

Lecture 9 – Hegel, Species and Infinite Representation

Introduction

We have now been through most of the major moments in the first chapter of *Difference and Repetition*. This week I want to look at the section of chapter one on infinite representation, which follows the discussion of univocity. So far, Deleuze has argued that in order to overcome the Aristotelian account of the world, we need to move to an account that substitutes univocity for analogy, and affect for species. Towards the conclusion of the chapter, Deleuze notes that the rejection of representation is not the only response which we could make to its various problems. Rather, we could instead attempt to provide a more coherent conception of representation itself. Deleuze characterises the attempt to do so as the move from finite to infinite representation, with the chief protagonists of this view being Leibniz and Hegel. In the lecture today, I want to focus on Hegel's response to finite representation, and Deleuze's interpretation of its limitations. In relation to the discussion of representation so far, the following comment by Deleuze sums up the difference between finite and infinite representation:

The specification of the very notion of limit changes completely; it no longer refers to the limits of finite representation, but on the contrary to the womb in which finite determination never ceases to be born and to disappear, to be enveloped and deployed within orgiastic representation. (DR 53)

The significance of this is clear if we return to Aquinas' definition of finite being:

[S]omething is said to be infinite from the fact that it is not limited. Now matter is in a certain way limited through form, and form in a certain way through matter. Matter is in fact limited through form inasmuch as before it receives a form, matter is in potency to many forms, but when it receives one, it is limited by it. (Aquinas, *Summa Theologiae*, Ia, qu. 7, ar. 1, co., tm. 4, p. 72, taken from Tomarchio, 176)

Here the limit is that finite representation therefore does not completely determine the object, but is limited by the recalcitrance of its matter. In other words, the formal definition of the object in terms of species and genera is not completely determinative. The point at which this determination fails, however, is also the point at which representation collapses. The particular is therefore inexplicable insofar as it falls outside of the limits of representation. What infinite representation is going to attempt to do is ground this moment of the formation of finite things within a broader movement of representation, infinite representation, rather than in matter. In the case of Hegel, therefore, who I want to discuss today, this means the at the kind of thinking which has characterised what we have seen as representation so far is only a moment in a wider movement of thought. Thus, finite thinking, or the understanding, which is the mode of thought of Aristotle, is really just a single moment in a broader process called speculative reason. It is only by reifying speculative thought that we end up with the problems that we have encountered so far, that is by denying that there is a greater moment to representation than finite representation, we find

ourselves unable to explain the concept of totality. Central to Hegel's explanation of infinite representation is the notion of dialectic. Essentially, Hegel wants to argue that rather than the meanings of terms simply being given by definition, we find when we analyse the movement of thought thinking these terms, that their meaning arises from the content itself. Hegel's *Science of Logic* therefore traces the development of concepts from the simplest concept, that of pure, undifferentiated being, through to what he calls the absolute idea, or the notion. By tracing the development of ideas themselves, we are able to see the inherent connections between them. Philosophy is therefore this movement of concepts themselves. For Hegel, therefore, the problems of finite representation emerge when we ignore this movement, and assume that concepts are just given. In this way, Hegel criticises his predecessors as follows:

Such presuppositions that infinity is different from finitude, that content is other than form, that the inner is other than the outer, also that mediation is not immediacy (as if anyone did not know such things), are brought forward by way of information and narrated and asserted rather than proved. (SL, 41)

Whilst exploring the notion of representation, and the responses offered to it from the 'minor' tradition of a philosophy of univocity, the distinction between the finite and the infinite has been archetypal of the way in which philosophers have constructed their logical apparatuses. Aquinas, for instance, introduces the concept of limit in defining the relationship of finite and infinite. Scotus develops an intensive notion of difference in order to prevent the finite and infinite from becoming species of the genus, being. Finally, Spinoza's plane of immanence emerges as a way of relating finite forms to an infinite ground whilst preserving some kind of distinction for them. In this lecture, I want to do something similar by looking at Hegel's dialectic of the finite and infinite, as this dialectic shows the essential features of Hegel's notion of determination. Next week, we will look at how this notion relates to Deleuze's fundamentally non-representational philosophy.

Finitude

The dialectic of finitude and infinity emerges in the opening section of the *Science of Logic*. At this point, Hegel has introduced two concepts that are important for us here. First, the dialectic begins with the notion of pure being, without any determinations whatsoever. This notion, however, proves to be problematic, as without any determinations, there is no way for us to differentiate it from nothingness – or better, it is in itself indistinguishable from nothingness. The pure concept of being is in fact empty and abstract. Pure being is a problematic concept because it lacks determinacy, and as the dialectic proceeds, this concept is replaced by a concept of determinate being (*Dasein*). This is in essence the concept of *a* being, rather than being in general. The question therefore arises, how are we to conceive of a being as determined? Hegel's answer to this question is that being becomes a determinate being through the concept of limit. It is by excluding that which is not it that a being is able to become determined. Limit has a double effect. Not only does the notion of limit bring determinate being into being, but as it excludes as well as defining, it brings into being another moment of determinate being outside of itself. In effect, the limit can be seen as operating in two directions. Not only does it determine the being that introduces it, but as it also limits the being which is excluded, it simultaneously also determines the being outside of the limit as a determinate being. Thus, Hegel writes that 'limit is the mediation through which something and other each as

well *is* and *is not*.' (SL 127) Determinate being therefore is that which allows us to distinguish between things by saying that it is 'this and not that'. It therefore relies on a plurality of terms (we cannot distinguish the 'this without the 'that'), and on the concept of negation (the 'this' is 'this' by *not* being 'that'). Now, in spite of the fact that the notion of the limit clearly carries a reference to an outside, it is a feature that is internal to the determinate being itself. It is what allows that being to be determinate. It is for this reason that Hegel claims that determinate being must also be characterised as finite being. As Stephen Houlgate notes (*Opening to Hegel's Logic*, 372), what defines finitude is the limit when understood from the inside of a determinate being. Such a being is not simply defined by its limit, it is also orientated towards its limit as the point at which it ceases to be. This is important for Hegel, as it implies that finitude emerges as a feature of the thing itself immanently, and is not something that is imposed on a thing by its outside.

Another important point to note at this stage is that the definition of finitude is not given in opposition to the infinite. Finitude emerges out of the necessary development of the concept of being itself. To be finite (*endlich*) is for something to be internally related to the limit of its being, rather than simply to being opposed to the infinite under the concept of being. Whilst being will therefore eventually be differentiated into finite and infinite, the division emerges immanently when we allow the conceptual structure of what it is to be something to unfold itself. Thus, Hegel opposes the fixed determinations that we find, for instance, in Aristotle, whereby 'it is asserted that the finite *stands perpetually* opposed to the infinite.' (SL 131)

Limitation and the Ought

For Hegel, when we look at this conception of the limit, we can see that its nature contains a contradiction. On the one hand, the limit is what allows a thing to be determined. It is an essential moment in its own being. On the other hand, it is a determination which is essentially tied to the outside of this something. The limit can be seen from both sides: both as something which determines what something essentially is, and as the point where the thing ceases to be what it is. It holds both of these determinations simultaneously as the border of the something with what is outside of it. Central to the essential nature of a thing, therefore, is a reference to what the thing is not. Hegel draws the following implication from this fact:

Something's own limit thus posited by it as a negative which is at the same time essential, is not merely limit as such, but *limitation*. (SL 132)

The border of something therefore also represents what something is not. In this sense, it is a limitation on the being of something. There is therefore here a strange dialectical inversion in Hegel's text. At first, the limit defines something as a determinate being, as an essential way of distinguishing it from an other. Now, however, the limit presents itself as a deficiency in being, insofar as it is limited by something which is not it. As this is a limitation, Hegel claims that this is a moment of the something that it should attempt to transcend. On the other hand, however, the limitation is still what is definitive of what the something is. Thus, in attempting to transcend its limitation, it attempts to transcend its own self. It's worth pointing out here that Hegel is not talking about a conscious aim on the part of the thing, although the language he uses is quite anthropomorphic. Rather, he is trying to show that this movement towards self-transcendence is an

inherent part of the logic of finite bodies. Thus, all finite things are, for Hegel, inherently involved in a process of self-transcendence.

At this moment, Hegel introduces the fact that this self transcendence of the thing is captured by the notion of an 'ought'. What is ought to be is something beyond this limitation. Hegel defines this condition as follows:

The ought therefore contains the determination in double form: once as the *implicit* determination counter to the negation, and again as a non-being which, as a limitation, is distinguished from the determination, but is at the same time itself an implicit determination. (SL 132)

What Hegel means is that the ought has a twofold structure. On the one hand, it needs to capture the idea of what the thing should be, apart from the limitation (otherwise it would simply be indifferent to the limitation). On the other, it needs to capture the fact that finite being is determined as precisely limited in its present form (otherwise it would already be what it should be).

Spurious Infinity

The fact that the ought contains within it the moment of limitation is key to Hegel's argument at this point. Finitude is related to its limit as a limitation that ought to be transcended. As a result of this, finite being, due to its own nature, tends to transcend its own limit. As its limit determines what it is, however, in transcending its limit, it ceases to be. Now, this point in a sense was there from the start of Hegel's account of finite being, as finite being immanently determined itself to be finite. Once again, it's important to note that unlike, for instance, Spinoza, it is the essential nature of finite being which leads it to cease to be, rather than some kind of external influence. The key logical question at this point is, what remains once the finite being has transcended its limit and ceased to exist? Rather than simple abstract nothingness being left behind, we find that what remains is determined as being the negation of finite being. That is, we are presented with that which is not the something prior to the moment of transcendence. If we think about what the original notion of finite being was, however, we can see that this notion bears a striking resemblance to it. In order to be determinate, being had to distinguish itself from being in general. It had to be 'this and not that'. What emerges from the collapse of finite being is itself a moment distinguished from the previous form of being. It is *this* and not that previous finite being. Rather than replace itself with a moment of pure nothingness, therefore, finite being's destruction leads to the creation of another moment of finite being.

Finite being therefore ceases to cease to be. Rather, it forms an endless series of moments without break. At this point, we can see the first form of infinity that Hegel wants to describe. Infinity is the series of finite moments transcending themselves without end. How do we therefore explain Hegel's comment that:

Thus the finite has vanished in the infinite and what *is*, is only the *infinite*. (SL 138)

As well as seeing infinity as a perpetual series of finite moments, we can also notice that the infinite is not simply present as the series of finite entities, but also as the being of this series itself. That is, stepping back, we can see that finite being ceases to be. But as ceasing to be is what defines finite

being, the whole of being can be taken as infinite being. Thus, it is not simply the concatenation of finite beings that is infinite, but finite being itself.

Now we have arrived at the notion of the infinite, we have to begin by asking what kind of state, thing or process the infinite is taken to be. The question of what the infinite is, however, returns us to the beginning of this lecture. To ask what kind of thing something is, we need to think it determinately. To think determinately, in turn, is to think in terms of an opposition – to think of something as this and not that. Thus Hegel writes that,

As thus in the form of simple being and at the same time as the *non-being* of an *other*, it has fallen back into the category of *something* as a determinate being in general – more precisely into the category of something with a limit... (SL 138)

So this notion is very close to the notion of infinity that we find in Aquinas' philosophy. There, the infinite was defined as the absence of limitation, and was defined in opposition to finitude. We can note here that the infinite is also that absence of limitation (Hegel writes on pg. 139 that '[i]n infinity we have the satisfaction that all determinateness, alteration, all limitation and with it the ought itself, are posited as vanished.' [SL 139]), and is defined in opposition to finitude. A key point at this moment of the dialectic emerges, however, the implications of which we will come back to next week. This notion of the infinite, which Deleuze rejects in order to open the way to a philosophy of univocity, is also rejected by Hegel. Thus, he writes that:

The infinite as thus posited over against the finite, in a relation wherein they are as qualitatively distinct others, is to be called *spurious infinite*, the infinite of the understanding, for which it has the value of the highest, the absolute Truth. (SL 139)

The reason for the problematic nature of the spurious infinite should be quite straightforward if we remember that central to the concept is that it is governed by the logic that Hegel has initially set out in relation to determinate being. Hegel sets out the contradiction as follows:

There are two worlds, one infinite and one finite, and in their relationship the infinite is only the limit of the finite and is thus only a determinate infinite, an infinite which is itself finite. (SL 139-140)

If we are to understand the infinite as truly infinite, we have to understand it as some 'beyond' to the finite world, separated from it in such a way that we can distinguish it from finitude. Obviously, it is difficult to thereby understand how we are to gain access to the infinite, but supposing that through what Hegel says 'appears as an external act' we do manage to gain access to it, what do we discover? Hegel argues that all we find is that

Owing to the inseparability of the infinite and the finite – or because this infinite remaining aloof on its own side is itself limited – there arises a limit; the infinite has vanished, and its other, the finite, has entered. (SL 141)

The heart of the difficulty is that the infinite is supposed to be that which is beyond limitation, but the basic structure of determining the infinite is by opposition, in other words by saying what the infinite is not. But by doing so, we introduce a limit into the notion of the infinite. Possessing a limit

is what defines finite somethings, however. For this reason, Hegel defines the spurious infinite as a 'progress to infinity.' (SL 142) We attempt to reach the infinite beyond, but in determining it, we limit it and make it finite. We thus have an infinite progression and alteration between finite and infinite terms.

True Infinity

If the traditional interpretation of the infinite offered by representation is problematic, then is there any way to think the infinite? The essential difficulty, according to Hegel, comes from two separate demands. On the one hand, the dialectic has shown that finitude and infinitude are intimately related. We cannot think one without simultaneously thinking the other. On the other hand, the logic of representation, or the understanding, for Hegel, assumes that to think something clearly, we also formulate an idea of it as distinct from other things. To begin with the first point, it is clear that the infinite cannot be thought without bringing in the notion of the finite. Hegel makes this point by noting that 'in *saying* what the infinite is, namely the negation of the *finite*, the latter is itself included in what is *said*.' (SL 143 – this point is even clearer in the German, where finite is *endlich*, and infinite is *unendlich*) Similarly, the finite is, according to Hegel, 'null', but such a notion for him relies on the infinite. The idea here is, I think, that the transience of the finite something can only be understood against the background of the all encompassing infinite. We cannot separate the two concepts as the understanding wants to do in the structure of opposition. Instead of understanding these two terms through opposition, Hegel will argue later in the *Science of Logic* that it is instead contradiction that is the appropriate term to govern the infinite. In his earlier *Jena Logic* he makes this explicit:

Genuine infinity ... is not a series that always has its completion in some other yet always has this other outside itself. Rather, the other is in the determinate itself; it is a contradiction. (JL, 35)

Normally, we would claim that it is impossible to think a contradiction, precisely because a contradiction involves asserting that the same object holds contrary properties (at the same time). For Hegel, this is the case within finite thinking, or representation, but not for a truly speculative understanding of the world. From a speculative perspective, we recognise that contradiction is the motor that puts concepts into motion. We will come back to this next week, but here, the difference between Deleuze and Hegel is apparent. Both recognise that opposition is a problematic concept. Deleuze instead tries to develop a concept of difference through the notion of intensity that remains at the level of the diverse, while Hegel pushes difference to the level of contradiction. So, to round off Hegel's account of the true infinite, to what is attributed the contrary properties of finitude and infinitude? Hegel's argument is that it is the circular 'return to self' of the concept itself:

The image of the progress to infinity is the *straight line*, at the two limits of which alone the infinite is, and always only is where the line – which is determinate being – is not, and which goes *out beyond* to this negation of its determinate being, that is, to the indeterminate; the image of true infinity, bent back into itself, becomes the *circle*, the line which has reached itself, which is closed and wholly present, without *beginning* and *end*. (SL 149)

The true infinite emerges when we step back from attempting to formulate the infinite through the progression, and recognise that the process of the circular movement of the finite into the infinite and back again is itself the infinite.

Conclusion

So I want to conclude by talking about some of the consequences of this account. First, it is clearly a break with the form of Aristotelian thinking which Deleuze is also opposed to. There is also a striking similarity with Deleuze's formulation of the relation between the finite and the infinite. Just as these two terms coexist for Deleuze, so do they for Hegel, and in many ways, Hegel's own philosophy is very close to a reading of Spinoza one might give. The key difference, however, is that Hegel's account maintains the basic structure of species and individuals. Just as the relation of the infinite to the finite emerges from a logic of opposition mirroring that of Aquinas, so Hegel will take up the logic of species and genera. Thus, in the *Encyclopaedia Logic*, he writes, for instance:

The universal is the ground and foundation, the root and substance of the individual. If e.g. we take Caius, Titus, Sempronius, and the other inhabitants of a town or country, the fact that all of them are men is not merely something which they have in common, but their universal or kind, without which these individuals would not be at all. The case is very different with that superficial generality falsely so called, which really means only what attaches, or is common, to all the individuals . . . The individual man is what he is in particular, only in so far as he is before all things a man as man and in general. And that generality is not merely external to, or something in addition to, other abstract qualities, or to mere features discovered by reflection. It is what permeates and includes in it everything particular. (*EL*, § 175, Add.)

Next week, I want to discuss the implications of this difference between Hegel and Deleuze, and to look more closely at Deleuze's criticisms of Hegel.