the review of metaphysics

a philosophical quarterly

The Actual Infinite as a Day or the Games Author(s): Pascal Massie Source: *The Review of Metaphysics*, Vol. 60, No. 3 (Mar., 2007), pp. 573-596 Published by: <u>Philosophy Education Society Inc.</u> Stable URL: <u>http://www.jstor.org/stable/20130818</u> Accessed: 11/12/2013 22:05

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at http://www.jstor.org/page/info/about/policies/terms.jsp

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Philosophy Education Society Inc. is collaborating with JSTOR to digitize, preserve and extend access to *The Review of Metaphysics*.

http://www.jstor.org

THE ACTUAL INFINITE AS A DAY OR THE GAMES

PASCAL MASSIE

T HE TRANSITION FROM ANCIENT TO MEDIEVAL philosophical theology is not a simple matter of substituting monotheism for pantheism, of replacing a divine that admits of multiple manifestations with a God who is one person (who is some*one*). Rather, it entails a deeper transformation of the concept of being. For the medievals, the claim, "God is," entails that being applies to God in a distinctive and exclusive sense. When characterizing this mutation, historians frequently stress that the Greeks could only conceive being as what maintains itself within its own limits. The ancient concept of "infinity" ($\mathring{\alpha}\pi\epsilon\iotaqov$) would thus have designated a purely negative term. The infinite cannot truly be something; at best, infinity is a mere potency. For many historians, it is this limited conception that will eventually be overcome with the later emergence of a truly positive concept of infinity in the form of *ens infinitum*.

No doubt Aristotle uses $\check{\alpha}\pi\epsilon\iota\varrhoov$ to qualify—among other things—the indetermination of matter (a quasi-nothing that can become almost anything) or the incompleteness of mathematical series. These senses, which betray a lack of determination, seem utterly incompatible with the subsequent medieval and Christian proclamation of *ens infinitum* as perfection. Yet Aristotle's thought also admits a concept of actual infinity. Indeed, the significance of the transformation from ancient to medieval thought remains veiled as long as it is understood simply as a matter of changing the "value" attributed to the idea of infinity from a negative to a positive pole.

For Aristotle, $\alpha \pi \epsilon_{100}$ in the particular sense of infinity by addition is not that outside of which there is nothing, but on the contrary that "outside of which there is always something."¹ By contrast to any

Correspondence to: Miami University, Department of Philosophy, Hall Auditorium Room 212, Oxford, OH 45056-3644.

¹ Aristotle, *Physics* 3.6.206b23, in *Loeb Classical Library* (Cambridge: Harvard University Press, 1996). Unless otherwise mentioned, all translations are mine.

The Review of Metaphysics 60 (December 2006): 573–596. Copyright @ 2006 by The Review of Metaphysics

definite magnitude, such an infinite fails to ever reach completion. When, however, in the medieval context, God is said to be infinite being, "infinity" does not designate a failure nor a lack of determination; rather it names a perfection that excludes nothingness. The apparent difference between the Greek and the Christian conceptions could not be stronger. Aquinas, for instance, can explain that the true name of God is "being" because this name does not signify anything determinate (non significat formam aliquam). But for Aquinas, "not to be a determinate form" (that is, not to be the form of this or that entity) is equivalent to being an infinite form or perfection. The negation of all determinations and limitations is tantamount to the affirmation of "unlimited form," a phrase Aristotle would have found unintelligible. In Aquinas's view, God is appropriately called being because the concept of being does not entail any particular form. God can be understood both as "form" and as "unlimited being" if the esse signifies the perfection of being itself, for, in such a case, the plenitude of pure activity grants being a positive infinity. "His infinity applies to the sum of his perfections."² If divine infinity indicates a sum, that sum cannot signify a final number but is rather the number that ends all calculation.³ The idea of omnipotence (a power that extends to everything that does not include a contradiction) led medieval thinkers to the discovery of a new concept of infinity. Like omnipotence and omniscience, infinity belongs to the essence of God, because the plenitude of activity (that is, the supreme sense of being) does not admit limits. Such an infinity is not beneath any determination; rather, it is beyond it.

By contrast, it is often stressed that the mathematical sense of infinity in Aristotle or his inquiry about matter can only lead to the concept of a merely potential infinity. Greek infinity would then be a potentiality that excludes the possibility of actuality.⁴ The traditional interpretation finds here a proof that Aristotle rejected the hypothesis of an infinity in act and admitted only a potential infinite.

Three major difficulties remain to challenge this interpretation, however. First, would this interpretation entail that $\check{\alpha}\pi\epsilon\iota \rho ov$ is a potentiality for which there can be no corresponding actuality whatsoever? We would then have to assume an exception to the principle

² Aquinas, *Compendium theologiae* 1, ch. 20 (St. Louis, MO: Herder, 1947).

³I have to thank Lauryn Mayer for suggesting this remark.

"potentia dicitur ad actum" since, in this case, there would be a potency that cannot be said in relation to any act.⁵ Second, even given this assumption, how could Aristotle have "rejected" the concept of actual infinity (as he allegedly did) without being at least able to envision it? So much for the idea that the Greek philosopher was "unable" to conceive an actual infinity. Third, the problem is further amplified by the fact that we do find in Aristotle's corpus (particularly *De caelo*) various explicit statements supporting the claim that infinity can be actuated. The two particular cases of matter and numerical series are far from exhausting Aristotle's views about infinity.

But what is at stake with this question? All this, it seems, is mere history. Indeed, the problem of the sense of $a\pi \epsilon_{100}$ is historical; yet, the risk of all historical inquiry is to fall back into historiography. To understand what is at stake in this query, we must reflect on the fact that the standard interpretation, despite its varied formulations,

Emmanuel Martineau is one of the very few commentators who has attempted to demonstrate the presence of an actual infinite in Aristotle. See "Aiôn chez Aristote, *De cœlo* I, 9: Théologie cosmique ou cosmo-théologie?" *Revue de métaphysique et de morale* 84 (1979): 37–40. Drozek (despite the above quote and his attribution to Aristotle of an "horror infiniti") seems to acknowledge a temporal and divine sense of infinity.

⁵ This does not mean that we should subscribe to the "plenitude principle" (all that is possible must be actualized at some point of time) that some commentators have attempted to attach to Aristotle. It is clear that a true potentiality must retain the power of not being, alongside the power of being. The problem, however, is that in that case, a potency would be said in relation to what cannot be; it would be said in relation to the impossible.

⁴ It is impossible to give an exhaustive list to demonstrate that this view constitutes the standard understanding of the issue. May the following survey suffice. A. W. Moore, *The Infinite*, 2^d ed. (London: Routledge, 2001), 40: "It transpires then that the idea of the actual infinite . . . was close to a contradiction in terms for Aristotle"; Heinz Heimsoeth, The Six Great Themes of Western Metaphysics and the End of the Middle Ages, trans. Ramon Betanzos (Detroit: Wayne State University Press, 1994), 85: "It is impossible for the apeiron or the boundless to exist. In Aristotle's view, actual, existing, completed infinity, as it were, was nonsense and essentially self-contradictory. . . . One can rightly call infinite the bare indeterminate possibility of existing": Adam Drozek, "Aristotle's Razor," Diálogos 70 (1997): 183: "This state [infinity] cannot, however, be actualized: infinity by increase does not exist in any sense; infinity by division exists only potentially with no prospect of becoming real"; John King-Farlow, "The Actual Infinite in Aristotle," The Thomist 52 (1988): 430: "Aristotle strives . . . to uphold and reinforce his somewhat vulnerable conviction that nothing may be both actual and infinite"; Léon Robin, Aristote, (Paris: Presses Universitaires de France, 1944), 144: "Infinity is in potency and it is only this. This is not however the potency of something that, one day, will ever exist 'in act'."

implicitly admits that it is impossible to hold two concepts of infinity. It assumes that infinity (just like eternity) necessarily entails steadiness and immutability. With this assumption, the so-called "negative" sense of infinity in Aristotle has been decided in advance. To challenge these presuppositions is to contest the idea according to which the contrast between the Greek and the Christian concepts of infinity is a matter of pagan thought's inability to conceive of a positive infinity (*pace* Gilson) or its limitation to the "bad infinite" that is the indefinite (*pace* Hegel).

Ι

The Actual Infinite. Aristotle writes, "With respect to magnitude, it has been shown that the infinite is not in act, it is only by division."⁶ If we stop reading here, it would seem that the case is once for all settled: Aristotle seems to be saying that infinity is not, unless it is in potency. Yet, we need to notice that in *Physics* 3.6 Aristotle is inquiring about a particular kind of infinity, namely, that which results from the act of "removing from" or "adding to" a given magnitude. In these instances, the infinite is not "unless it is in potency." From this, it seems, many critics have been tempted to write in an ending: since potency is opposed to actuality, it follows that if infinity is in potency, it cannot be in act.

There is, however, a problem with this reasoning. Not only did Aristotle never say such a thing; but what follows in the very same sentence casts a totally different light on the first clause: "The infinite is not in act; it is only by division, or it is in act *as we say that the day and the games are in act*, and it is in potency, just like matter."⁷ How can this be? Does this mean that the infinite is only in potency but somehow also in act? This seems to be a patent contradiction, unless we recall that: "we do not talk of ἐνέργεια as the same in all cases [oὐ πάντα ομοίως], but only by analogy, that is, as A is 'in' B (or related to B), so is C in D (or related to D); for in some cases ἐνέργεια is for potency what motion is for the power of moving [ὡς χίνησις πρὸς δύναμις]; in others, as substance is to this matter."⁸ It is not therefore

576

⁶*Phys.* 3.6.206b12.

⁷Phys. 3.6.216b12–15.

that the infinite *cannot* be said to be in act, but that it is not said so in the *same* sense of act as when we contrast, for instance, a block of marble and a statue (that is, matter and substance) or a motion.

Infinity and void and other such things are said to be in potency or in act in a *different way* [ἄλλως] than for many other beings such as: "seeing," "walking," or "visible." The latter, at some point of time, can be said in plain truth [ἁπλῶς ἀληθεύεσταί ποτε] to be in potency and in act, for "visible" is sometimes said of what is seen, and sometimes of what is *capable* [δυνατόν] of being seen. The infinite however is not in potency in such a way that it will later have a separate [χωϱιστόν] actuality, but it is potential inasmuch as it is known. To this never-ending process of division we grant being in actuality and potentiality, but <we do> not <grant> separate existence.⁹

In order to account for this text the following points need to be considered:

First, the plain truth about things like the "visible" is that we can separate actuality and potentiality in our ways of speaking, because such phenomena are indeed different modes of being. It is one thing to say about the tree in the garden that it is visible when it is actually seen, another to say that it is visible when it is not actually seen but remains capable of being seen (when the tree is in utter darkness, for instance).

Second, there is a time when $[\pi o \tau \epsilon]$ "visible" means "what is seen," and a time when it means "what is capable of being seen." The difference in these instances is, literally, a matter of time, or more precisely, a difference of two times (now the tree is actually seen, now it its not). Without temporal difference (or beyond it), actuality and potentiality would have to be thought in totally different terms.

Third, Aristotle explicitly recalls that we are investigating here the particular problem of division; that is, we are only concerned with the category of quantity. In this case, we encounter an infinity that is only inasmuch as it is known. One must be actually counting, in order for the count to reveal infinity. What Aristotle does not say, however, (and what we have no reason to assume) is that this is the *only* sense of $\ddot{\alpha}\pi\epsilon\iota\rho\sigma\nu$. But there is a more important reason that should prevent us from assuming that this is what Aristotle nevertheless meant. We

⁸ Aristotle, *Metaphysics* 9.6.1048b6–10, in *Loeb Classical Library* (Cambridge: Harvard University Press, 1989).

⁹*Meta*. 9.6.1048b10–17.

are talking about two distinct senses of actuality (namely, with respect to the infinite, and with respect to the finite).

Fourth, when we engage in counting, the neverending process of division means that there is always something that remains to be counted.¹⁰ The paradox Aristotle is pointing out is that when engaging in division or addition, we do not simply get a reduction or an increase: rather, we are always left with some excess. When dividing a finite quantity (for example, a foot-long line), we are actually losing sight of its unity; for there is always a potential remainder, always something that could be further divided, always some further number. Although the operation itself could go on forever, for us, the act of counting must eventually come to a stop.

Thus, there is a sense in which the same quantity can be said to be finite and infinite. In the second case, however, this does not mean that infinity exists in act as a separate substance. Rather, it must meet two conditions: (a) it is essentially related to an act of knowing; and (b) it has the sense of what cannot be completed (for infinity is what is always in excess of the actual knowledge we have of it). We eventually have to stop dividing the line; yet, we also see that the division itself could go on. As soon as we ask about the measure of the knowable as a whole, we are led to consider the limit of such a whole. Thus, the question of what stands beyond it comes to the fore.

The infinity of division is not to be confused with the infinity of matter: "[F]or what is potentially a statue may turn out to be actually a statue, but this is not so for what is potentially infinite."¹¹ Out of a stone, a statue can emerge as a definite and actual individual substance—once the marble has been carved, a statue has found its place among the things in the world. No such thing ever happens out of infinite divisibility. Yet, the question remains whether infinity is simply unrelated to $\ell \nu \epsilon \rho \epsilon \mu \alpha$. In fact, the main challenge to the traditional interpretation is given by Aristotle himself a few lines later:

But being is said in many ways, and the infinite is so just as the day or the game is; they are always coming into being successively [$d\epsilon i d\lambda \lambda o \kappa \alpha i d\lambda \lambda o$], and in these instances there is being *in potency and in act.*¹²

 $^{^{10}}$ The verb used by Aristotle (ὑπολείπω) means: "to stay behind," "to be left behind," to "leave remaining."

¹¹*Phys.* 3.6.206a18.

¹²*Phys.* 3.6.206a21–5.

This refutes the idea that the infinite admits *only* of potency. Rather, with the infinite, the very distinction between act and potency takes on a different signification; the always of infinity contains both potentiality and actuality. The task here is to take in view what Aristotle enunciates analogically. A day is a temporal dimension that embraces all that occurs within its limits. It constitutes the temporal surroundings of what goes on. At any moment, the day has already started and yet, it still remains ahead of us. Similarly, the $d\gamma \omega v$ (the season of the Olympic gatherings) goes on for days and days. Yet, this going on has nothing to do with a succession of identical moments or a numerical series; the games always bring something new; as long as they go on, the outcome remains undecided. The day and the games are in potency inasmuch as they do not form a completed whole, but they are also in act in as much as they are ongoing processes. Of these phenomena we must say that as long as they are *actual*, they are precisely not concluded. The day that embraces the now of our existence and the season of the games always contain some unfinished business.

What Aristotle rejects here is not at all the concept of actual infinity simpliciter, but the idea that infinity could be actual in the sense of something simultaneously given as a whole: that is, that infinity could be something complete, achieved and separate.¹³ The so-called Aristotelian rejection of actual infinity in Book 3 of the *Physics* concerns, in fact, the impossibility of an actually infinite body (a body that would infinitely add something to itself). This, argues Aristotle, is never the way a body is. But it does not follow that infinity can only be in potency and never in act. Furthermore, actual infinity calls for a reference to knowledge (something that is not needed for a body). It is so because the conviction that there is infinity arises from five sources: (a) time ("for it *is* infinite"), (b) the division of magnitude, (c) "generation and destruction inasmuch as they do not come to an end," (d) the consideration of the limit that envelops each being. Finally, (e) "the greatest and most tremendous thing [χυριώτατον] which raises an aporia that affects us all is this: numbers and mathematical magnitudes and also what is outside $[\xi \omega]$ the heavens appear to be infinite, because in thought [έν τῆ νοήσει] they never come to an end."¹⁴

¹³ See Antoine Côté, "L'infini chez Aristote," *Revue philosophique de Louvain* 88 (1990): 490–1 in particular.

¹⁴*Phys.* 3.4.203b24–26.

This greatest *aporia* is thus made manifest by the numerical order and what stands beyond the cosmos (although, as we will see, in quite different respects). In these instances, infinity concerns thinking in an essential way, but it does so with respect to what thought cannot grasp as a whole. To borrow an expression from Kant, we could say that the infinite is what "escapes its representation in a concept."¹⁵ Yet, not being any actual thing is not "not-being" *simpliciter*. Infinity does not have the actuality we grant to a human being, a statue or a temple because there is no such thing as an infinitely large body. In these cases, it is indeed justified to say that there is no infinity in act. Yet, there is a further dimension concerning time and becoming that needs to be investigated. In the mathematical series and "what is outside the heavens," there is an infinity of what always comes into being successively, a process that does not stop. In all cases, infinity appears against the background of an inquiry concerning the idea of an ultimate limit that would once and for all close any further regress.

Π

Infinity, Thought and Matter. But first of all, how do we encounter infinity? It seems that with respect to infinity, there is no privileged point of reference. The issue arises when we take into sight what is beyond the heavens, as well as when we consider the lowest degree of being, that is, matter. Infinity occurs at the lowest and the highest levels of being: the almost nothing of matter and the pure actuality of God. In each case, infinity arises at the limit of what we can conceive. The confrontation with infinity is a confrontation with a paradox. Infinity presents itself as what never comes to an end, it is potential inasmuch as it is known but, at the same time, it is unknowable inasmuch as it is infinite.

To claim that infinity is related to knowledge is not equivalent to stating that it exists only in our mind, as the standard interpretation suggests. Certainly, infinity is what our mind cannot fully comprehend, what essentially remains out of reach; but to appeal to thinking

¹⁵ The question of the sublime in Kant's third *Critique* is in this sense fundamentally related to infinity.

and knowing in this case is not simply a matter of saying that infinity is a conceptual construction; thinking, on the contrary, indicates the proper place of its encounter. The experience of infinity is a thoughtexperiment of a particular nature. Before the infinite, the intellect becomes restless; as such, infinity puts us out of our minds; it is a demented [*de-mens*] thought, an idea of the mind which, at the same time, is out of the mind. This is why the consideration of knowledge is necessary in order to account for it: since it is infinite, says Aristotle, "it is unknowable [$\check{\alpha}\gamma\nu\omega\sigma\tau\sigma\nu$]."¹⁶

To understand this, we need to turn our attention to the case of matter. Infinity already appears when we consider the material character of those beings which, by virtue of their corporeity, are closest to nonbeing. Matter itself does not possess an independent substantial being. Indeed, we never encounter matter *per se*. It is in confrontation with Plato that Aristotle gives us an important indication:

"The infinite" is unknowable *qua* infinite because matter has no form $[\epsilon \tilde{l} \delta \sigma \varsigma.]$ Thus, it is manifest that the infinite is rather in the definition $[\lambda \delta \gamma \omega]$ of the part, than in the definition of a whole, for matter is a part of the whole: just as bronze is "said" of a bronze statue. Further, if it were to embrace perceivable things $[\tau \delta \tilde{\varsigma} \alpha l \sigma \theta \eta \tau \delta \tilde{\varsigma}]$ and intelligible things, the great and the small should also embrace the intelligibles $[\tau \dot{\alpha} \nu \eta \tau \dot{\alpha}]$ But it is absurd and impossible for the unknowable and the indefinite $[\dot{\alpha} \delta \rho \eta \tau \sigma v]$ to embrace or to limit $[\pi \epsilon \rho \iota \dot{\varsigma} \epsilon v \alpha \dot{\alpha} \rho \eta \zeta \epsilon v]^{17}$

(a) The first two propositions are articulated in terms of a causal relation: It is *because* $(\gamma \dot{\alpha} \varrho)$ matter lacks form that its infinity is unknowable. There is infinity in matter, because matter as such entails the absence of form. Matter itself is unformed, shapeless. We know matter only by referring it to what it is not—we never encounter bronze *simpliciter* but always the bronze of something. The matter of a statue is not a statue. Matter as such lacks form. It is neither this nor that (and for this reason, it can become either this or that).

(b) This peculiar character of matter allows us to better understand the connection between infinity and knowledge. Knowing matter only by appealing to that of which it is said, we understand matter as that which we cannot know. Aristotle's insistence on the noetic dimension does not mean that the infinite is merely mental (thereby surreptitiously interpreting potentiality as ideal, conceptual, or fictional,

¹⁶*Phys.* 3.6.207a26.

¹⁷*Phys.* 3.6.207a27–33.

and actuality as real, that is, for example, extramental). To its being corresponds a fundamental ignorance. This ignorance, however, is not nothing; rather it is a known ignorance. Inasmuch as we *know* our ignorance, we have already encountered the limit of knowledge. Yet, to posit a limit (even when it is taken to be the "ultimate" one) is to raise the immediate question of what stands beyond it.

(c) The reference to Plato is not a mere illustration of the same argument. Plato and the Pythagoreans understood infinity in terms of the duality of the great and the small (the principles of matter), while the one was construed as the principle of substance. Although endless, matter is nevertheless given a limit when it receives the one which is the principle of all forms (indeed, the one is principle qua form). Wherever something constitutes a whole, it is *ipso facto* one thing. But if the one-the principle of substance-is itself something of the order of the great and the small (that is, if the one is itself understood as a magnitude) then we encounter a fundamental contradiction; for in that case, infinity would have to be granted to what gives unity. If the infinite could encompass the intelligibles themselves, then the forms would be infinite, and the one would be many. The unknown and the indeterminate would somehow have to measure the proper limit of knowledge. All this, however, is "impossible and absurd." Matter as such cannot be finite, and form cannot be infinite. Thus, matter must always remain in the definition of the part (it is said of something else). By essence, matter has no form (by essence, matter has no essence), whereas whatever constitutes a whole is such that it necessarily is one, but this can be so only through the mediation of a form. The *one* is a metaphysical principle and never simply a question of magnitude.

The case of matter demonstrates one of the two senses in which potency is said in relation to actuality. *Metaphysics* Θ , 6 clearly shows that matter is said to be in potency in relation to a hylomorphic substance. Even though bronze can be turned into a determinate thing (a particular statue, an ornamental plate, a medal), this power reveals that bronze itself remains indeterminate; it is then never *qua* matter that bronze becomes such or such substance. For this reason, the infinite that characterizes matter is properly called indefinite (dóglotov). Form brings about what matter is incapable of accomplishing on its own, namely, to embrace ($\pi\epsilon \varrho i \xi \kappa \iota v$), to limit ($o \varrho i \xi \epsilon \iota v$), to grant a separate existence ($\chi \omega \varrho i \xi \epsilon \iota v$). Matter receives a form which remains other than the matter in which the form is embodied. It suffers the unity of a form that it itself never becomes.

III

Infinity, Time and Eternity. And yet, the incompleteness of mathematical series or the indetermination of matter do not exhaust the instances of infinity. With respect to time, measure, generation and "what is beyond the heavens," infinity is not said to be actual in relation to a substantial body, but in relation to movement:

Since being is said in many ways, the infinite is actual in the sense in which we say that a day is, or that the games are actually occurring; that is, they are always coming on and on into being for these are both in potency and in act. Thus, the Olympic games are potentially occurring and are ongoing.¹⁸

The remarkable feature of these claims is that they do not present potentiality and actuality as two distinct moments. Rather, Aristotle speaks of being "in-potency-and-in-act." Actuality is to potentiality what motion is to the power of moving. But motion (the actuality of potentiality *qua* potentiality) is not dependent on a substance any more. In these cases, infinity is not identical with the indefinite ($\dot{\alpha}$ óq α tov) of matter. Rather, it is properly $\ddot{\alpha}\pi$ eiqov and entails a conjunction of actuality and potentiality. Infinity is both a potency that admits of a progression and an actuality that is always coming into being. Its potency admits of a progression, and its movement is its actuality. Yet (just like the day or the games), it is never achieved and never reaches completion, for what is in eternal motion is never present "as a whole" at any moment.¹⁹

Since it is an analogy however, the image of the day and the games also maintains a difference. There will be a time when today or the games will be over, a time when they will be no more and become things of the past. Could such a time come for infinity? Obviously not: if being one means "being a whole," then infinity is excluded from this kind of actualization. Clearly, if we mean by actuality the

¹⁸*Phys.* 3.6.206a20–5.

¹⁹ As Leo Sweeney puts it: "We can say of it 'it is being actualized' but never 'it has been actualized'." *Divine Infinity in Greek and Medieval Thought* (New York: Peter Lang, 1992), 150.

separate and subsistent existence of a thing, then infinity is nothing actual. Yet, for this reason, the conclusion is not that infinity cannot be actual, but rather that this sense of actuality is not the proper way of understanding $\dot{\epsilon}v\dot{\epsilon}q\gamma\epsilon\alpha$ in this context. An eternity that could somehow be given *totum simul* is a square circle. This doesn't mean that infinity is not, nor that it cannot be said to be in actuality, but rather simply that infinity cannot be actual in the sense of "all at once." At the same time, however, we have discovered that infinity has a necessity of its own. "Time *is* infinite."²⁰ Infinity, understood temporally, is eternity. In this context, time is not understood as a linear succession of punctual nows, an empty form indifferent to its content, but in the sense of the seasons' bringing forth.²¹

We now need to turn our attention to the specific sense of infinity that Aristotle attributes to God. The key text is to be found in *De caelo* 1.9. Enquiring into the question of being as a whole, Aristotle encounters the properly philosophical question of God. To consider being as a whole is to consider all that exists in relation to the *aporia* of its outer limit. As such, the question puts to the test the very concept of limit; it arises from the pondering of two questions: where and when? These two basic questions provide us with the starting point of the *aporia*:

(a) *Where* is the world, the totality of what is, as a whole? Is it somewhere, that is, is it in some place? But how could this be, since a place is by definition always surrounded by some further space? Should we rather say then that it is nowhere? But in that case, how could the world be if it is, literally, nowhere to be found?

(b) *When* is the world a whole? Should the world be limited to what exists now? In such a case, it would never form a whole, since it would be cut off from its past and its future. If the world does not extend to all that was, as well as to all that will be, it would always remain incomplete. Thus, the world as a whole cannot either occur in any temporal moment. Could this mean then that the world is in eternity? If it were so, however, how could there be time?

²⁰Phys. 3.4.203b17.

²¹ This sense of temporality is closer to the "archaic" understanding, as for instance with Heraclitus. In Eugen Fink's words, "Hours and time are not to be taken as the empty form in contrast to the content of time, but as filled time which begets and produces each thing in its own time." Martin Heidegger and Eugen Fink, *Heraclitus Seminar*, trans. Charles Seibert (Evanston: Northwestern University Press, 1993), 37.

The question of being as a whole is, for Aristotle, a matter of philosophical theology, for the question of the divine is raised in relation to nature in general and the heavens in particular. Despite the cycles of generations and destructions that carry the world away, something remains: forms strive to make themselves manifest as the whole realm of $\phi \dot{\upsilon} \sigma \varsigma$ bears witness. It is always the case that, as Aristotle puts it, man begets man. The form "human" is what remains, what survives the births and deaths of particular individuals and entire genera-It is always the same essence that occurs throughout the tions. in(de)finite variety of human beings. The divine is related to being-asa-whole as to its surroundings; it designates the highest sense of being qua pure presence. The divine remains what it is in spite of all that changes; it is the unaltered, the unmoved, that motion itself presupposes. Eternity is therefore the fundamental determination of the divine, for only that which is eternally present can constitute a ground for all that continually enters into and departs from presence. The constancy of the cycles of generations and destructions in all that is alive, the constancy of the heavenly spheres in their circular and perfect motion, the constancy of the cosmos itself call for a divinity that bestows an immutable landmark toward which all that is becoming orients itself.

The metaphysical question of being entails the consideration of cosmology: to ask about being is to enquire about the world, or more precisely, about its limits. We must not decide in advance whether there is here a logical error similar to the paradox of the ensemble that contains all the ensembles, a paradox that contemporary set theory would have resolved once for all. What matters is to acknowledge that a paradox necessarily appears as soon as we speak of "being-as-a whole," of the world as one or of an ultimate limit. And yet, these worries are unavoidable. We cannot acknowledge the existence of various regions of beings without assuming a whole that embraces all these different regions. Everything occurs as if only an ultimate whole could grant beings the space that allows them to be what they are in their specific realms.

Aristotle's word for the wholeness of what is in its cosmological sense is "o $\vartheta \alpha v \delta \varsigma$," a term commonly translated into English as the "heavens." Its Latin rendering, however, still preserves a fundamental ambiguity that has disappeared in our translation: "*caelum*" signifies both the "sky" and "the heavens" (not unlike *der Himmel* in German),

thus pointing both to the things that are out there $[\tau \dot{\alpha} \varkappa \tilde{\epsilon}]^{22}$ and to what is yonder [$i\pi\epsilon \rho$]. The heavens show the limit of what we can see of the universe (the extreme boundary of the visible), thus immediately opening the question of what lurks beyond it. Specifically, Aristotle distinguishes three senses of "O $\dot{\upsilon} \rho \alpha \nu \dot{\sigma} \zeta$ " (a) the sphere of the fixed, (b) the planetary spheres, and (c) "the whole and 'everything together' [τὸ ὅλον καὶ τὸ πᾶν]."23 De caelo bears not only on the heavens in contradistinction to the sublunar world, but also on the relation of cosmos and heavens to the whole. Asking about the heavens, we are thus considering being-as-a-whole. "The heavens and the world [oὐρανός, κόσμος]: this is the synthesis of the whole."²⁴ Such a whole is not only the sum total of what is here in the world ($\tau \dot{o} \pi \tilde{\alpha} v$) plus whatever is there in the heavens; it also envelops this sum ($\tau \dot{o} \delta \lambda o \nu$). In this context, the whole does not designate an abstract concept of totality; rather, it is understood on the basis of a gradual ascension of various surroundings.

This is why the things out there $[\tau\dot{\alpha}\varkappa\epsilon\tilde{\imath}]$ (that is, outside the heavens) are not in a place, nor does time make them grow old, there is no change $[\mu\epsilon\tau\alpha\betao\lambda\dot{\eta}]$ for what is beyond $[\dot{\upsilon}\pi\dot{\epsilon}\varrho]$ the most extreme rotation; but immutable, impassible, enjoying the best and most independent life, they measure through and through the whole eternity $[\tau\dot{\circ}\nu\,\ddot{\alpha}\pi\alpha\nu\tau\alpha\,$ $\alpha\dot{\iota}\tilde{\omega}\nu\alpha].^{25}$

Aristotle's treatment of the divine in *De caelo* is often expounded as a paradigm of cosmic or physical theology. In order for $o\dot{v}\varrho\alpha\nu\dot{o}\varsigma$ and cosmos to designate different regions of beings, both must be thought of in relation to (or embraced by) a further whole that encompasses them. Without it, there could be neither regions of beings, nor cosmos, nor heavens. The ultimate surrounding, then, is itself beyond the most extreme translation of the heavens, and this is the realm of the divine par excellence.

The fundamental point in this text is that the deity is understood in terms of $\alpha i \tilde{\omega} \nu$ which is to say, in relation to time. Does this mean that God is "in" eternity, in the sense in which we say that a content is

 $^{^{22}}$ Notice that "từ trở loes not mean what is "up there" or "above us," but says more simply (and more ambiguously) what is "out there," the "distant," by contrast with what is simply "here," present at hand.

²³ Aristotle, *De caelo* 1.9.278b20, in *Loeb Classical Library* (Cambridge: Harvard University Press, 1971).

²⁴ De cael. 1.10.280a21.

 $^{^{25}}De \ cael. \ 1.9.279 \ a18-22.$

in a container? Certainly not, for Aristotle says of divine life that it "runs through eternity as a whole [diatelei tov anavta alwa]."²⁶ Eternity is not a limit within which the heavens stands. Rather, that which is "out there" runs through eternity as a whole. It is true that the word "αἰῶν" also has the common (and somewhat archaic) sense of the "course of a life" (Aristotle himself recalls this use at 279a24). But this sense is mentioned in order to contrast it with what Aristotle is now attempting to consider. The limit $[\tau \epsilon \lambda o \varsigma]$ of the heavens is analogous to the limit of a particular life. The relation is analogical: the eternal αἰῶν is to God what "αἰῶν" in the mundane sense of "course of life" is to a human life. An analogy is not an identity, however, for in the first case, "the limit of the heavens as a whole, the limit that embraces [περιέχον] all time and infinity is αἰῶν; it takes its name from eternal being $[\alpha i\epsilon i]$ immortal and divine."²⁷ "Limit" here has nothing to do with some termination. The heavens are themselves embraced by this limit, and because of this, they are stirred by a teleological movement allowing them, in turn, to envelop the world.

If the first principle is not infinite in the sense of a separate infinity, it is nevertheless eternal and ceaseless. In other words, it is with respect to time that the question of the so-called positive infinite or infinite in act arises. Eternity is not infinite in the way that a line can be indefinitely prolonged by adding more and more extension to it. With respect to quantitative measure, $\ddot{\alpha}\pi\epsilon\iota\rho\sigma\nu$ has only potential being. This is why even though any sensible body appears to be infinitely divisible, there is no actual infinite body. Alwv, however, calls for a different concept of infinity. Eternity does not signify the everlasting motion (*sempiternitas*) of the divine bodies (that is, the heavens); but the eternity (aeternitas) that belongs to God itself-the soul of this body. In this second sense, eternity holds divine life together and designates the temporal horizon of God. But in that case, eternity is not equivalent to immutability, for it is said to be "ceaseless," and αἰῶν cannot be understood as expressing a static order of being.²⁸ To claim that the first principle is unmoved is not to say that the first principle

²⁶De cael. 1.9.279a22.

²⁷ De cael. 1.9.279a26–7.

²⁸When Aquinas comments on this, he feels obliged to expound the concept of " α lõv" with the further determination, "*totum simul*." See Aquinas, *In Aristotelis libros de caelo*, §215 (Marietti: Taurini, 1952): "Aeternum est spatium totius temporis . . . totum simul existens."

is something that is fixed, but to say that it is not moved by something else.

In a sober statement, Aristotle declares what many commentators have attempted to deny he ever said²⁹: "It is necessary that unceasing mobility belong to the God [$\dot{\alpha}\nu\dot{\alpha}\gamma\varkappa\eta$ t $\tilde{\omega}$ $\theta\epsilon\tilde{\omega}$ $\varkappai\nu\eta\sigma\nu$ $\dot{\alpha}i\delta\iota\sigma\nu$ mic anymore but "beyond [$\dot{\upsilon}\pi\dot{\epsilon}\varrho$] the outermost motion." What occurs here is, according to Martineau, "nothing less than the creation of a metaphysical God-αίῶν."³¹ The conclusion Martineau does not draw, however, is that while onto heology demands a constant and absolute presence as its ultimate foundation, it does not follow that the so-called "metaphysics of presence" excludes mobility. Aristotle is not speaking of the circular movement of the heavens, nor of the ether, nor of the celestial divine body; he is pointing to " $\delta \theta \epsilon \delta \varsigma$ " and grants God itself with unceasing mobility, while the circular movement of the heavens is, in turn, understood as a consequence of this divine movement. The transcendence of what is "out there" (beyond the most external translation) is an unceasing mobility which belongs properly to God. If, indeed, the heavens are a divine body, we are now enquiring beyond the heavenly sphere.

Each being that performs [ὦν έστιν ἔργον] exists for the sake of that which it performs; but the activity [ἐνέργεια] of God is immortality, that is, ceaseless life [ζωὴ ἀίδιος]. This is why it is necessary that ceaseless mobility belong to the God [ἀνάγκη τῷ θεῷ κίνησιν ἀίδιον ὑπάρχειν]. And as the heavens [οὐρανός] is such (for it is a divine body), it contains for this purpose a circular body, which, by nature, always moves itself in a circular motion.³²

 $^{^{29}}$ Among others, Leo Sweeney, Paul Moreau, Jean Pépin, Etienne Gilson, W.D. Ross. Despite the fact that this sentence is grammatically unambiguous, William Guthrie translates $\theta\epsilon\delta\varsigma$ at line 10 by "divine" and adds a note in which, referring to the authority of Simplicius, he remarks that "by $\theta\epsilon\delta\varsigma$ Aristotle means no more than $\theta\epsilon\tilde{\imath}ov\ \sigma\tilde{\omega}\mu\alpha$. . . the coincidence of the terms $\theta\epsilon\delta\varsigma$ here with $o\vartheta\varrho\alpha\nu\delta\varsigma$ is another indication that the unmoved mover was not yet a part of Aristotle's theology." See Aristotle, *On the Heavens*, (The Loeb Classical Library Harvard: Harvard University Press, 1971, reprint), p. 148–9, note a. Thereby, Guthrie contradicts the very sentence he translates as well as the explicit claim at 279a18–22 which shows that Aristotle does not at all confuse $o\vartheta\varrho\alpha\nu\delta\varsigma$ and $\theta\epsilon\delta\varsigma$.

 $^{^{30}}De \ cael. \ 2.3.286a10.$

³¹ Emmanuel Martineau, "Aiôn chez Aristote," 54.

³² De cael. 2.3.286a7-12.

Aristotle is considering beings from the standpoint of their performance. All ontological determinations take on here an active and temporal sense. We must, however, distinguish different senses: in one case, the activity must be thought in relation to an œrgon (a task that has to be brought to completion); in another, it is the always of sempiternal motion; in another again, it is the eternal activity of the God itself. This triple temporal order springs from a concern for the limits of time both in the sense of its end and its outer limit (both senses are conveyed by the word "τέλος.") More precisely, the activity of the God itself is distinguished in the following two ways:

(a) With respect to those beings that are active in view of some $\tilde{\epsilon}_{Q\gamma}ov$: plants, animals, and humans, inasmuch as they are striving to be what they are. Life in general strives to accomplish itself; it struggles to achieve its essence. The activity of these beings reveals what they are through the various ways they can be said to be "at work." The cycles of generation and destruction that bear upon their existence are such that they must strive in order to achieve what they are. It is a matter of striving, because individuals cannot remain in achievement *qua* individuals; for this reason, their essence (*qua* human beings, dogs, trees, and so forth) is preserved only in the species.

(b) With respect to the always that embraces the heavenly spheres, the continuous circular motion of the divine body. This second type of motion (the first heaven) reveals the bodily manifestation of the immaterial first mover. Yet, by contrast with these two types of activities, what sort of task would God have to accomplish? What kind of mobility can properly be attributed to God, since, by definition, it can neither be with respect to place nor with respect to alteration? Divine psychology is more properly discussed in Book 12 of the *Metaphysics*. Yet, in *De caelo*, this soul is already understood as unceasing mobility in a sense that is demanded by the two other kinds of motions and yet, is essentially distinct from them.

But if there is a distinction between the celestial spheres' unceasing motion and the mobility of God, does it not follow that God is in some sense transcendent? This view challenges the traditional understanding of Aristotle's cosmological theology. One might object that to talk of transcendence in this context cannot be justified for two reasons. First, Aristotle expresses God's being in terms of "tἀxεĩ," "περιέχειν," and "ὑπέρ," but these words are vague and ambiguous; they do not seem to tell us much about whatever stands "out there." Second, it does not necessarily follow that beyond the most external translation, there is only *one* being. It has been argued that Aristotle remains unclear on the unity or plurality of the God(s).³³

The answer to these objections sends us back to our initial observation. The abovementioned critiques rest, in fact, on the assumption of a Christian sense of God's transcendence. Clearly, if by "transcendence" we understand eternity and infinity in the sense of "totum simul," there is no doubt that this is not what Aristotle suggests. However, it does not follow that this is the only possible understanding of transcendence. Furthermore, if the words "tἀxeĩ," "ὑπέϱ," and "περιέχειν" are, indeed, ambiguous, it does not follow either that they are imprecise.

Let us consider these terms as Aristotle uses them at this juncture.

(a) Tảxết (a crasis for "tà ἐxết," "tà ἐxếtvωv") has no particular connotation of a lofty elevation standing above and beyond something else. The God is not "up there" looking down onto us. Rather, it stands yonder, in that distant place. God's place belongs to what is other than here; indeed no place could contain it, and in a sense God is nowhere. This, however, is not at all equivalent to saying that God is *away* from us, as the Christian *Deus absconditus*. Transcendence is not the mere negation of what is transcended; there is no there without a here. That which is "tảxết" is understood as other than and beyond the world, but only and always on the basis of the world.

(b) Περιέχειν (to surround, to envelop, to embrace). The God who dwells in the distance is not away or removed; it is, on the contrary, "against" the world,³⁴ in the sense of covering it, and outside of it. We should recall that "περιέχειν" appears, significantly, in the context of Aristotle's analysis of time ("It is necessary that all the things that are in time be embraced [περιέχεσται] by it").³⁵ All that is temporal is embraced by time. Whatever enters into being and departs from it is temporally wrapped in a more ample time that also embraces the

³³ For instance, Etienne Gilson: "If the Greeks were never quite sure how many gods there were, that was precisely because they *lacked* that clear idea of God which makes it impossible to admit more than one." *The Spirit of Medieval Philosophy*, trans. Alfred Downes, (Notre Dame: University of Notre Dame Press, 1991), 47 (emphasis added).

³⁴ "Against": another "ambiguous" term, from the English language this time, which might, in fact, be the most adequate term.

³⁵*Phys.* 4.12.221a28.

time of its prior and posterior nonbeing. The time properly allotted to each entity (the seventy years of Socrates' life, for instance—his temporal $\alpha i \tilde{\omega} \nu$) is itself enveloped by the time that precedes and the time that succeeds his existence. By analogy, what envelops all temporal entities must itself be embraced by something else. This is eternity.

However, a further objection to this interpretation needs to be mentioned. If eternity is compatible with some sense of motion, then, as with everything else that is in motion, there ought to be something anterior and something posterior. But if it is so, there ought to be time, since the definition of time depends, at least in part, on the difference of anteriority and posteriority within movement. How then could eternity be distinct from time?

The problem with this objection rests in what it presupposes. The difficulty we encounter with the idea of an eternal ceaseless mobility is that we are prone to identify eternity with a constant presence which, as such, can only disavow movement. This conception, however, does not agree with the Greek sense of $\alpha i \tilde{\omega} v$. The eternity that properly belongs to God must indeed be distinguished from the continuous run of the ethereal realm, but it does not follow from this that God ought to be immobile. Rather, as Aristotle states in various instances, God qua first principle is necessarily unmoved, that is, not moved by something else: God is not generated but generating. "There is something that always moves the things in motion, and the first mover is itself immovable."36 "Άκίηντον" does not mean that the prime mover "stands still," but that it is not put into motion by anything other than itself. This marks the difference between the temporal and the eternal sense of infinite movement. Temporal entities are moved in time, insofar as they come into being and are eventually destroyed. Aristotle himself makes it clear: the proper opposite of "eternal" is not "temporal" but "destructible $[\phi\theta\alpha\rho\tau\eta]$."³⁷ The eternal, then, is by definition what does not cease to be. Ceaseless being, however, does not entail stillness. God is not indestructible in the sense in which we can say that mathematical objects or Platonic forms are indestructible, and the science that is properly concerned with this kind of immovability is mathematics and not theology.³⁸ God's movement

³⁶*Meta*. 4.8.1012b33.

³⁷ Meta. 12.1.1069a32.

³⁸*Meta*. 6.1.1026a15.

is an ungenerated and unaltered movement toward itself, as the discussion of the noetic activity of the divine intellect in *Metaphysics* 12 demonstrates. As such, God's movement ceaselessly withdraws into itself.

By contrast, temporal beings belong neither to being nor to nonbeing but to the alternative of being and nonbeing as a whole. Time envelops temporal things, granting each one its own time, and the multiplicity of these times enveloping each entity is itself further enveloped:

Things that are destructible and generable and in general, things that at one time are and at another are not, all of these must be in time; for there is a 'vaster' time $[\pi\lambda\epsilon(\omega\nu)]$ that exceeds $[\dot{\upsilon}\pi\epsilon\varrho\dot{\epsilon}\xi\epsilon_l]$ the existence of temporal entities as well as the time measuring their substance.³⁹

Inasmuch as it embraces their existence, time is in excess of beings, both delimiting and constituting them.⁴⁰ As the analysis of place (*Phys.* 4.1–5) already demonstrated, to "envelop" and to "be in excess" are essentially related. This "vaster time" that envelops all the things that exist in their own and limited time comprehends both their being and their nonbeing. But the inquiry cannot be put to rest with this remark. We are immediately faced with a further question: when is this time that includes all the temporal things surrounded by the ougavos? When is the time of times?

If these temporal envelopments reveal a transcendence, this latter term cannot designate anything that would be entirely separate. To say that God is the ultimate activity is not to say that it constitutes a separate and fixed entity. Pure actuality has an essentially reflexive character (as the terms $\underline{\dot{\epsilon}v}$ - $\tau\epsilon\lambda\dot{\epsilon}\chi\epsilon_{i\alpha}$, $\underline{\dot{\epsilon}v}$ - $\dot{\epsilon}\varrho\gamma\epsilon_{i\alpha}$ reveal) *qua* "thinking of thinking" or "act that has in itself its own end," this reflexivity constitutes an activity and not a merely static self-identity. Let us note in that respect that the translation of " $\alpha\dot{\upsilon}\tau\alpha\varrho\chi\epsilon\sigma\tau\dot{\alpha}\eta$ " by "impassive" (Guthrie) suggests a connotation that is not carried by the Greek word. Divine autarchy is not a matter of impassivity, in the sense of

³⁹*Phys.* 4.12.221b30–1.

⁴⁰ This corresponds to the phenomenological distinction between ontic and ontological time. The so-called "finite-time theory" usually attributed to *Being and Time* does not entail at all the denial of a time to come "after" Dasein's existence (and even less a morbid predilection for death!) Rather, to say that time is finite is to say that Dasein understands what is beyond itself only on the basis of its own temporal position.

mere inactivity. True autarchy is, on the contrary, the very negation of passivity. To be autarchic is first of all not to be passive (that is, not to be submitted to something else), which is precisely the case for what has unceasing mobility. Autaqxeia is the activity of that which is never at rest. Thus, God is transcendent in the sense of a ceaseless activity that transcends the very immanence on the ground of which we apprehend it. "Eternity" names the end of time in the sense of its $\tau \epsilon \lambda o_{5}$ —that is, not its cessation, but its accomplishment.

We can see now why transcendence and eternity are necessarily related. Their relation springs from a fundamental concern for time and its end. This end is not simply a point where time stops, a step beyond which nothing occurs anymore. Rather, transcendence must be understood in the active sense of transcending, through which divine activity is perpetually actual. To say that infinity cannot exist "as a whole" is to say that we cannot attribute the mode of being of this or that particular entity to what has unceasing mobility. Transcendence, in this sense, is a matter of horizon, inasmuch as the horizon is the ultimate line of demarcation between the visible as a whole and the invisible. The horizon is a line we can never reach, yet it is "out there," and from it we find our standings and establish a here as our proper dwelling place. Similarly, eternity designates a "there" we cannot reach, yet it constitutes the horizon from which we determine a span of time as our proper time. The end of time is the point where time transcends itself.

But what is this divine activity that does not have to seek its justification in something else? Since God is pure activity, it cannot be or act for the sake of something else. "The activity of God is immortality [$\dot{\alpha}\theta\alpha\nu\alpha\sigma(\alpha)$] that is, ceaseless life [$\zeta\omega\dot{\eta}$]. It is therefore necessary that ceaseless mobility belong to God."⁴¹ God does not have "something to do" in the sense of being busy with a task to perform. Rather, inasmuch as God finds in itself its own end, "God" names being *qua* pure activity. Just as $\alpha d\tilde{\omega}\nu$ admits, as we saw, an intra- and an extratemporal sense, similarly life ($\zeta\omega\dot{\eta} \dot{\alpha}(\delta\iota\sigma\varsigma)$ crosses the demarcation between the cyclical movement of generations among living beings and the mobility Aristotle attributes to the God itself ($\varkappa(\nu\eta\sigma\iota\nu\tau\tilde{\omega}\theta\epsilon\tilde{\omega})$). But this attribution remains, of course, analogical, since divine

 $^{^{41}}De \ cael. \ 2.3.286a10-12.$

mobility is not akin to the celestial motion along an axis or to the cycle of generations.

IV

Beyond Good and Bad Infinity. Aristotle's concept of divine eternity neither fits with *sempiternitas* (the uninterrupted continuation of an incessant *et cetera*, the eternal return of the celestial cycles) nor with *aeternitas* in the sense of *nunc stans* of an immobile "now." It should be clear by now that the difference between Aristotle's άπειρον and the medieval *ens infinitum* cannot be explained away by a appeal to the difference between a merely potential infinity and an actual one, as if it were a matter of simply switching a concept from a negative (and pagan) pole to a positive (and Christian) one. In fact, it is not certain at all that what Hegel calls "the wrong or negative infinity of endless progression"42 truly describes Aristotle's concept of $\ddot{\alpha}\pi\epsilon_{100}$, unless we reduce what Aristotle has to say about infinity to the case of mathematical series. What Hegel dubs "wrong infinity" is such that the infinity that is obtained by negating the finite simply reiterates the finite ad infinitum. As Hegel puts it, "the progression to infinity never gets further than a statement of the contradiction involved in the finite."⁴³ Eventually we must give up the contemplation of such an infinity, not because it is too sublime, but because it is too tedious. Note that the reason why such an infinity is "wrong," in Hegel's judgment, is that it depends on "finite and discursive thinking." That is, on a "position that regards the categories as ultimate." A typical characteristic of such a thought is that it considers "finite" and "infinite" as permanent categories, or more precisely, that it understands the finite as a "permanent contradictory to the infinite."⁴⁴ Such a

⁴²Hegel, Logic (Being Part One of the Encyclopaedia of The Philosophical Sciences – 1830), trans. William Wallace (Oxford: Clarendon, 1975), § 94, p. 137. When discussing the difference between the Greek and the Christian sense of infinity, Gilson is prompt in identifying the former (Greek) to the "negative" and the latter (Christian) to the "positive" sense of infinity: "The plenitude of its [the Christian God's] actuality of being confers on it, as of full right, a positive infinity unknown to Aristotle." Gilson, *The Spirit of Medieval Philosophy*, 58.

⁴³Hegel, *Logic*, § 94, p. 137.

⁴⁴ Ibid., § 28, pp. 48–9.

thinking is clearly bound to produce a concept of infinity that is merely negative, inasmuch as all it knows of the infinite is but the repeated negation of the finite.⁴⁵ Hegel contrasts this conception with the "infinite or speculative thought" (that is, dialectical thinking) which, "while it no less defines," does away with the categories understood as finite forms.

It is true that Aristotle maintains an irreducible difference between the finite and the infinite. Moreover there is indeed, in an Aristotelian sense, a contradiction between finite and infinite, since the same thing considered at the same time and in the same respect cannot be both finite and not finite. Yet it does not follow that the relation between these terms is merely a matter of mutual exclusion between "ultimate categories." The qualification "at the same time and in the same respect," that Aristotle is keen to repeat when discussing what properly constitutes a contradiction, is crucial. For Aristotle, the infinite never leaves the finite behind, since there is no there without a here, while, at the same time, these terms can never fall into an identity.

In order to understand God's activity as that which admits of infinity and eternity, we need to go back to the analogy between infinity and the way in which the day or the games exist. The Olympic games or the day will eventually end. Night for the day, the closing ceremony for the games, will mark the point in time when we can say that these are completed, that they are no more. Yet as long as they are actual, their actuality signifies an ongoing process in which there is no point of time when they are actual as a whole. "The Olympic games are as what potentially occurs and what is occurring [$\kappa \alpha i \tau \tilde{\varphi} \delta \upsilon v \alpha \sigma \theta \alpha i$ $\gamma \iota v \epsilon \sigma \theta \alpha i$, $\kappa \alpha i \tau \tilde{\varphi} \gamma \iota v \epsilon \sigma \theta \alpha i$]."⁴⁶ Analogically, God's activity is "immortality, that is, ceaseless life," in the sense of a mobility that never comes to pass. To be in act, in this sense, is therefore not to encounter an external limit (as the marble does when it is carved into a particular statue) but to be in a constant process of occurring.

The modal distinction between potency and act can now appear in its full metaphysical sense as the bridge that unifies the questions of being as a whole (theology) and the question of being qua being

 $^{^{45}}$ The Hegelian analysis would, in a way, fit with what Aristotle shows about infinite numerical series. Each time we reach a finite integer we must deny it (*not* 10, but 10+1, *not* 11, but 11+1, and so forth).

⁴⁶*Phys.* 4.6.206a25.

(ontology). In De caelo, the final word about ἐνέργεια is neither eternity nor infinity but immortality ($\dot{\alpha}\theta\alpha\nu\alpha\sigma\dot{\alpha}\alpha$). God does not need to produce something in order to be active; rather, it endlessly occurs. It cannot have a particular goal, aim, or task to fulfill, for all that it can fulfill is already realized by its own happening. But why then is there still activity when the end is already met? This manner of asking betrays in fact our own conceptual limitations. We cannot understand activity as anything else than a frantic rush for whatever it is that the agent lacks; we assume that activity can only be the anxious search for something which would fulfill a prior deficiency. In other words, our incomprehension reveals the fact that we have grown used to seeing in activity nothing else than production, if not productivity. Yet God's activity is ceaseless in the sense of the pure actuality of ceaseless life. If being in its foremost sense is actuality qua activity, then it suffices to itself. Activity is ultimately not what a being does, but what being is.

Miami University