

## Chapter 7

# Transcendental Illusion and Antinomy in Kant and Deleuze

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### Introduction

In this paper, I want to look at the way in which Deleuze's reading of Kant's transcendental dialectic influences some of the key themes of *Difference and Repetition*. As we shall see, in the transcendental dialectic, Kant takes the step of claiming that reason, in its natural functioning, is prone to misadventures. Whereas for Descartes, for instance, error takes place between two faculties, such as when reason (wrongly) infers that a stick in water is bent on the basis of sense impressions, Kant postulates that reason generates illusions internally purely in the course of its natural function. It is these illusions which lead reason into antinomy, as on the basis of these illusions, it is led to posit an illegitimate concept of the world as a totality. Further, for Kant, the antinomies represent an indirect proof of transcendental idealism, as it is only with the additional assumption of the noumenon, as that which falls outside of appearance, that we are able to resolve the antinomies. Deleuze's work on the image of thought clearly owes a great deal to Kant's theory of transcendental illusion, but the connections between Kant's transcendental dialectic and the structure of *Difference and Repetition* go deeper than this. Whereas Kant's problem is that reason generates contradictions when it assumes that the unconditioned can be given to reason, Deleuze's problem is the impossibility of developing a concept of difference within representation. Between these two problems, there are significant structural parallels – in particular, the attempt to think outside the dichotomy of the finite and the infinite, and the attempt to prevent the application of spatio-temporal predicates to the noumenon. The antinomy of representation for Deleuze is the inability of representation to think difference apart from as purely representational or as undifferentiated abyss. As we shall see, Deleuze

gives an explanation of this antinomy in terms of the differential calculus, and the notion of the differential in particular. While these parallels exist between Kant and Deleuze's thought, there are also some important differences. Although the differential is not determined in relation to representation, this does not mean that it lacks all determination. This opens up a possibility not available in Kant's philosophy, that is, a thinking beyond the limit of representation. As we shall see, Kant closes off this possibility by giving reason a heuristic function which in effect reinstates representation. Kant makes this move precisely because the lack of spatio-temporal determinations of the noumenal means for Kant that the noumenal lacks determinations altogether.

In order to explore the use Deleuze makes of the Kantian doctrine of transcendental illusion, this paper will be divided into three main parts. First, we will look at Kant's own theory of transcendental illusion in order to see how Kant understands this misadventure of thought. Second, we will look at how Deleuze takes up this doctrine of transcendental illusion, and in particular how Deleuze's focus on difference changes the role of transcendental illusion. Third, we will look at how the structure of *Difference and Repetition* is influenced by the structure of antinomy, in this case between finite and infinite representation. I want to conclude by looking at some of the problems which emerge in our interpretation of Deleuze if we don't take the notion of transcendental illusion seriously, either by continuing to characterize the virtual in terms of representation, or by taking representation itself to be illusory, rather than simply being the site of a transcendental illusion. Before turning to Kant and Deleuze, however, we shall look briefly at Descartes' notion of error, as this, for Deleuze at least, provides the model of error which Kant's doctrine of transcendental illusion is supposed to replace.

In his chapter on the image of thought, Deleuze explicitly opposes Kant to Descartes. In particular, what interests Deleuze is that Kant, in the transcendental dialectic, argues that reason naturally goes awry if the nature of its relationship to the understanding is not properly recognized. While Deleuze claims that Kant is not the only figure to replace the notion of error as the prime misadventure of thought with a more subtle theory of failure (Deleuze lists, for instance, the concepts of superstition found in Lucretius and Spinoza, forgetting in Plato, and alienation in Hegel), as we shall see, many specific features of Kant's implementation will be taken up by Deleuze. We shall now turn to Descartes' theory of error, which Deleuze characterizes as being based on 'the effects of bodily causes' (DR: 172), external to reason.

## 1. Kant, Reason and the Antinomies

As is well known, one of the key aims of Descartes philosophy is to discover truths with certainty, and in order to achieve this certainty, Descartes introduces methodological doubt: 'reason now leads me to think that I should hold back my assent from opinions that are not completely certain and indubitable just as carefully as I do from those which are patently false' (Descartes 1996: 12). What is important about this move by Descartes is that it is reason itself which instigates the method of doubt. Whereas classical doubt often related various faculties to each other in order to undermine all of their claims to primacy in the search for truth, Descartes installs reason as the arbiter of the process of doubt itself. The aim of methodological doubt is therefore to create a space for reason to conduct its enquiries into the structure of the world, as 'deduction of one thing from another can never be performed wrongly by an intellect which is in the least degree rational' (Descartes 1985a: 12). If the intellect is incapable of error, however, we have the difficulty of explaining how error can and does occur, particularly given Descartes' contention that we were created by a beneficent and non-deceiving God. Descartes' solution to this central problem of his method is to situate error in the relations between the faculties. In the *Meditations*, it is the mismatch between the large domain of the will, which has no concern over truth, and the smaller domain of reason which leads to error. Likewise, in the *Rules for the Direction of the Mind*, Descartes writes, 'while it is the intellect alone which is capable of knowledge [*scientia*], it can be helped or hindered by three other faculties, *viz*, imagination, sense-perception, and memory' (ibid.: 32). Thus the madman of the first meditation who believes himself to be made of glass (Descartes 1996: 13) is to be explained in terms of 'certain vapours [which] disturb their brain' (Descartes 1985b: 172), rather than any deficiency in the intellect itself. In order to avoid the interference of the faculties, Descartes focuses in large part in the *Rules* on practical techniques to reduce reliance on memory as a faculty external to reason. I need to learn, for instance, 'to run through [a series of inferences] several times in a continuous movement' until 'I have learnt to pass from the first to the last so swiftly that memory is left with practically no role to play, and I seem to intuit the whole thing at once' (Descartes 1985a: 25), and I am advised to practice 'weaving and carpet making, or the more feminine arts of embroidery, in which threads are interwoven in an infinitely varied pattern' (ibid.: 35) in order to allow me to be better able to grasp a complete series of reasonings. Similarly, the *Meditations* begins with a discussion of habit, soliciting the development of

appropriate mental habits which allow the autonomy of reason, and with it, the development of a complete and indubitable philosophy. Once this is done, the Cartesian method proper can be employed, which involves four stages: the rejection of the dubitable, the division of the problem into parts, the ordering of those parts in terms of simplicity, and the enumeration of all features of the problematic (ibid.: 120). Reason thus allows us to systematically order, reorder, and solve problems by making sure they are properly specified, and removing, as far as possible, the influence of the other faculties. While we cannot identify Descartes' conception of reason too closely with that of Kant, where it has a complex position within the architectonics of the critical system, the spirit of Descartes' approach is clearly one of the main targets of Kant's antinomy of reason. Kant's response to the Cartesian method is a form of *reductio ad absurdum*, attempting to show that even given Descartes' careful strictures on the employment of reason, we can be led into error. As we shall see, the antinomies provide an important opening onto the Kantian system as a whole, so much so that Kant would later write that he would have 'started with what I have entitled the "Antinomy of Pure Reason," which could have been done in colourful essays and would have given the reader a desire to get at the sources of this controversy' (Kant 1999: Letter to Marcus Herz, after 11 May 1781) were it not for the demands of providing a systematic account of the critical system as a whole.

The transcendental dialectic occurs after the aesthetic and analytic in the first *Critique*, and deals with the role of reason in our knowledge of the world. It is here that Kant puts forward the view that reason, operating apart from the other faculties, internally generates illusions which lead us into contradiction. Before turning to the antinomies themselves, therefore, we will look briefly at the role of reason in the formulation of knowledge. Kant claims to have shown in the aesthetic and analytic how the understanding takes appearances, and unifies them according to rules (CPR Smith: A302/B359). While the understanding applies to sensibility for Kant, and is therefore able to make judgements about phenomena, this is not sufficient for proper knowledge of the world. Although this provides the foundation for such knowledge, as it stands, we are given a merely fragmentary knowledge of phenomena. What is needed is a further level of unity, whereby these various cognitions of the understanding can themselves be unified into a coherent system of knowledge. It is this second step which is carried out by reason. Reason therefore serves to unify the rules of the understanding according to principles. It is this final step which gives us knowledge, as a coherent set of judgements, about the phenomenal

world. In seeking to unify cognitions of the understanding under higher principles, Kant describes reason's task as '[finding] the unconditioned for the conditioned cognitions of the understanding, by which its unity will be completed' (ibid.: A307/B364). In this case, the unconditioned is the rational ground for the conditioned cognition. In order to illustrate how this functions, Kant turns to the model of the syllogism [*Vernunftschluss*]. We will briefly look at how Kant explicates this connection to the syllogism, as it will become important when we look at Deleuze's description of representation, and its connection to Aristotle.

Kant explains this point in relation to the proposition, 'Caius is mortal' (ibid.: A322/B378). Kant explains that such a proposition could be derived from experience alone, through the understanding's relation to intuition. While such a method would give us a particular fact, it does not give us universality, or totality in our system of knowledge. Instead, reason seeks the condition for this statement; in this case, the condition is, 'all men are mortal'. Presumably, according to Kant's later comments that reason follows a regressive procedure, we could proceed further, and seek the conditions of the statement that 'all men are mortal', thus generating a series of inferences moving towards the most universal. This principle of inference is mirrored by a concept relating to the synthesis of intuitions, which is the 'concept of the totality of conditions for any given conditions' (ibid.: A322/B379). Thus, reason's understanding of inferences is mirrored by an understanding of phenomena. This understanding of reason's function as essentially syllogistic is not held to all that tightly by Kant, and, as we shall see when we come to look at the antinomies, the relation of condition to conditioned can be specified in other ways (in the antinomy we shall consider, it is specified in terms of a past moment being the condition of a present moment). What is important to note is that reason is considered by Kant to be subsumptive in its operation. That is, the relation of conditioned to conditions is like that of a particular to the concept which it falls under. Reason therefore operates according to the model of judgement, a fact which is unsurprising once we recognize that 'reason does not really generate any concept. The most it can do is free a concept of the understanding from the unavoidable limitations of possible experience' (ibid.: A409/B435).

The antinomies show the consequences of reason's attempt to apply to the world this aim of finding the unconditioned. There are three forms of error which reason falls into, depending on whether the syllogistic inference in question is categorical, hypothetical, or disjunctive. The antinomies emerge from reason's employment of the second of these syllogisms: the

hypothetical. Whereas the paralogisms deal with reason's attempt to apply the categories beyond the realm of the sensible itself, the antinomies instead cover reason's attempt to develop a concept of the world as a whole. As we shall see, while this concept appears to be a purely empirical concept, it turns out to be merely pseudo-empirical, actually being beyond any possible experience. In order to accomplish the task of providing a systematic view of knowledge, it is reason which takes up the categories of the understanding, and attempts, by means of a regressive procedure which tries to move from the present conditioned to its conditions, to allow us to conceive of such a totality. As we shall see, it is the task of reason to attempt such a regression through the series of conditions which govern the object, but we fall into error when we confuse this general rule with a cosmological principle that 'when the conditioned is given, then so is the entire series of conditions subordinated one to the other, which is also given (i.e. contained in the object and its connections)' (ibid.: A307–8/B364). This confusion is the antinomy itself, as it is reason's confusion of its task with the presumed givenness of the unconditioned which leads to antinomy, but this general confusion becomes apparent in four specific antinomies. As we are interested in the structure of the antinomies in general, we will only describe here the first of the antinomies, which deals with whether or not the world has a beginning in time. The question of whether the world has a beginning relates to reason's goal of finding the unconditioned for the conditioned, in the sense that the present moment is conditioned by the series of past moments. Accordingly, reason attempts, through a regressive procedure, to think the world as a totality by thinking the unconditioned that conditions the present. The antinomy emerges since there are two ways to specify this unconditioned, which Kant terms the dogmatic and empiricist interpretations of the world. It is this which leads to the antinomy, as it seems impossible to show the superiority of one position over the other. The two different ways of conceiving of the unconditioned of a series depend upon whether we consider the unconditioned to be a first term of the series, which would operate as an intelligible beginning, or, on the other hand, we conceive of the totality of conditions taken together as the unconditioned. The first corresponds to empiricism, the second to dogmatism. While these positions appear rather abstract, they mirror closely the debates between Leibniz and Clark, as Al-Azm's work shows (Al-Azm 1972). Kant himself refers to the dogmatist position as being that of Plato, and the empiricist that of Epicurus. As the antinomies are supposed to arise naturally from reason's activity, however, these figures should be seen as exemplars of the different positions, thereby giving each a wider remit.

We shall move through the arguments themselves quite quickly, as our main focus is on the structural analogues between Kant's formulation and that of Deleuze. Beginning with the argument for the thesis, that the world has a beginning in time, Kant proceeds from the assumption of the opposite in order to generate a *reductio ad absurdum*. Given that the world has existed for an infinite amount of time, an infinite number of things must have happened. An infinite series is by definition, however, a series that can never be completed, and hence, the past (as an *infinite* series) cannot have passed away. As the statement that the past has not passed is contradictory, we thereby assert its contrary: that the world has a beginning. The empiricist antithesis follows a similar structure, first assuming that the world does have a beginning in time, implying that there must have been time prior to that beginning. This time before the world must be an empty time, however, and in such a time, every moment must be identical to every other. In this case, it is impossible for anything to have come into being, since as each moment of time is identical with every other, it is impossible to distinguish a moment when the world would have begun. We are therefore led to the conclusion that there must be no beginning to time (CPR Smith: A426–9/B454–7). While there are objections to both of these arguments, Kant clearly wishes to maintain that the disagreements presented are real and serious, and such that they do not allow reason to 'withdraw and treat the quarrel with indifference as a mere mock-fight' (ibid.: A464/B492). As such, according to Kant's account of the antinomies, by simply following the rules of reason, we are led to contradiction.

On Kant's account, therefore, reason has been led into contradiction not through any interference by bodily causes but by reason's own activity. One possible response to the quandary of the antinomies would be radical scepticism. That is, having shown that reason is incapable of totalizing phenomena without generating contradictions, we could give up on the goal of systematic knowledge. Kant's solution is instead to argue that reason can go awry not simply through error, but also by succumbing to a form of illusion. This illusion will in fact be what Kant calls a transcendental illusion, as it will turn out that this illusion is a condition of the possibility of systematic knowledge. Kant's procedure will therefore be twofold. On the one hand, he will have to show how this illusion is generated. On the other, he will have to show how reason succumbs to this illusion, and how it is possible for reason to function without falling into error. Dealing with the first requirement to begin with, if we return to the question of the world, we can see that this was generated through reason's desire to understand empirical phenomena as a totality. The regression from conditioned to

conditions was therefore 'set as a task' (ibid.: A498/B526) for reason. The need to draw the fragmented cognitions of the understanding together to generate knowledge is clearly a pressing one, and so can be seen as a legitimate goal of reason. Kant argues, however, that if this goal is to be achieved, a further assumption is required on the part of reason. That is, the task of seeking the pure unconditioned itself presupposes a subjective principle. In order to seek the unconditioned, we need to consider, on some level, the possibility of the unconditioned being attained. In fact, for any particular conditioned case, we can recognize that which conditions it, as in the case of a temporal sequence, whereby each moment can be understood as conditioned by the moment which precedes it. Every particular moment therefore has a condition in the preceding moment. In order to apply the principle that we must seek the unconditioned, we therefore make the further assumption that 'when the unconditioned is given, then so is the whole series of conditions subordinated one to the other, which is itself also given (i.e., contained in the object and its connection)' (ibid.: A307–8/B364). As the relation between a condition and that which it conditions is analytic (ibid.: A498/B526), and 'human reason is by nature architectonic' (ibid.: A474/B502), it is natural for reason to approach the conditioned in this way. Thus, it is a condition of the possibility of unifying the fragmentary knowledge of the understanding that such a unity can be given, or in other words, that it is possible to specify the unconditioned. While we need to *think* this notion in order for reason to accomplish its goal, the fact that we must think the unconditioned as given does not imply that the unconditioned actually is given. In this sense, the transcendental illusion is unavoidable. As Kant writes:

This is an *illusion* which can no more be prevented than we can prevent the sea appearing higher at the horizon than at the shore, since we see it through higher light rays; or to cite a still better example, than the astronomer can prevent the moon from appearing larger at its rising, although he is not deceived by this illusion. (ibid.: A297/B355)

In itself, the transcendental illusion is not necessarily fallacious. Knowledge requires the Idea of a totality, and the necessity of the Idea of a totality makes it appear as if such a totality could actually be given, but as the examples which Kant brings up show, the presence of the illusion can be counteracted by the philosopher, just as the astronomer counteracts his subjective perception of the moon with his knowledge of the broader results of astronomy. This therefore leads us to the second aspect of Kant's



analysis of the antinomies. Given that the transcendental illusion is not in itself an error, what is it that leads us into the contradictions which we find in the antinomies?

We should first note that the recognition of the existence of a transcendental illusion does not seem to resolve the problem directly. Even given the presence of a transcendental illusion, we are still left with two contradicting propositions. In order to diffuse this difficulty, Kant proposes the strategy of highlighting an assumption shared by both the dogmatist and the empiricist. This assumption is that what is referred to by the concept of world are things in themselves.

If the conditioned as well as the condition are things in themselves, then when the first is given not only is the regress to the second *given as a problem*, but the latter is thereby really already given along with it; and, because this holds for all members of the series, then the complete series of conditions, and hence the unconditioned is thereby simultaneously given, or rather it is presupposed by the fact that the conditioned, which is only possible through the series, is given. (ibid.: A 498/B526–7)

This is because both dogmatists and empiricists, in their conception of ‘a synthesis of the mere understanding, which represents things *as they are* without paying any attention to whether and how we might achieve acquaintance with them’ (ibid.: A498/B526–7) assume that the totality of things can be characterized in terms of an empirical synthesis which treats them as conditioned by space and time. This characterization opens the way to a possible solution to the antinomies:

If two opposed judgements presuppose an inadmissible condition, then in spite of their opposition, which does not amount to a contradiction strictly so-called, both fall to the ground, inasmuch as the condition, under which alone either of them can be maintained, itself falls. (ibid.: A305/B531)

We can now return to the antinomy in order to see how this approach works. As we saw, Kant claims that the antinomy presents two possible conceptions of the world. The first empiricist conception sees it as infinite, with all conditions being empirical. The second, dogmatist (or Platonist) conception saw the world as defined as having a definite limit, or an intelligible beginning, leading to a finite set of conditions. If we reject the notion that what is referred to by the understanding are things-in-themselves, then we are given a third possibility; that is, that the predicates ‘finite’ and

'infinite' are necessarily tied to our empirical understanding of the world. The third possibility is therefore to reject this dichotomy: 'If I had said that the world is either finite or infinite, both statements might be false' (ibid.: A503/B531). This amounts to claiming that we cannot apply the predicates of appearance to the world as it is in itself. Thus, Kant relies on one of the key distinctions of transcendental idealism, that between appearances and things in themselves in order to diffuse the paradox. As the thing in itself falls outside of the world of appearance, it also falls outside of the categories of appearance. Given that the finite and infinite are concepts which apply to appearance, the thing in itself is neither finite nor infinite. The world, as the unconditioned, is therefore neither finite nor infinite, but rather a-finite, or non-finite. Kant characterizes this reinterpretation as a move from the analytical contradictories of transcendental realism to the dialectical contraries of transcendental idealism. It equally shows that a pure empiricism itself becomes dogmatic as, while it attempts to remain within the sphere of the empirical, it does so through the active assertion that the totality is the totality of appearance, thus asserting a positive metaphysics rather than simply bracketing rationalist assumptions.

This leads us to the final point of significance in Kant's treatment of the antinomies. This is that not only do they express the fact that something is problematic in taking reason to be inherently capable of conducting ontology, but furthermore, Kant believes that they provide a proof of his own transcendental idealist position. Thus he writes that:

If the world is a whole existing in itself, then it is either finite or infinite. Now the first as well as the second alternative is false . . . Thus it is also false that the world (the sum of all appearances) is a whole existing in itself. From which it follows that appearances in general are nothing outside our representations, which is just what we mean by their transcendental ideality. (ibid.: A506-7/B534-5)

Looking back over the account that we have just given, several features will be of special importance to Deleuze's own philosophy. Of primary importance is the distinction between appearance and the thing in itself. We should note that as one of the strictures of transcendental idealism is that thought relates (determinately) to appearance, thought cannot determinately think the thing in itself. Instead, thought posits the noumenon. The concept of the noumenon is in the Kantian system left strictly undetermined, as to determine it through the categories would be to understand it in the same terms by which we understand appearance (this in fact occurs in dogmatism, which falls into error by attempting to think

beyond appearance using the categories of appearance). This does not mean that the noumenon is without significance. In fact, as the concept of the noumenon is the concept of something beyond appearance, even in its undetermined state, it serves to limit the pretensions of sensibility. While this structure will be mirrored in Deleuze's work, it will be understood instead as involving the dichotomy of representation and difference. The notions of the finite and the infinite will also be important for Deleuze, although instead of characterizing that to which thought relates (finite and infinite series of conditions), Deleuze will use them to characterize thought itself (finite and infinite thought). In spite of these changes, the idea of a transcendental illusion will maintain its importance for Deleuze, as will the idea of antinomy, although this antinomy will now be the antinomy of difference.

## 2. Deleuze, Representation and Difference

Turning to Deleuze, we should begin by noting that his relationship with Kant is ambivalent. *Kant's Critical Philosophy*, for instance, is written as 'a book on an enemy' (KCP: Translator's Introduction), but *Difference and Repetition* recognizes as well that he developed the tools for overturning what Deleuze calls the image of thought: 'for the concept of error, he substituted that of illusion: internal illusions, interior to reason, instead of errors from without which were merely the effects of bodily causes' (DR: 172). The image of thought refers to what Deleuze calls representational thought (a term we will discuss shortly), and in this respect, Deleuze's project bears a similarity to the Kantian aim of overturning the transcendental realist dogma that appearances are things-in-themselves. We can see this by looking at how Deleuze presents his project of clarifying the nature of the event in the *Logic of Sense*. Here, Deleuze claims that 'a double battle has the objective to thwart all dogmatic confusion between event and essence, and also every empiricist confusion between event and accident' (Deleuze 2001: 64). The event is one of Deleuze's terms for that which falls outside of representation, and here we see Deleuze explicating the difficulties of thinking the event using the same categories which Kant uses in formulating the antinomies. To fall prey to the dogmatic confusion would be to posit the event as something like an intelligible beginning, or the unconditioned which grounds the conditioned. In order to think such an idea, however, we need to apply the categories, which are the conditions of the possibility of sensible experience, beyond the realm of the sensible. To think

beyond appearance determinately, using the categories of the understanding, thus involves a category error, since the categories of the understanding only have validity when applied to the spatio-temporal world. Thus, the dogmatist, in characterizing the noumenal in terms of the categories, provides only the thought of essence. The dogmatist attempts to give a positive meaning to a term which for Kant can only have a negative employment as 'a limiting concept, the function of which is to curb the pretensions of sensibility' (CPR Smith: A255/B11). Concepts applied beyond their proper domain would be 'without sense, that is, without meaning' (ibid.: A240/B299). The notion of an event cannot be cognized as an intelligible ground for appearance, as to do so would be to understand the event in spatio-temporal terms. Similarly, for the empiricist, as the unconditioned is simply the totality of the conditioned, the event would have to be thought of as itself a feature of the empirical world. That is, it would have to be thought of as an *accident* within the world, in other words, simply as one property among others. In specifying the concept of the event, therefore, the empiricist has to reduce it to a state of affairs, denying the possibility of a beyond to appearances. Up until this point, Deleuze's analysis proceeds along Kantian lines. The event here seems to operate much like the noumenal in Kant's philosophy, in that it simply cannot be determined according to the categories which apply to appearance. In opposing brute empiricism, it also prevents the simple collapse of the totality into appearance itself. In this first, negative, sense, there is a parallel between transcendental idealism and transcendental empiricism, therefore, to the extent that both of these positions are opposed to what Kant characterizes as transcendental realism. There is, however, a sharp divergence between the two philosophies in regard to the status of the noumenal. Whereas for Kant, the noumenal is purely negative, as it lacks all spatio-temporal determinations, for Deleuze, while it also lacks all spatio-temporal determinations, it does not follow from this that it is completely indeterminate. Thus, Deleuze will give a positive signification to what can only be negatively determined for Kant. Deleuze frequently changes his terminology throughout his writings, and, while the event plays the role of the noumenon in *Logic of Sense*, in *Difference and Repetition*, the same problematic is taken up in terms of the question of difference. There, as we shall see, difference is construed as that which falls outside of representation, with representation taking a somewhat analogous position to transcendental realism in Kant's work.

In order to give a properly sufficient account of representation, a full study of Deleuze's relation to Aristotle would be needed, which would draw us far from our theme of Deleuze's relation to Kant. As an understanding of

representation is key to understanding Deleuze's relation to Kant, however, a brief sketch of Deleuze's characterization of it will be necessary. The 'constituted categories of representation' appear with Aristotle, according to Deleuze (DR: 155). What characterizes this representation is, for Deleuze, the generation of hierarchies founded on the concept of identity. While this allows us to formulate judgements about the world, it operates on the basis of excluding a moment of difference. It does this according to its four aspects of identity, analogy, opposition, and resemblance. In order to see how this is achieved, we can look at how a particular individual is determined. If we take an individual such as Caius, if we want to determine what he essentially is, we can do so by attributing predicates to him. Thus, to begin with, we may assert that Caius is a man. This provides one determination of Caius, but we can go further, by recognizing that the term 'man' can in turn be determined. Thus, a man is a type of animal. In turn an animal is a substance and so forth. While a concept of difference is clearly possible here – man differs from other animals – it is only in relation to this higher genus (the animal) that difference can be thought for Aristotle. That is, if there is not a ground of similarity, the difference becomes too extreme and becomes simple otherness. Thus, the determination of man is based on *identity* of genus. Furthermore, in order to make sure that determination is complete, the difference between man and other animals cannot simply follow a process of division such as that found in Plato. In the *Sophist*, for instance, the visitor divides things that swim into two classes: those with wings and those which live underwater (Plato 1997: 220b). Such a division clearly does not capture everything which swims. In order to avoid such lacunae, we therefore divide according to *oppositional* differences, such as between the rational and the non-rational, in the case of animals. Once we have these categories, we have to decide whether a given individual belongs to a particular species. While members of the species all differ from one another, their entry into the group is defined by their *resemblance* to the essential nature of the species. Finally, analogy comes in to solve a problem within the representational framework. Determination relies on difference, but each difference must be supported by an overarching identity. This means, however, that the highest genus cannot be determined, as this would require it to have a difference in relation to a genus above itself. Thus, the relations of the elements below the highest genus are not determined in terms of it, but instead through the concept of *analogy* with each other.<sup>1</sup>

This survey of representation has been rather brief, but it should allow us to ask the question, does representation produce a concept of difference?

If we look at individuals, we are clearly faced with differences (Socrates differs from Caius, for instance), but these differences are not *essential* differences. For Aristotle, as there are an infinite number of things, but only a finite number of words, determination has to take place at the level of the species, or the universal. Such individual differences fall outside of the hierarchy as purely accidental, and are therefore erased by the principle of resemblance. Similarly, there can be no concept of difference for the highest term in the hierarchy, the highest genus, as it does not differ in terms of a higher (identical) concept. In terms of what falls in the middle, we do not have a concept of difference, but a difference between concepts in the light of a higher identity. In fact, this lack of a concept of difference seems problematic both at the level of what Deleuze calls the large and the small. Identity seems unable to account for differences in the highest genus, or for differences in the individual. As we shall see, Deleuze does not want to characterize these failings as simple errors, however, but rather as the result of a transcendental illusion which necessarily arises for representational thought, that representation applies to the totality of what there is. The four 'principles' which we discussed in relation to representation are, according to Deleuze, four forms of this transcendental illusion (DR: 334). On top of this, there is another illusion generated by their combination: 'the ultimate, external illusion of representation is this illusion that results from all its internal illusions – namely that groundlessness should lack differences, where in fact it swarms with them' (ibid.: 347). We will now return to Kant to see how these illusions develop.

As we saw, Kant describes the process of reason's search for the unconditioned in terms of syllogistic logic. It operated according to a procedure which attempted to reach the unconditioned through a regression through conditions. Thus, the grounds for the judgement, 'Caius is mortal' was the universal judgement, 'All men are mortal'. As we saw, reason operates according to the model of judgement, and in doing so, relies on the concept of determination as subsumption of individuals under universals. As Deleuze notes,<sup>2</sup> Kant's conception of reason essentially conforms to Aristotle's doctrine of the syllogism, and it is as a consequence of this that reason generates transcendental illusions of representation. Now, if Kant is right, and the role of reason is to search for the condition of the conditioned through a regressive procedure, and this procedure operates according to the structures of syllogistic reasoning, then we will have two simultaneous effects. On the one hand, reason will presuppose the notion of a totality thus giving the illusion that the unconditioned can be given (the result obtained by Kant); on the other, as reason operates according

to the rules of syllogistic logic, this totality will be structured according to its 'four principal aspects . . . in so far as it is the medium of representation' (DR: 37). The illusion thus given will be that the totality of being must be subordinated to the principles of representation. The four internal illusions together aim to show that determination does not require difference. When combined together, however, we arrive at a further, external transcendental illusion. While it seems that we can always in practice find the condition of the conditioned, reason assumes that the unconditioned, as the totality of conditions, can be given. Just as reason totalizes conditions, since these conditions are understood representationally, representation is itself totalized. That is, reason assumes that all thought, and hence the world itself, can be comprehended by the categories of representation. Once reason has totalized representation, we have two ways of thinking the ground of representation. Either we conceive of it as itself representational, in which case, it can no longer function as the ground for representation, or we must conceive of it as a-representational, and as such, as lacking in any determinations whatsoever. Therefore, for reason, at least insofar as it is considered as representational – whatever falls outside of representation is strictly nothing, or, in Deleuze's terms, groundlessness lacks differences. Returning to the question of the event, we can therefore see that for Kant as well as for the empiricist and dogmatist, the event cannot be thought. While Kant may, on Deleuze's terms, give a diagnosis of the reason why the event cannot be thought, the totalizing nature of reason means that the nature of the event must remain undetermined.

### 3. Kant and Deleuze on the Antinomies

In this third section, I want to move on to look at the way in which the notion of antinomy itself is taken up by Deleuze. In particular, there are two aspects of Deleuze's usage of antinomy. First, Deleuze provides a critique of Kant's own use of the antinomies, arguing that ultimately his failure to understand the noumenon as determinate prevents a move beyond representation. In order to look at this, we will provide what will be a rather schematic account of Deleuze's interpretation of this antinomy as it applies to the calculus. More broadly, we can see that the opposition between the finite and the infinite, and the alternative hinted at by Kant in the antinomies, features strongly in the architectonic of *Difference and Repetition*, as Deleuze attempts to avoid both classical (finite) metaphysics and Hegelian (infinite) dialectics. We must recognize that the antinomical structure itself

cannot be seen as a direct refutation of finite and infinite representation, precisely because, as Deleuze recognizes, Hegelian dialectic itself operates antinomically: '[P]rofounder insight into the antinomical, or more truly into the dialectical nature of reason demonstrates any Notion whatever to be a unity of opposed moments to which, therefore, the form of antinomial assertions could be given' (Hegel 1989: 191).

In spite of this limitation on the scope of antinomical thinking for Deleuze, we should note that the finite–infinite distinction still provides a point of reference that allows us to situate Deleuze's own project.

We will therefore deal with this architectonic issue of the target of the antinomies first. *Difference and Repetition* attempts to provide a way of thinking beyond representation, and in doing so, it opposes two different types of representation. So far, in our descriptions of representation, we have dealt with what Deleuze calls finite representation, which is exemplified by the logic of Aristotle, and also by Kant. When we look at Kant's antinomies, although they operate according to the distinction between the finite and the infinite, we can see that they both operate according to the categories of the understanding. 'Reason does not really generate any concept. The most it can do is free a concept of the *understanding*' (CPR Smith: A409/B435). That is, at heart, both the dogmatist and the empiricist are operating according to the same model of thought: the subsumptive model of judgement. Reason generates different solutions to the problem of the world, depending on whether it assumed the series of conditions to be finite or infinite, but the essential operations of reason are the same in both cases. While such a mode of thought may relate to the infinite (as in, for example, experiences of the sublime), it is essentially characterized by itself being the thought of a finite subject. The second branch of representation is instead what Deleuze calls infinite representation. Infinite representation operates, according to Deleuze, by attempting to incorporate the moments of the large and the small within representation itself. Thus, for instance, Hegel attempts to show that the finite immanently contains the infinite, and *vice versa*. Rather than relying on fixed categories, Hegel instead attempts to incorporate movement into thought itself. The difference between the discussion of empiricism and dogmatism in Kant's philosophy and the infinite and finite forms of representation in Deleuze's philosophy therefore comes down to this: whereas finite and infinite are for Kant two positions understood as differing in content, for Deleuze, finite and infinite characterize two different images of thought themselves. Thus, rather than a first-order antinomy which operates within finite representation, Deleuze will work with a second-order antinomy of forms of representation



themselves.<sup>3</sup> It is this antinomy and its resolution which define the architectonics of *Difference and Repetition* as a whole.

We can now turn to the technical aspect of Deleuze's discussion of the antinomies. On the one hand, Deleuze criticizes Kant's treatment of the antinomies of reason, and on the other, Deleuze provides his own antinomies, formulated in terms of the concept of difference. Deleuze writes that Kant resolves the antinomies 'when on the one hand he discovers within representation an element irreducible to either infinity or finitude (regress); and on the other he adds to this element of pure thought another element which differs in kind from representation (noumena)' (DR: 226). Kant's concept of the noumenon cannot itself overturn representation as the noumenon merely represents the limiting concept of the sensible. As such, the Kantian noumenon only asserts that determinations are representational, and that that which cannot be represented lacks determinations. As the Deleuzian antinomy will be grounded in the question of difference and identity, Deleuze instead argues that it is possible to give a positive signification to the noumenal. As we saw, Deleuze claims that representation cannot formulate a proper concept of difference, as it subordinates difference to identity. This opens the possibility that if a concept of difference could be given which wasn't subordinated to identity (and hence fell outside of representation), we could give a characterization of the non-representational that did not lack all determinations: 'Difference is not phenomenon, but the noumenon closest to the phenomenon' (ibid.: 280). The question which Deleuze will therefore ask is whether it is possible for representation to develop a concept of difference. Since the aim of *Difference and Repetition* as a whole is to show that representation cannot, we can at most sketch the structure of Deleuze's approach to this problem from the perspective of the Kantian influences on its formulation. First, we should note that Deleuze agrees with Kant that '[t]he entire alternative between finite and infinite applies very badly to difference, because it constitutes only an antinomy of representation' (ibid.: 332). For Kant, the problem of the world, or the totality of conditions, was badly posed because transcendental realism either assumed that world, as the totality of conditions, was finite or infinite. In fact, the concept of world could not be formulated, as it was conditioned by the noumenon, which as undetermined could not be incorporated into the totality. Instead of focusing on the Idea of world, Deleuze will instead relate the problematic to the notion of difference.

The antinomy of representation is its inability to think difference. Just as the antinomy of reason in Kant's philosophy is expressed in particular antinomies, so in Deleuze's thought, the antinomy of representation

is expressed in the inability of either finite or infinite representation to think the concept of difference at the foundations of the differential calculus. Deleuze's use of the differential calculus allows him to give a positive interpretation to the concept of difference, as noumenon, which therefore allows him to posit *contra* Kant, the possibility of determinations which, while strictly nothing in relation to representation, are yet not strictly nothing.

While a formal study of the calculus would once again take us too far from Kant's own philosophy, we will give a simplified account of the calculus here in order to see how Deleuze uses it to give a positive account of the noumenon. We can begin by noting that the calculus involves the relation of quantities, such as we find in velocity. When we talk of a velocity such as miles per hour, or meters per second, the relation that we are talking about is a ratio of two terms. Thus, the velocity represents the distance travelled in a given time (however many meters in a second). If we want to work out the velocity of something travelling at a constant speed, it is simple enough to find by simply dividing or multiplying both terms of the ratio, thus if we travel ninety miles in two hours, we are travelling at 45 miles per hour. The calculus instead deals with cases where the ratio of two quantities is constantly changing, and this presents a difficulty. With the velocity of the body moving at a constant speed, we are dealing with determinate quantities: the distance travelled in a certain time. When the speed is variable, however, we cannot use this method – measuring a distance would give us an average velocity, whereas we require the specific velocity at a point. The difficulty is that we need to work out the velocity at an instantaneous moment, but as the body does not travel any distance in an instant, the two terms of our ratio, distance and time, would appear to be zero. More generally, this problem relates to any graph or function which relates two variable qualities to one another, and as such, rather than talking of meters per second, we talk of  $dy$  by  $dx$ , or  $dy/dx$ . The antinomy of the calculus can be formulated in more general terms as arguing that  $dy$  and  $dx$  must equal zero to capture the change at a point (making the ratio  $0/0$ ), but  $dy/dx$  must have a determinate value to give the rate of change at that point. In other words, we can see the calculus as employing the notion of instantaneous velocity, the velocity of an object at a point, but velocity seems to rely on the distance covered in a (non-instantaneous) time.

For Deleuze, the fate of the differential in representation highlights the general antinomy of the impossibility of formulating a concept of difference within representation. The contradiction, that the differential must have a definite value, yet be equal to zero, is solved in two ways.

Finite representation gets rid of the notion of the differential altogether, replacing it with the notion of the limit. We no longer see  $dy/dx$  as a ratio involving infinitely close terms, but instead see it as the determinate value of the limit of a series of approximations of the ratio. As we are concerned with the limit of the series, we need not concern ourselves with whether the differentials themselves actually reach that limit. The approach of infinite representation is instead to understand the ratio as a vanishing. That is,  $dy/dx$  represents the movement itself of the differential annulling itself while it reaches zero, while still preserving a determinate value. The notion of vanishing which Hegel employs mediates the two moments of the determinate value (that which vanishes), and the  $dy/dx = 0/0$  (the having vanished). In both cases, according to Deleuze, the concept of difference is either simply removed, or reincorporated into representation. Deleuze's solution instead is to argue that the differential cannot be understood according to the categories of sensibility, and this is why it is not present in the solution to a differential equation, as the solution is given purely in terms of representation. As Deleuze writes, 'neither real nor fictive, differentials express the nature of a problematic as such' (ibid.: 225).

For Deleuze, the differential provides the possibility of a positive account of difference. As we saw, the Kantian noumenal operates purely as a limiting concept, preventing the pretensions of sensibility from applying beyond their legitimate ground. This was the problem with the dogmatist, for whom the noumenal was characterized in terms of the categories. If Deleuze wishes to give a positive characterization of the noumenon, it must be a concept which relies on none of the concepts of representation. In order to achieve this, Deleuze turns to the differential. In particular, in relation to  $x$  and  $y$ ,  $dx$  and  $dy$  are strictly nothing. When combined with one another, however, they generate a determinate value, as both  $dy$  and  $dx$  equal zero, but  $dy/dx$  has a determinate magnitude. The symbol  $dx$  is therefore completely undetermined, fulfilling the Kantian criterion that the noumenal lack all determinations. When  $dx$  is combined with  $dy$ , however, the ratio that they form is determinable – that is, it provides a function through which the gradient, as a determinate number, can be found for each point on the curve. It is this feature of the differential which allows it to fulfil the requirements of his concept of difference. In other words, the fact that  $dy/dx$  must equal  $0/0$  representation (as it is velocity at an instant), despite the fact that it gives rise to representable results (determinate answers) shows that the differential must have both a determinate and non-representational value. Kant's concept of the noumenal had to be free from all determinations of sensibility. As such, it remained undetermined.

Deleuze's concept of difference remains free from all representational determinations. This is why, 'in relation to  $x$  [which for Deleuze here signifies representation],  $dx$  is completely undetermined' (ibid.: 219). Lacking all determinations of representation does not leave difference undetermined, however, precisely because each term is determinable in relation to each other. The differential provides the possibility for an understanding of difference which falls outside of representation.

The differential therefore plays the role for Deleuze of giving the noumenal a positive signification, and this generates a number of differences from Kant. To begin with, while reason internally generates transcendental illusions, it does so as a by-product of its unification of the fragmentary knowledge of the understanding. The fact that the noumenon has a purely negative role for Kant, as defining the limits of sensibility, means that ultimately, according to Deleuze, representation is not overturned by Kant.

To the extent that this pure thought remains undetermined – or is not determined as differential – representation, for its part, is not really overcome, any more than the propositions of consciousness which constitute the substance and the details of the antinomies. (ibid.: 226)

What Deleuze means by this is that since the problematic element of representation, the noumenon, is not determined, Kant has no choice but to retain the dichotomy of determination as representation and the non-representational as undetermined. This is why the problematic element is thought as undetermined – that is – undetermined according to the principles of representation. A corollary of this is that, taken up in the wider setting of *Difference and Repetition* as a whole, the problem is always understood in terms of the solution within representation. Deleuze's characterization of the differential instead tries to steer a line between on the one hand maintaining its determinacy, while on the other, not resorting to any spatio-temporal terms in its determination. It is for this reason that Deleuze opposes the reading of the differential as infinitesimally close to a particular term put forward by Leibniz, as this infinitesimal still maintains the grain of sensibility within it. By doing so, he hopes to accept Kant's strictures on the determinations of the noumenon while opening up a space beyond representation.

The positive determination of the noumenon instead allows Deleuze to posit a 'sub-representative element' (ibid.: 226) that allows us to characterize the problematic. This in turn allows us to set up the monism–dualism

of Deleuze's dichotomy problem–solution, or virtual–actual. In this regard, we need to note two interrelated features. First, representation is not itself illusion.<sup>4</sup> Rather, 'representation is a site of transcendental illusion' (ibid.: 334). As we saw in the analysis of Kantian reason, representation has a tendency to totalize itself. That is, as representation systematizes knowledge, it presents the illusion that the given is entirely representational. While it totalizes itself, it therefore cuts itself off from its genetic conditions (which for Deleuze are differential, and therefore sub-representational). This is inevitable, as in any particular case, a representation can be related to another representation, and so it appears that representation can provide a complete determination of the world. Representation fails to recognize the reality of the non-representational, but this error cannot be resolved by a simple inversion. Perhaps the simple dualism does not hold, however as recognizing determinate differential and genetic conditions of representation must inevitably change our understanding of the nature of representation itself, and its categories such as negation.<sup>5</sup> Just as we found with Kant, however, we should note that the recognition of a transcendental illusion as a transcendental illusion does not remove it, and for this reason, philosophy must always beware of the sedimentation and the incorporation of the concept of difference within representation.

## Conclusion

While this study of some of the relations between Kant and Deleuze has been brief, it has allowed us to see that Kant's study of transcendental illusion and the antinomies plays a vital role in the architectonic and argumentation of *Difference and Repetition*. In particular, the debate between finite and infinite representation is formulated by Deleuze as an antinomy. There are some important differences, however. In particular, Deleuze's antinomy does not involve two arguments which directly contradict one another, and in fact it could not do. Hegel is the great exemplar of infinite representation, and as is known, his method itself proceeds antinomically. Thus, Deleuze's argument itself relies on the reality of a form of difference outside of representation, in some ways inverting the structure of Kant's antinomies. The rejoinder of infinite representation, therefore, is simply to deny the reality of such a form of difference. Luckily, Deleuze does not simply rely on the tools available within the Kantian system, and indeed, aligning him too closely with Kant risks, for instance, occluding the whole domain which exists between pure virtuality and actuality, thus depriving

Deleuze's account of it's genetic ambitions. It does allow us to see that while the term 'transcendental' in transcendental empiricism may be contorted by the influence of other members of Deleuze's philosophical retinue, such as Spinoza, Nietzsche and Bergson, it still retains something of its Kantian origins.

## Notes

- <sup>1</sup> As Deleuze notes, the concept of analogy proper in fact emerges in scholastic metaphysics.
- <sup>2</sup> 'Understanding judges, but reason *reasons*. Now, following Aristotle's doctrine, Kant conceives of reasoning in a syllogistic way' (KCP: 18).
- <sup>3</sup> It is for this reason that the problem of Deleuze's interpretation of the calculus is badly posed if he is interpreted as siding with modern (finite) interpretations against Hegel, even if the modern interpretation considered is that of hyperreal numbers. Duffy, for instance, makes this error:

Deleuze . . . establishes a historical continuity between Leibniz's differential point of view of the infinitesimal calculus and the differential calculus of contemporary mathematics thanks to the axioms of non-standard analysis which allow the inclusion of the infinitesimal in its arithmetisation; a continuity which effectively bypasses the methods of the differential calculus which Hegel uses in the Science of Logic to support the development of the dialectical logic. (Duffy 2006: 74–5)

- <sup>4</sup> I am thinking in particular of Peter Hallward, and, for example, his claim that 'Deleuze's fundamental idea, in short, is that if being is creativity, it can only fully become so through the tendential evacuation of all actual or creaturely mediation' (Hallward 2006: 2). Grier, in her study of transcendental illusion in Kant, shows that a similar error has also often been made in interpreting the transcendental dialectic, leading to the equation of transcendental illusion with transcendental realism. (See, in particular, Grier 2001: chapter four). Statements by Kant such as the following provide strong evidence for her reading: 'The transcendental dialectic will therefore content itself with exposing the illusion of transcendental judgements, and at the same time take precautions that we are not deceived by it' (CPR Smith: A298/B355). Grier argues that the failure to distinguish between illusion and deception in Kant's account generates the interpretative error.
- <sup>5</sup> In fact, Deleuze does argue that concepts such as negation do not have a proper place in representation, properly conceived. In arguing this point, Deleuze relies on another branch of post-Kantian thought, the intuitionist mathematics of Griss. Intuitionism follows Kant in arguing that mathematical objects are not simply given all at once, and tries to draw the consequences from this. Brouwer, the founder of the school, argues, for instance, that we cannot prove a proposition simply by proving that the negation of that proposition is false, as to do so would be to presuppose a form of mathematical Platonism, whereby the

proposition to be proved pre-exists the proof itself. The most we can say, on Brouwer's account, is that the negation of the proposition is false, thus leaving the truth value of the proposition indeterminate. Griss goes further than Brouwer's constructivism by arguing that we cannot talk about mathematical objects which do not exist (as in propositions such as 'the square circle does not exist'). In order to remove the concept of negation from mathematics, Griss tries to formulate the concept of difference in terms which do not rely on negation. Thus, instead of the inequality of two numbers being defined in terms of negation, they are defined as being 'apart' from one another. Similarly equality is not defined as the negation of apartness, but instead by the theorem that 'if every real number  $c$  that is apart from  $a$  is also apart from  $b$ , then  $a = b$ ' (Heyting 1956: 94). Deleuze cites this example approvingly (DR: 294), but further argues that Griss' work itself was limited by a failure to understand the nature of the problematic (DR: 327). Deleuze's criticism of Griss therefore echoes his earlier criticisms of Kant.