.

16 On the historical development of onto-theology, see Iain Thomson, *Heidegger on Ontotheology: Technology and the Politics of Education* (Cambridge University Press, 2005), particularly chapters 1 and 2.

17 Heidegger, *Identity and Difference*, pp. 70–71.

18 Martin Heidegger, *Aristotle's* Metaphysics Θ *1–3*, trans. Walter Brogan and Peter Warnek (Bloomington: Indiana University Press, 1995), p. 38.

19 Heidegger, *Identity and Difference*, p. 71.

20 Martin Heidegger, *Contributions to Philosophy (From Enowning)*, trans. Parvis Emad and Kenneth Maly (Bloomington: Indiana University Press, 1999), p. 4.

21 Tonner, *Heidegger, Metaphysics and the Univocity of Being*, pp. 87–88.

22 "We will see how eminence, analogy, even a certain equivocation remain almost as spontaneous categories of Cartesian thought" (*EPS* 62).

23 For the role of real and numerical distinctions in Spinoza, see Michael Hardt, *Gilles Deleuze: An Apprenticeship in Philosophy* (Minneapolis: University of Minnesota Press, 1993), pp. 59–63.

24 See *DR* 50 for Deleuze's criticism of Spinoza.

25 In Deleuze's early work, univocity takes the place of analogy. That is, while being is not a genus, it is nevertheless said of all beings in the same sense (in one voice). As Daniel W. Smith notes in "The Doctrine of Univocity: Deleuze's Ontology of Immanence," in Mary Bryden (ed.), *Deleuze and Religion* (London: Routledge, 2001), pp. 167–83, pp. 179–80, the language of univocity is not present in Deleuze's collaborations with Guattari. In this later work, immanence is nonetheless understood in fundamentally non-analogical terms. In this regard,

Deleuze's later critique of the notion of "immanence to" in Husserl (*WP* 44–49) presents an important continuation of Deleuze's engagement with Heidegger, as can be seen by comparison with Heidegger's critique of an implicit moment of analogical thinking in Husserl (for an exposition of this critique, see Tonner, *Heidegger, Metaphysics and the Univocity of Being*, pp. 85–93).

26 As Constantin Boundas notes in "Heidegger," in Graham Jones and Jon Roffe (eds.), *Deleuze's Philosophical Lineage* (Edinburgh University Press, 2009), p. 329, the title *Difference and Repetition* mirrors *Being and Time*, with difference taking the place of being (and thereby removing the last vestiges of identity thinking), and repetition taking the place of time (through the retrieval of Nietzsche's doctrine of the eternal return).

27 For a more detailed account of Deleuze and Badiou's conceptions of mathematics, see Daniel W. Smith, "Mathematics and the Theory of Multiplicities: Badiou and Deleuze Revisited," *Southern Journal of Philosophy*, 41:3 (2003), 411–49. Simon Duffy (ed.), *Virtual Mathematics: The Logic of Difference* (Manchester: Clinamen Press, 2006) provides an excellent collection of essays on Deleuze's engagements with mathematics.

28 Alain Badiou, *Being and Event*, trans. Oliver Feltham (London: Continuum, 2005), p. 23.

29 Ernst Nagel and James R. Newman, *Gödel's Proof* (New York University Press, 2001), pp. 23–24.

30 Alfred North Whitehead and Bertrand Russell, *Principia Mathematica*, vol. 1 (Cambridge University Press, 1910), p. 58, quoted in I. M. Bochenski, *A History of Formal Logic*, trans. Ivo Thomas (University of Notre Dame Press, 1961), p. 397.

31 Badiou, *Being and Event*, p. 23.

32 *Ibid.*, p. 29.

33 *Ibid.*, p. 41.

34 *Ibid.*, p. 42.

35 *Ibid.*, p. 29.

36 *Ibid.*, p. 45.

37 *Ibid.*, p. 4.

38 "Along with Heidegger, it will be maintained that philosophy as such can only be re-assigned on the basis of the ontological question," *ibid.*

39 Alain Badiou, *Deleuze: The Clamor of Being*, trans. Louise Burchill (Minneapolis: University of Minnesota Press, 2000), p. 5.

40 *Ibid.*, p. 20.

41 Peter Hallward, *Out of This World: Deleuze and the Philosophy of Creation* (London: Verso, 2006), p. 103, follows Badiou in this claim,

arguing, for instance, that "The earth has never been more deterrito-rialised nor its inhabitants more 'molecularised' (*ATP* 345), and this is the result of a specific historical process. Deleuze and Guattari are the first to admit that they have little to add to Marx's description of this actual sequence. What they add is a new eschatology. The absolute limit to the de-coding of all values, the evacuation of every territory is a value or event beyond any conceivable presentation. The subject that may survive the dissolution of every presentable or actual subject will be an exclusively virtual or supra-historical subject – a nomadic or schizophrenic subject, one worthy of the end of history or the end of actuality. It's in this sense that, beyond capital's limit, schizophre-nia is 'the end of history' (*AO* 130). By striving to reach the 'furthest limit of deterritorialisation', Deleuze and Guattari's as-yet-unseen schizophrenic 'seeks out the very limit of capitalism: he is its inher-ent tendency brought to fulfilment', and thereby incarnates the very 'becoming of reality' itself (*AO* 35)."

42 In this respect, Deleuze's critique of Kant's Ideas is indicative of Deleuze's opposition to predicative unity. While Kant's Ideas of God, self, and world are problematic, insofar as they are outside of experi-ence, yet presupposed by Reason's task of unifying knowledge, Deleuze argues that because they are understood on the model of objects of experience, they betray the necessary emphasis of philosophy on the problem (*DR* 172–74).