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LYCEUM

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Metaphysics in Search of Theology

Lloyd Gerson

I

St. Augustine informs us that pagan philosophers divided theology into three parts: (1) civic theology which included the cultic practices of individual ethnic and political groups; (2) mythical theology which included the stories about the gods in Homer, Hesiod, and others; and (3) natural theology which included the arguments regarding the existence and nature of the gods constructed by philosophers. St. Augustine is drawing on a well established distinction, one which likely goes back to the Pre-Socratics. As he points out, natural theology was accorded a primacy among the pagan philosophers which it could never have among Christians or, for that matter, for anyone who recognized the authority of revealed religion. According to orthodox Christians, natural theology must assume an auxiliary role, elucidating and supporting the deliverances of Scripture. For the pagan Greek philosophers, however, civic theology and the myths of the poets were inferior and subordinate to the fruits of disinterested reason.

Among the first philosophers of Ionia, natural theology is continuous with the larger scientific enterprise of postulating explanations for the *kosmos*. It is perhaps not easy for us today to appreciate fully the boldness in the very idea that the world of our everyday experience is actually an ordered whole or a *kosmos* and that it is, therefore, at least to some degree, transparent to our intellects. Nevertheless, this idea is the enduring legacy of those remarkable thinkers who lived in the colonial outpost of Miletus in Asia Minor in the first half of the 6th century B.C. It is the idea without which science and philosophy can scarcely begin and its utter generality is certainly one reason why, at first,

philosophy and science are practically indistinguishable in the meager fragments available to us of those who first proceeded to act on it. That is, the impulse towards the intellectual penetration of the *kosmos* is itself neutral in relation to particular methodologies, philosophical or scientific.

In postulating a *kosmos* and the possibility of offering explanations for it, one presumably begins to reflect on what sort of thing an adequate explanation must be. There are three crucial features of the concept of an adequate explanation which arise slowly but inexorably in early Pre-Socratic thought. The first is that such an explanation must itself not be in need of the same sort of explanation which it provides. For example, the *apeiron* or boundless of Anaximander is evidently a hypothetical entity postulated to explain phenomenal change, which in Pre-Socratic thought is characterized in terms of *perata* or limited property-continua, like the hot-cold or wet-dry. Anaximander had grasped the point that an adequate explanation cannot be of the same sort as that which it explains, otherwise it is part of the problem and no solution whatsoever.

Second, an adequate explanation must be a cause of some sort. Besides the fairly obvious analytic connection between the notions of explanation and causality, we should notice that the association of these two notions occasions a refinement in the data to be explained. In setting out to explain tidal activity, for example, it is easy to see the futility of the pseudo-explanation which merely redescribes the activity and the need to move toward the explanation which is the cause of the tides coming to exist. Gradually and by no means once and for all, in Greek philosophy adequate explanations came to be seen as causes of the existence or coming to be of that which is to be explained.

Third, when one begins to reflect on the exigencies of an adequate explanation which is different from that which it explains and also the cause of its existence, the logical outcome is the idea of an ultimate explanation completely unlike anything in need of an explanation, namely, a necessary existent. Whether such an ultimate explanation be the *apeiron* or atoms or a super-human mind, the common characteristic of all these is that they are

radically different from that which they cause to exist and they themselves exist just because they are what they are. I hasten to add that I am not suggesting that in Pre-Socratic philosophy there is a logically perspicuous concept of necessary existence. Rather, I am suggesting that the actual methodology employed by the Pre-Socratic philosophers in their explanatory endeavors presupposes, however vaguely, the concept of a necessary existent.

In ancient Greek a god is, roughly, an everlasting power. Accordingly, no surprise is occasioned by the discovery that a postulated ultimate explanation of the *kosmos* is regularly and without fanfare characterized as a god. Thus is natural theology integrated with Pre-Socratic scientific philosophy in general. Anaximander, Xenophanes, Heraclitus, Anaxagoras, and Diogenes of Appolonia all provide illuminating examples of the essential continuity of natural theology with scientific realism, that is, the postulation of explanatory entities knowable only indirectly through their effects.

But now I must invoke an intruder into this admittedly somewhat idealized picture of early Greek philosophy. Parmenides is frequently introduced as the father of western metaphysics, which is perhaps a good example of an inadequate explanation in the manner suggested above. For we might well ask "who begat the philosopher Parmenides?" There is a tradition in antiquity that Parmenides was the pupil of Xenophanes and though this tradition probably owes more to the half-serious practice of doxographical groupings than to actual history, still it contains an important hint. For Parmenides' metaphysics is at its core a profound challenge to the methodology of Ionian philosophy.

Parmenides is not original in drawing attention to two salient features of appearances, namely, plurality and change. Milesian thought is already oriented along these lines. An *arche* or principle of the changing, plural world should be one and unchanging. But if such a principle exists, its role is somehow to explain the regularity of change and the unity underlying plurality. Parmenides rejects with considerable force the conditions for the possibility that an *arche* could provide explanations. He does so not because of the insufficiency of the

arche, but because of the logical disconnectedness between such an *arche*, suitably described, and everything else.

Parmenides has his mentor goddess display two basic roads lying before him, the way of truth and the way of seeming or opinion. I interpret him as holding that there are fundamentally two methodologies: if you follow one you will arrive at the truth and if you follow the other you will arrive at something less, mere opinions disassociated from the truth despite widespread credence. The way of opinion is not, as some have mistakenly held, merely the logical negation of the one true way. Roughly, the way of truth involves a commitment to the use of reason alone, whereas the way of opinion involves a commitment to the use of reason in the service of the senses. Thus, on the way of truth, the traveller can expect that reason will yield truth, whereas the traveler on the way of opinion can be certain that the senses are instruments of falsity or deception. No opinion arising from or in any way infected by sense-experience will be true. This is so because truth concerns being or what is real, and the properties of being are such that no sense-object can by definition be the basis for an inference about being. The rational for this extraordinary claim is presumably that belief regarding any sense-object depends on the presupposition of plurality and change and that this presupposition has the absurd consequence that being and not-being would be the same and also not the same.

Why should an elementary belief regarding ordinary sensibles necessitate this preposterous consequence? Clearly, the answer is that plurality and change are thought by Parmenides to be self-contradictory notions. This is the only guarantee Parmenides would have that anyone employing these notions must go astray. To assume plurality and change is tantamount to assuming a contradiction. It does not, of course, follow from the assumption of A and not-A that neither A nor not-A is true. The deductions made on the basis of the assumption of plurality and change must, if they are to be uniformly faulty, involve the reinsinuation of the contradiction at every stage. And so they do if an ordinary predicative judgment entails a real distinction between the being of the subject and something else, namely, whatever is said of it. We know, Parmenides

thinks, that on the basis of the deduction of the properties of being, no such judgments can speak the truth. For whatever is really distinct from being is nothing.

The implications of Parmenides' reasoning is that the Ionian practice of seeking ultimate explanation for the *kosmos* in a first principle different from that which it explains, and, hence, not itself in need of an explanation, is doomed to failure. For this practice seeks to explain appearances, not of course by another appearance, but by the reality which is their underlying or occult cause. Parmenides has diagnosed a confusion in the general concept of an *arche* as the reality behind appearances. For if this principle is reality itself, there is nothing else, if it is one thing that is real, so too are appearances, which are not nothing, and the postulated principle will be spurious and in need of an explanation as well. It is Parmenides' contention that once a distinction between reality and appearance is made, one cannot then proceed to explain the former by the latter. The reason for this is simply that as one begins to deduce the attributes of being or reality, it becomes evident that these cannot be possessed by appearances, at least insofar as change and plurality of any sort are thought to characterize these essentially. The enormous leap made by Parmenides is in a conception of reality according to which the deliverances of the senses never reveal reality. It is one thing to hold that the bent stick in water was really straight and would appear so outside the water and quite another thing to hold that no appearance reveals reality in any way. Accordingly, either a putative *arche* is not real or what is real is not an *arche* of anything else.

The great insight of Parmenides is that in searching for a universal first principle of everything, it will not do merely to say that this principle is real or has real being. Rather, it must be identical with being itself. If this were not so, then the being of the first principle would be in need of an explanation. Its being must be self-explanatory as the Ionians had guessed, but nothing whose nature is really distinct from its own being could be so. For example, let fire be the supposed *arche*. A distinction between fire and its being follows because "fire exists" or "fire has being" gives us two pieces of information: what exists and that

it exists. If this is so, the nature fire does not explain its own being nor can being explain fire, unless it is separated from fire, in which case fire does not exist, counter to the initial hypothesis. A true *arche* must be perfectly undivided. And it seems an impossible task to explain how such a principle could serve to explain anything else. To put it crudely, how could being have anything to explain if the only thing other than being is nothing?

Parmenides grasped the logical requirement for an *arche* of all or first principle that it be different from everything else. If such an *arche* exists as one among other existents, it would not be different in this respect. It would not have a just claim to being the object of true discourse. So, an *arche* of all could be nothing but being itself. But being itself cannot be an arche of anything else. After all, what else is there but being?

I think that the unavoidable implication of this reasoning is that the possibility of there being an *arche* of all depends on showing that things can possess being without identifying them with being. Thus, the logic of adequacy in cosmological explanations demands that metaphysical questions be addressed. And natural theology which is, as it were, a partner in the cosmological enterprise, is inextricably bound up with metaphysics. Parmenides, the first metaphysician, believed that metaphysics made natural theology impossible. Accordingly, progress in natural theology meant showing that this is not so.

A number of alternatives suggest themselves. For example, it is possible to deny that there is a distinct science of metaphysics and so to free natural theology from all metaphysical constraints, thereby making it a part of cosmology in the sense that the general principles of theology are just those of cosmology. This is the position of Stoicism, which made god identical with an intelligible principle of the natural order, something like a fundamental physical force. Or it is possible to concede the logical connection between metaphysics and natural theology, and hold that the expedient dismissal of the former ensures the irrelevance of the latter. This is the position of various pluralist cosmologists after Parmenides, such as the Atomists and many of their modern day inheritors whose battle-cry is: save the phenomena and damn the metaphysics! It is also

the position of the Academic Sceptics. A third possibility is to grasp the nettle and to show how a science of being opens the door to natural theology rather than closes it. In the remainder of this paper I shall try to provide a brief sketch of how this third possibility is developed in the works of the three dominant figures in ancient Greek philosophy, Plato, Aristotle, and Plotinus.

II

The phrase "Plato's metaphysics" typically occasions some puzzlement because there is in the dialogues so little doctrinal as opposed to dialectical discussion of being. The paltry sum of scattered remarks might well seem to justify the conclusion that Plato does not in fact have a distinctive metaphysical position. I believe that this view is mistaken, if for no other reason than that Plato was a most attentive student of Parmenides. But in order to appreciate Plato's contribution to metaphysics it is necessary to approach him as inheritor of the tradition to which both Parmenides and his Ionian predecessors belong, namely, that of seeking out ultimate explanations of the *kosmos*.

Plato's Forms explain identity and difference in the sensible world. The possibility of two or more things having an identical attribute is owing to the existence of an entity, a Form or Idea, whose nature it is to be just that which its name names. The Form of Justice, for example, is identitatively that nature which all things correctly called just possess. Thus, Forms, like neutrinos, black holes, and the unconscious, are hypothetical entities postulated to explain puzzling data, although I grant that the sort of data likely to be found puzzling to some persons are probably somewhat different from those found puzzling by, say, the particle physics group at the Advanced Institute in Princeton. Nevertheless, scientific realism is, I hold, a principle sufficiently capacious to include both. But if this is all there is to say about Forms they would hardly be worth mentioning. For it is no explanation of identity in difference at all merely to say that the identity exists, even if one adds, perhaps gratuitously, that it exists immutably and eternally. By itself, this is a travesty of an explanation. To begin

with, one must add that this eternal and immutable existent is of the sort to be able to be the identical attribute in numerically distinct individuals, which is, after all, the basis for puzzlement. What this means is that its nature is such that it can identify numerically distinct instances, such as two just acts. But then, although we have said that the Form is such as to be the nature which its name names, we must distinguish that nature from its existence. More precisely, we must distinguish the nature from its own immutable and eternal existence and from its existence in each of the numerically distinct just acts. In short, the theory of Forms explains identity in difference if and only if there is a real distinction between an eternal and immutable nature and its existence. If this is possible, then we can say that the nature is such that *per se* it does not exist. Then, it is, again *per se*, neither one nor many. What this means is that two acts can be said to be just univocally because justice is *per se* not numerable and so not, by being present in one act, excluded from being present in another. But apart from the existence of this nature in these just acts, it must have a separate existence, that of the Form, because the very possibility of instantiation is atemporal and so the Form is ontologically prior to all possible instances of it.

Thus interpreted, Forms really would explain identity in difference, provided that it is possible to maintain a real distinction between, say, the nature of justice and its immutable and eternal existence. Furthermore, immutable Forms seem to possess the necessary existence required for the sort of ultimate explanations postulated by Plato's Ionian predecessors.

But all is not well with this model. For one thing, forms must be connected among themselves in order to explain the necessary connections in the sensible world. Thus, it is presumably owing to the eternal connection of threeness and oddness that anything three here below is odd. Alas, the notion of the eternal connection of independently and eternally existing entities is thoroughly opaque. For another thing, Plato speaks blithely in the *Phaedo* of Forms and sensibles as "two kinds of being" which sounds like Plato means to imply that what being is is neither Form nor sensible, in which case Plato can hardly be said to have contributed to a solution to the problem posed by

Parmenides. To put this slightly differently, the necessary existence of a Form begins to lose the air of explanatory finality when it is conceded that there is a plethora of such necessary existents. Even if one objected that necessary existents do not require an explanation for their coming to be, still their multiplicity is a fact crying out for metaphysical explanation, a point that was evidently lost on the anti-metaphysical Atomists in the analogous case of a multiplicity of atoms. The multiplicity <u>and</u> supposed interconnectedness of Forms can hardly count as satisfactory.

If all this sounds desperately obscure, I'm afraid the solution is not going to receive a joyful embrace. That solution is the Form of the Good. I will grant you that Plato might have been a bit more forthcoming regarding the attributes of this most extraordinary entity and a bit more explicit regarding its relation to other Forms and to the sensible world. Nevertheless, certain crucial properties of this Form are beyond doubt and directly relevant to my subject.

The Form of the Good is placed in a superordinate position in relation to other Forms. It is the cause of truth. It is that owing to which other Forms have being and other Forms are knowable. It itself is not being but beyond being in dignity and power. It stands in relation to other Forms as the sun stands in relation to objects in the visible world. Finally, and most importantly, the Form of the Good is obviously intended to be an ultimate *arche* or principle, explaining without needing an explanation.

When Plato says that the Form of the Good is beyond being he certainly does not mean that it is nothing, but rather that it is not limited in the way other Forms are. As we have seen, one way of expressing this limitation is to point out that there is a real distinction between the nature of the form and its existence. This is a limitation because one nature with its own existence is not another nature with its own existence. Precisely because the Form of the Good is beyond being, it is not limited in this way.

Despite Plato's reticence on this matter, it seems to me that in the postulation of the Form of the Good is to be found the basis for Plato's response to Parmenides. The Form of the Good is in fact intended to be the nature of being

itself. Its properties are those of the main subject of Parmenides' poem. The response to Parmenides emerges when one realizes that to attribute being to anything else is to speak equivocally. The being of any nature other than the *arche* of all, including Forms, is really distinct from that nature. Parmenides was right to hold that being as a nature is unique but wrong to hold that for this reason nothing else could exist. And thus, if only minimally, the passage between metaphysics and natural theology is opened by showing that a relation between the *arche* of all and everything else is at least not a relation between being and nothing.

If the Form of the Good constitutes the beginning of a response to Parmenides, it must not be thought that it is offered as a substitute for other Forms. On the contrary, its primary relation is to other Forms. Forms remain indispensable because their various natures are needed to explain various kinds of identity in difference. An act is just primarily because of the Form of Justice, not because of the Form of the Good. But then how are the problems of the interconnection of Forms solved and how is the necessary existence of these other forms explained by the necessary existence of the Form of the Good? After all, is the eternal necessary connection between all subordinate Forms and the Form of the Good any less opaque than that of the eternal necessary connection among these forms?

Permit me to make short work of a very long and complex story. Perhaps the oldest argument for the existence of god in antiquity is the argument from design. It is an argument only slightly less ubiquitous than the argument *de consensu gentium*. It is not exactly the same as William Paley's argument or even the argument known and respected by Kant. It is, however, according to Xenophon, an argument much favored by Socrates, and in the Platonic dialogues it is employed in several forms in *Laws X*, the *Timaeus* and in the *Philebus*. Suffice to say, Plato is quite confident that he can prove that this world is intelligible to us because it is the work of an intelligence, an eternal *nous* or mind.

Now the relation of this divine mind to the world is not my present concern. Rather, what I wish to suggest is that in the later dialogues Plato provides a number of strong hints that he is inclined to view the Forms as contained eternally within this divine mind. There are two lines of reasoning behind this tentative claim. First, as eternal cause of the being of the other Forms, the Form of the Good is virtually what all other Forms are. This means both that it has the power to produce them and that it somehow contains all of its effects, namely, the subordinate Forms. By "containing" the Forms I mean, roughly, that the form of the Good is what one attains when one is congnitively identified with any Form. The Form of the Good represents the goal of cognitive striving. It is the ultimate generalization of the common Greek identification of "good" with a goal. Second, since human cognitive striving is imperfect and intermittent, the eternal distinctions among Forms must be guaranteed by their eternal cognition. This the divine mind or the demiurge is hypothesized as doing. Plato's response to the dilemma that distinctions among Forms are either real, and hence their connections are unintelligible, or merely conceptual, and hence Forms are no longer ontologically prior to all their instances, is to hold that Forms are eternally distinct in the divine mind, making of them neither separate existents nor mere concepts.

Perhaps this interpretation will seem far-fetched to some. Apart from the requisite detailed examination of the texts, I can only plead that it is based on an attempt to take seriously Plato's commitment to the theory of Forms, his evident awareness of its difficulties, in the *Parmenides*, for example, and what he says about the Form of the Good and divine *nous*. I can also add that it did not seem far-fetched to many in antiquity who took seriously Plato and the entire Greek philosophical tradition.

It was a commonplace among the ancients that the Form of the Good was god, not because it was personal in any sense, but because it was the *arche* of all. It must be added, however, that Plato arrived at an indispensable role for a mind whose eternality and causal relation to the world justified the epithet divine. In this regard Plato was following in the footsteps of Xenophanes and

Anaxagoras. The subordination of the divine mind to the Form of the Good is, as I have argued, a function of Plato's particular response to the challenge of Parmenides. Plato could not suppose that the unqualifiedly first principle of all was a mind precisely because of the composite nature of any finite existent. A remote sequel to this story, which I mention only in passing, is to be found in the Trinitarian theology of Origen and the early Augustine where the second person of the Trinity tends to be identified with the locus of truth and the first person as that which is "greater than truth."

Plato's scattered remarks on theology in the later dialogues must be understood within the metaphysical framework I have sketched. That is, the supreme first principle is static and impersonal and the subordinate personal deity is constrained by its essential identification as eternal cognizer of Forms. Thus, Plato has a difficult time explaining the relation between the cognitive and productive activities of the demiurge. When, for example, in the *Timaeus* he makes the portentous pronouncement that the demiurge is without jealousy and filled with goodwill for all the world outside him, one must wonder at the grounds for such an extraordinary claim. If it be objected that Plato is here merely speaking in a myth, one still has to account for the claims regarding the benevolence and providence of a multiplicity of heavenly deities in *Laws X*. There we have the classic design argument, but we have it quite detached from the metaphysical context capable of making it more than a parody of philosophical reasoning.

III

Although Aristotle did indeed write the first work that could reasonably be called a systematic treatise in metaphysics, nevertheless he did so against the background of a well-established tradition of thinking about being. Moreover, in his identification of first philosophy or wisdom with a science of first principles he is carrying on the Pre-Socratic quest transposed into a metaphysical key by Parmenides that we have briefly glimpsed. When, finally, he identifies

first philosophy with theology, meaning of course natural theology, he is reaffirming the essential continuity of theology with science long since established.

Aristotle's diagnosis of the problem posed by Parmenides is actually not in disaccord with Plato's. Just as Plato's Form of the Good implies a distinction between what has being and the first principle of being, so Aristotle's doctrine of focal meaning or *pros hen* equivocity implies a distinction between primary and derivative referents of "to be." Parmenides had supposed, wrongly, that "to be" meant one thing, that it was a univocal expression, in which case there was nothing having being which was not being itself. Plato had seen the fallacy in univocity, although his theory of Forms seems to impede his ability to reject radical equivocity and so to make a unified science of being possible. Aristotle, as is well known, rejects unqualifiedly Plato's Forms, including the Form of the Good. As a result, the rejection of the univocity is followed by the rejection of radical equivocity in favor of *pros hen* equivocity, a transformation with enormous consequences. For with that transformation a new approach to natural theology is made possible.

For all of the desperate obscurity of the central books of Aristotle's *Metaphysics*, the main steps of its argument are clear enough. The governing hypothesis is that the age-old search for being is nothing but the search for substance. Accordingly, Aristotle undertakes an investigation of substance, focusing on sensible substances as most readily available for study. He argues that there are four principle candidates for substance, drawing presumably both from common sense and from the tradition. These four are: essence, universal, genus, and the substratum. The last candidate may be understood in three senses: form, matter, and the composite sensible object. Aristotle gives us criteria according to which the candidates are to be assessed. The first criterion is that substance is primarily a "this" and a "what," although anything can be said to be a "this" and a "what" derivatively. Second, whatever is said to be, is a substance or is said to be because of a substance. Thus, a substance is causally independent, whereas anything else is causally dependent on substance in some

way. Thirdly, a substance is primary in three other ways: in formula, in knowledge, and in time.

The result of the assessment of the candidates is beyond dispute. The universal, the genus, and the substratum in the sense of the matter and the composite are all decisively eliminated as unsuccessful candidates for substantiality in the primary sense. The victor is substratum in the sense of form and essence in those cases where it is equivalent to form. It cannot be stated too strongly that despite the intensely dialectical nature of the central books of the *Metaphysics* and the difficulty of interpreting some details of Aristotle's arguments, this central conclusion is clear and firm.

Aristotle concludes then that being in the primary sense is form, that is, a being that is nothing but form is unqualifiedly being. And everything else that is said to be is said to be in a derivative or qualified way, including sensible substances, universals, attributes of individuals, and so on. But that is not enough. For Aristotle has said that the science which discovers the primary referent of "being" is the science of being *qua* being, that is, the science of being wherever it is found. Therefore, if being in the primary sense is form, it must be shown how the science of separate form is the science of every expression of being. There are two related problems here. First, we must determine what meaning to attach to the claim that all beings are an expression of being in the primary sense. Second, unless it can be shown that one or more beings which are nothing but form alone exist, then the science of being *qua* being as conceived is impossible, for there can be no science when there is no real subject matter.

The solution to the first problem is in general sufficiently clear. There must be a causal relation of some sort between the primary referent of being and all derivative referents. If this were not so, there would be no basis for arguing against the radical equivocity of being and therefore no basis for claiming that there is one science of being *qua* being. But it is not so easy to determine exactly what this causal relation is supposed to be.

The reasoning in the central books of the *Metaphysics* does suggest that the primary referent of being is supposed to be related to everything else analogously to the way that the attributes of a sensible substance are related to it. In fact, the origin of the doctrine of *pros hen* equivocity is within the doctrine of categories, where substance is the focus. Attributes of substance are derivative expressions of sensible substance because they are the result of their activities. Thus, to be a man is to live a certain kind of life and this life is manifested in a myriad of accidental attributes. The primary causal relation between a sensible substance and its accidents is efficient or productive. The accidents are sustained in existence by the substances in which they are present.

The analysis of the being of sensible substances and their attributes in the central books thus suggests that just as accidents are related to sensible substances so is everything, including sensible substances, related to the unqualifiedly primary referent of being. The fact that sensible substances include matter and so possess qualified being implies that they are beings only derivatively. The unity of the science of being *qua* being demands that their derivative being be a causal derivation, and the argument in the central books at least suggests that this causal relation must be efficient. This brings us to the second problem.

In Book 12 of the *Metaphysics* Aristotle presents an argument for the existence of god, whom the argument identifies as the unmoved mover. Textually, there is little room for doubting that this unmoved mover is characterized in terms of final and not efficient causality. Indeed, it is precisely because god is separate form and hence pure actuality that it cannot be an efficient cause. Efficient causes have their actuality outside themselves, which is the main reason why sensible substances, the efficient causes of their accidents, are not perfectly actual. Now the famous or infamous characterization of god as thinking about thinking pretty clearly guarantees that god is not busily engaged in efficient causal activity. That emulation of god's blissful self-absorbed existence should be the goal of all those capable of formulating such a goal is perhaps reasonable enough. But to put the matter simply, being has a scope

considerably wider than the class of would-be contemplators, even wider than the class of organic substances. On the hypothesis that being in the primary sense is what Aristotle says it is, how are we to suppose that the study of the life of the primary referent of being will illuminate the being of absolutely everything else? If god were an efficient cause, we might hope that the final causality of everything else was illuminated in the light of the divine purposes. Derivative being could be construed, as it were, instrumentally. But this move is not even discussed, much less advocated, anywhere in the *Metaphysics*.

As we have seen, Aristotle claims the identity of metaphysics, or first philosophy, and theology. They stand or fall together. Accordingly, if he cannot demonstrate that being is *pros hen*, which is to say that there is one primary and many derivative senses of being causally related to the primary, his theology is refuted. What I mean is that Aristotle cannot say that his proof for the existence of god stands on its own such that whatever one wants to make of it metaphysically is a separate matter. Nor can he say that his metaphysics is untouched by a rejection of that proof. For we must not confuse a science of sensible being with a science of being *qua* being. As Aristotle himself says, if god does not exist, then metaphysics is just physics. The missing link in the entire program is the demonstration that separated form--being in the primary sense--is causally connected to everything else so intimately that the science of the former must reveal the being of the later.

I think it is clear that what prevents the success of the program is the initial hypothesis laid down by Aristotle that being is substance. For given that substance is primarily separated form, the identification of being with substance entails that being in the primary sense is separated form. Hence, when Aristotle speculates on the nature of being in the primary sense, he is asking himself how separated form could be causally related to everything else. The answer he arrives at is perfectly cogent within the Aristotelian context, but it is manifestly unsatisfactory because being is not form and so not substance. Or we might state this differently. If being were separated form, then the "to be" of absolutely

everything would be produced by or sustained in existence by the self-absorbed thinking that is god. This is not credible; it is not, I suggest, even intelligible.

I do not have a satisfactory answer to the question what led Aristotle to the disastrous hypothesis that being is substance. One would have thought that his own principle that physical science assumes the existence of its objects would have guided him to locate that assumption as the starting-point for the separate science of metaphysics. In any case, it is worth remarking that no Peripatetic disciple of Aristotle ever tried to defend the identity of being with substance and that Aristotelian metaphysics generally has a very undistinguished career throughout the rest of the history of Greek philosophy. Natural theology had not yet found a firm metaphysical foundation.

IV

The last part of my story concerns Plotinus, that remarkable philosopher of the third century of our era. Plotinus has suffered unjustly from an accident of chronology. He is generally outside the scope of both classicists and medievalists. He has also suffered from the unhelpful label of "neo-Platonist," from his sometimes obscure style, and from his sometimes incautious tendency to intrude his own personal experience into his philosophical writings. On the other hand, Plotinus knew the great philosophical schools inside and out and in a way the entire body of his writing is an attempt to transform the truths discovered by his predecessors into a system whose beginning and end is the very subject of this paper.

The best approach to Plotinus' understanding of the metaphysics of natural theology is through his reasons for rejecting the Aristotelian alternative. He has two arguments, one directed against *nous* as a first principle and one directed against the identification of being and substance. The first argument is simple and elegant. Assume that Aristotle's god is the first principle of all. If this is so, then it is self-explanatory or absolutely underived. But if god is thinking, even about himself, then there is in god the irremovable duality of subject and

intentional object of thinking. God's simplicity is only relative, whereas the unqualifiedly underived first principle must be unqualifiedly one. If god has oneness, rather than is oneness, as is the case with the relatively simple, then that oneness is part of an explanation applied to god, and the god who has it is not first. The argument which dethrones Aristotle's god does not mean the abandonment of a divine *nous*, but only its subordination to the first principle, as we shall see presently.

The second argument aims at the heart of Aristotelian metaphysics. The argument purports to show that the Aristotelian claim that "man" and "one man" mean the same thing is false. Reason tells us that if a thing loses its unity, it exists no longer. This being so, should we conclude that being and unity are the same thing? No, for if the being of a thing is only the multitude of its parts, and if unity is different from a multitude, then unity and being are different. For example, a man is composed of animality, rationality, and many attributes, and these "parts" are bound together by a unity. But then the man is other than the unity, since the man is divisible, whereas the unity is indivisible. The first principle of all, the One, is neither the totality of beings, since then it would not be one, nor is it being, because being is the totality of things.

It is quite easy to misconstrue or overlook the true meaning of this argument. First, we know, and presumably, Plotinus knows as well, that Aristotle did not claim that "being" and "unity" mean the same thing. Rather, he claimed that their difference was merely conceptual. Plotinus is only committing himself to the denial that the distinction is merely conceptual; that is, he wants to show that it is a real distinction of some sort. Second, and more importantly, Plotinus seems to be begging the question in a colossal fashion in supposing that the being of a composite is really distinct from its unity. For if unity is a *pros hen* equivocal as is being, according to Aristotle, we need not concede that the unity of a composite is unqualified unity any more than we need hold that its being is unqualified being. What then is the point of this argument?

The proof that unity and being are more than conceptually distinct is actually a proof that that which causes a composite being to be one is really

distinct from the composite. The contribution of a composite to its own being is the multitude of its parts. By this I do not mean that the parts are disparate until unified by a principle outside of them. In that case, each part would be one. I mean a different sort of contribution. An "inventory" of what the composite is will be a list of its parts. But the list itself is not the existing composite, for there is no difference between the list of parts of an existing composite and a non-existing one. Since everything other than the first perfectly incomposite principle of all is a composite of some sort, it is this principle that explains the being of anything else.

On this interpretation, "one man" and "man" do not mean the same thing because "man" just stands for the inventory of parts of what a man is. There is no unity in a non-existent man, though there may be unity in the existent idea of a man. Rationality, animality, plus countless accidents do not make one man. The difference between the list and the one man is explained by the first principle of all, one of whose less misleading names is "the One." The reason for postulating the One is that without it we could not account for the difference between "man" and "one man." To admit that there is a difference between the list and the one man is to be led inexorably to the existence of the One.

It is my contention that the unity of a finite being, which Plotinus believes he has shown is really distinct from that finite being, is virtually that finite being's existence. The One is postulated as the explanation for the datum which is precisely the existence of composite individuals. As I have suggested, this datum is just under the surface in Pre-Socratic philosophy, but not until Plotinus does it become the fulcrum of a new natural theology. That in Plotinus we are witnessing an original approach to natural theology is, I believe, incontestable. The One is related to everything else unlike any other first principle or god posited by any of Plotinus' predecessors, including Plato. For the One is that which sustains the existence of everything else, both that which is eternal and that which is generated and destroyed. In fact, Plotinus' criticism of Aristotle, and we might add, Stoicism, in the light of his understanding of

Platonic principles, leads him to what can justifiably be called a creation metaphysics.

A creation metaphysics is not unprecedented in its conception in Greek philosophy. As I have argued, Aristotle hypothesized a science of being *qua* being which would have been, had it been successfully completed, a creation metaphysics. The Aristotelian putative primary referent of being should have been a cause of being. Plotinus carries through what Aristotle failed to achieve. By "creation metaphysics" I mean a metaphysics where the primary referent of being is to be found in a cause of the being of everything else. A creator is just a cause of being. Temporality is quite irrelevant to creation. By "a cause of being" I mean roughly that which stands in relation to the being of anything analogous to the way an artist stands to his work of art. But unlike an artist, a creator does not work with pre-existing material. And unlike an artist, a creator is the sustainer of the being of everything else after its inception.

Plotinus has a good deal to say about his *arche*, the One, and what may best be termed its "hyper-personal" attributes. The fact that it is what all creation has makes all attributions to it analogical. It does think and will, both "in a manner of speaking." It is even an appropriate object of prayer, and union with it is the goal of all persons whether they are conscious of this or not. It is, in Plotinus' remarkable phrase "freedom-maker," though it itself transcends the categories of freedom and necessity.

I mentioned briefly that the dethroning of Aristotle's god as *arche* did not, for Plotinus, result in the abolition of the divine mind absolutely. In fact, *nous* has a precise ancillary role in Plotinus' metaphysics as ultimate cause of intelligibility in the world. It is an ancillary role because intelligibility is subordinate to infinite being, the first principle.

Undoubtedly, much more needs to be said on this score and I do not mean to suggest that Plotinus does not encounter serious problems in the working out of his creation metaphysics. I do wish to suggest, however, that his natural theology is what a Christian natural theology, such as that of Thomas Aquinas, would look like isolated from its specifically Christian context.

I am conscious of having compressed an enormous amount of material into a very short compass. The conclusion I should like to emphasize is that a careful study of what the Greek philosophers have to say about god shows us that natural theology needs metaphysics, whether that natural theology be ultimately authoritative or subordinated to revealed theology. And conversely, a metaphysics guided by the successes and failures of Greek philosophy, inevitably must be identified with natural theology. On this score, at least, Aristotle was absolutely correct.

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Human Rights and Nature's Rightness

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There is something rather incongruous about the idea of inalienable human rights coming to the fore in the late 20th century. Sociologically, it is quite understandable: this is the age of the me-generation, and the weak, as Nietzsche saw, ever claim in the name of "justice" what they cannot seize by force. Philosophically, though, it is rather embarrassing. Not that the idea of human rights is not noble, inspirational and generally righteous altogether: it is all of that. However, it is also badly out of step with Western philosophical development over the past two centuries.

The claim that humans, simply as humans, can be said to have certain "rights," intrinsically and absolutely, whether a given society chooses to respect or even to acknowledge such "rights," presupposes an orderly universe, value laden and morally ordered, from whose order, more basic than conventional societal rules, such rights could be derived. It presupposes a universe whose order is more basic than human order, whose rules are more basic than human rules and preferences, individual or collective.

Western thought, for at least two centuries and longer, has strenuously resisted the suggestion that the universe is that kind of a place. Contemporary philosophy views any claim that there may be values independent of human preference with suspicion, and for the most part denies the very possibility of unambiguously true statements of any kind. A recent French grafitto summed up the sentiment with admirable clarity: "Truth is fascism--all power to the imagination!"

Against that kind of a background, against the conviction that the universe in itself is value neutral and that values are arbitrary, function of human preference and consensus, any claim about absolute, inalienable "human rights" sounds like no more than a particularly shrill individual demand. The

me-generation not only wants it all and wants it now, but wants it as its "inalienable right" . . .

I am going to suggest that there is an irresolvable contradiction between our conception of reality and our conception of human rights. We can, if we wish, hold that the universe is a place that has no moral rules so that, assuming we are strong enough to take it, we can have it all and have it now, a place where our arbitrary will is sovereign and subject to no restraint: *homo mensura*. In that case, however, we cannot consistently claim that we have "rights." In such a universe, claims of "human rights" can represent at best an arbitrary demand that we be treated in conformity with certain rules. The validity of that demand, however, depends entirely on our ability to convince or to coerce others to treat us accordingly. If they do not, we cannot claim that our "rights" have been violated, only that we have not succeeded in establishing our claim.

Conversely, we can consistently claim that our being as human, simply as human, carries with it certain rights, certain rules in accordance with which human beings ought to be treated. To make such a claim, however, we have to claim that the universe is a place that has rules, a place that is value laden and morally ordered, and that our presence in it is not arbitrary but defined by such rules, entailing both rights and obligations. If that is the case, however, we cannot claim to be ourselves exempt from those rules. The rules which guarantee our "rights" impose obligations on us as well--or, in other words, no, we cannot have it all and have it now. We have to play by the rules.

Or, in philosophical shorthand, we can be consistently Hobbesian or we can be consistently Lockean, but we cannot consistently combine a Hobbesian conception of a universe with a Lockean conception of natural rights, claiming a relativity of value and the sacredness of human rights in the same breath. It is not the case, as Ivan Karamazov supposed, that if there were no God, everything would be permitted. If there are no rules, nothing can be said to be "permitted"--or, for that matter, prohibited. We can have it all and have it now, but we cannot claim anything as a right. If we wish to claim to have "rights," we have to

recognize that we can have only that to which we have a right, and only when we have it.

That, I would suggest, is the appropriate setting for any discussion of human rights--the recognition that the very idea of a right is inseparable from that of a rule-governed context within which rights and obligations arise, and that the idea of a <u>human</u> right is inseparable from the idea of reality as itself such a context, value laden and rule governed.

Following common usage, I take a "right" to refer to a legitimate expectation of pursuing a course of action without having to justify it to anyone, and of expecting others not to hinder such a pursuit--or, perhaps even of expecting them to aid us therein. If freedom of expression is a right, I need not justify speaking my mind or apologise for it, I can legitimately expect others not to interfere with my doing so and, perhaps, can expect others so to structure our life together as to facilitate my doing it. Or if we say that economic security is a right, we are saying that we can legitimately expect to be adequately rewarded for our labours, can expect others not to interfere and, perhaps, can expect them so to structure society as to shield me from destitution.

In common practice, such legitimate expectations arise within a community in accordance with explicit or, more often, unspoken rules representing that community's consensus. Most human communities agree, explicitly or tacitly, that certain prior performance establishes such a right. So digging, maintaining and using a well may establish a right to that well's water. Having dug a well, I need not justify watering my flocks from it to anyone, and I can expect others to refrain from interfering with that activity. If they do, I can claim not only that I have been injured, exacting revenge, but also that my <u>right</u> has been violated. The right here is contingent on my prior performance--having dug the well--and on the tacit assumption that that act establishes a legitimate claim: I have earned the right.

Alternately, again within tacit community consensus, a right may be based on an explicit bestowal. Thus a civil right--say, that of voting--may be linked to certain prior performance--here in New Hampshire upon the payment

of ten dollars poll tax on the first of April. What establishes that right, however, is not the performance but a bestowal. That right has been bestowed by the constitution of the State of New Hampshire, together with certain obligations, down to displaying a rather overstated state motto on my license plate. As a citizen of New Hampshire, abiding by its constitution--and proclaiming "Live Free or Die" on my number plate--I can claim a right to vote. I need not justify wishing to do so, I can legitimately expect others not to keep me from the polls--and perhaps can even expect the State to make the polling place wheel-chair accessible.

Our ordinary as well as our legal discourse on the topic of rights presupposes that basic framework of explicit or tacit rules, and within it justifies the expectations we call "rights" either by prior performance or by prior bestowal. Do the handicapped have a right of access to public facilities? Definitely: they are taxpayers whose prior performance--the payment of taxes--has earned them that right. Do the indigent have a right to vote? Definitely: though they may pay no taxes, they are citizens and the right to vote has been bestowed on them. We might, to be sure, invent clever puzzles so dear to some of us--for instance, does a handicapped indigent alien have a right to access to public facilities? But those are games, not affecting the matter of substance. The truth of the matter is that in ordinary discourse as well as ordinary practice we get along quite adequately, for the most part, with the conception of rights as established within a prior explicit or tacit framework of rules by prior performance and/or prior bestowal.

The facile and familiar justification, however, becomes rather problematic when we try to extend it to "human" rights, said to pertain to all humans simply in virtue of their humanity, even if they live in a community which does not recognize any *a priori* rules governing human behavior to their fellow humans. We need not look to Nazi Germany or Sadam Hussein's Iraq for examples. The prevalent conviction of our own society that all questions of right and wrong are relative to an individual speaker's preference--some people are nature lovers, others prefer pumping oil: it all depends on what you like--makes

us an example of such a society. How can we speak of human rights? Civil rights, certainly: constitutions bestow them and custom establishes them. But human rights? Don't they depend on how you look at it?

Certainly human rights cannot be said to be based on a prior bestowal by any authority. The very idea of a human right challenges the claim of any authority to bestow--and so be entitled to deny--such rights. A right bestowed would cease to be an intrinsic human right. So, though, would a right earned by prior performance. When we speak of a right as human, we claim that they are rights we have simply in virtue of being human, without having to do anything to earn it.

The right to life we claim in the Declaration of Independence as the inalienable right to "life, liberty and pursuit of happiness"--paraphrasing Locke's earlier "life, liberty and pursuit of property"--provides a clear instance. No body politic need bestow that right, we do not need to earn it. We assume that simply because we are we also have a right to be. We need not justify being, we can legitimately expect others not to interfere with our being and, perhaps, can even expect others to support us in the task of being. We are, and so we assume we also have a right to be, simply because we are.

Our being as humans, however, is no simple matter. It takes a great deal to sustain us in being, though we seldom consider that. Ordinarily, we assume that because we are and so have a "human" right to be, we also have a right to whatever is necessary for our sustenance. That is no small claim. Humans are notoriously expensive to maintain, incomparably more so than other species which also are and, it would seem, can, by the same logic, claim a right to be. Yet we expect them to bear the cost of our sustenance, and not of sustenance alone. We assume that we have a right not only to sustain our needs but also to gratify our whims, down to VCR's, 2 mpg speedboats and every manner of conspicuous waste. Simply because we are we assume we have a right to anything we want--an inalienable human right to life on whatever terms we envision it, subject to no constraints, no obligation: a right not only to be but to be anything we please, whatever the cost to all else that also is.

Even upon the least reflection, that is a rather problematic claim. Humans are, but does that also mean they ought to be? That they have a right to be? It is entirely arguable that, for instance, the American southwest would be far better off if the fifty or so million *belagaana* settlers were not, leaving the place to buffalo and a few thousand Navajo shepherds with a handful of Zuni thrown in for good measure. Those white settlers have proved immensely destructive, their life-style immensely expensive. Certainly, they are and so, presumably, have a right to be--and need a place to live. But should that need be met when the cost is so incredibly exorbitant, some seventy times that of the average human inhabitant of this globe and many more times that than the cost of a buffalo? On what basis can they claim a "right" to sustenance?

As America's founding fathers set about raping the virgin continent, they were not unaware of the problem. The right they claimed as human--or in the terminology of the time, as "natural"--was bestowed upon them, they declared, by their Almighty God, the law giver of the universe. . . presumably without consultation with the gods of the Navajo. Yet that God bestowed not only rights but also obligations. Given the benefits He provided, including a "right" to some highly desirable real estate, we, their heirs, might well have been willing to put up with His idiosyncratic preferences, as for instance his prudish commandment about not committing adultery. When, however, He sought to command us, "Thou shalt not covet," He struck at the very heart of our free enterprise system. We believe, after all, in an expanding economy, and coveting is the driving force of that expansion. Almighty God simply had to go: as Laplace said it for us, we have no need for that hypothesis.

With the departure of the Almighty God, we have found ourselves free of all the awkward constraints, but also bereft of anyone to sustain our claim to rights. We are, that is all. There is no one to bestow "rights" upon us, not even the right to be, and we certainly cannot claim to have earned that right by our performance. If we wish to claim human rights as rights, not simply as one more arrogant claim of the me-generation, we have to claim that, even without a God to bestow them, those rights are somehow built into the very nature of reality,

into the structure of the universe. We have to claim that our world is the kind of place within which, independently of us, there are values and rules, more basic than human desires, from which we can derive legitimate expectations of "rights."

Therein, however, lies the rub. For some four centuries, we of the West have devoted much of our philosophic efforts to denying that the universe is that sort of a place. Starting at least with the Spanish colonization of the Caribbean, philosophy has been called upon to provide us with a conception of reality that would be consistent with wanting it all and wanting it now--and was willing to oblige. The 16th century Spanish physician, Gomez Pereira, first suggested that living beings are mere mechanisms unless endowed with an immortal soul by the Almighty God and the Church of Rome, enabling the conquisatores to exterminate the Taino Indians with the same easy conscience with which they clear-cut forests. Two generations later, a French soldier of fortune in the Imperial army that laid waste to the Czech lands, Renee Descartes or Cartesius, extended that formula to all reality. The universe became a place without rules more than ever.

In justice to Descartes, we ought to note that he was not himself a "Cartesian" in the sense which the term was to acquire in later usage. In his own thought, mental reality, the *res cogitans*, in which inhere all value and all moral order, was neither less than real nor private or arbitrary. As with Kant's noumenal realm, it is as universal as reason itself and as real as extensional reality. However, it was distinct. The reality accessible to our senses--and so accessible to the rapidly rising empirical sciences--was said to be solely an extensional reality, devoid equally of value and meaning, the *res extensa* which we would come to call "objective" reality. That reality, the world around us and even our bodies within that world were said to be an aggregate of objects in space, with no properties other than extension and no relation other than their mathematically describable interaction: things bumping into each other in predictable ways in space-time. So it would be an error to attribute to that

reality any value, meaning or moral order, much less rules that might constrain our arbitrary will--or ground any human rights.

Value, meaning, moral order there may be, to be sure--humans certainly speak as if there were. However, on the Cartesian scheme, they are not a part of extensional or "objective" reality. They belong to a wholly different order of being, that of the *res cogitans*, which much later we would come to describe as "merely subjective." For Descartes, that realm of being was still no less real than that of extensional reality. After all, it includes the one absolute certainty, the self-certifying I, the *Cogito*, as well as God, who for Descartes was still very real indeed. It is, however, an entirely separate order for which there is no room in the world of extension. The sciences which study that extended world--in later usage, the "objective" world--need have no recourse to the world of thought and value. Nor, conversely, does the study of the realm of the mental, of the *res cogitans*, have any relevance for the realm of extension. Plessy vs. Ferguson applies: the two are separate but equal.

Yet, as a later ruling would hold, separate is inherently unequal. For Descartes' heirs, very much including ourselves, reality came to be equated with the realm of the value-free, merely causally ordered realm of extension, the "objective" reality. The realm of the mental shrank to a "merely subjective" reflexion of that "real" world, and rather less than real itself. While the object world of causal relations in space-time came to be conceived as reality, the realm of meaning came to be conceived of as only "real for me," and the rhetoric of bifurcation persists to our day. "Subjectively," we may recoil from the devastation of Arctic ecosystems, but "objectively" there is oil there and we need oil: subjective sentiment may be a private privilege, but must not constrain objective reality. But if that bifurcation holds, can human rights be anything more than subjective sentiment?

Descartes' bifurcated vision of reality, to be sure, did not go unchallenged even in his own time. Already his great contemporary, Jan Amos Komensky or Comenius, rejected it, insisting that values, meanings and the moral order of the universe are no less a part of reality than extension of causality.

Comenius had reason to appeal to rights: he was an exile, driven from his devastated homeland by the armies in which Cartesius served. But others have taken up the theme--Goethe, Schelling, Masaryk, Husserl. Like Comenius, they remained voices crying in the wilderness. The consensus of modernity emerged as strongly Cartesian: reality is objective, value-free, simply there, while values are strictly private, a personal matter rendered public at most by consensus and convention.

The reason why the Cartesian model prevailed may not be altogether philosophical. That model has an obvious advantage: a value-free reality is one we can plunder and devastate without a second thought: it is, after all, only raw material. Anyone shedding tears over the devastation of a forest or the agony of non-human sentient beings is simply expressing a subjective preference, real only for him/her--must be a "nature lover." But the advantage has an obverse: the ways we treat each other, the rules of social interaction and the rights we can claim as human can, on this model, also be at best "subjective," a matter of private preference or of community consensus. Some people like picnics, others like pogroms: no accounting for tastes. For, on this model, humans, too, are "objectively" only raw material, whatever their "merely subjective" feelings.

Could it be that the recent interest in "human rights" is not just another expression of the arrogant greed of the me-generation but a desperate attempt to exempt humans from the universal rule of availability as raw material? If it is, it may be noble, but it is also futile. There is no basis for such a claim in the reality construct we accept as normative. A normative ethics--and the attempt to establish human rights as binding regardless of anyone's wishes--is possible only on the basis of a very different conception of reality, as value laden and so as morally ordered. We cannot do normative ethics unless we first do a very different metaphysics, learning to think of reality and of the universe as a place of values and rules from which we can derive human rights.

With that recognition, our inquiry becomes philosophical not only in an analytic or a descriptive, but also in a speculative sense. Can we generate a conception of reality which would do justice to all the evidence, including the

experience of transpersonal value and of a moral order of which human rights are a part, and do it without resorting to a *deus ex machina*? That is not simply a matter of tacking on a "subjective" addendum onto our conventional conception of "objective" reality the way school systems tack on a course in "values" onto a curriculum of physics or business management. Rather, it means setting aside our habitual assumptions about "objective" reality and "subjective" values and starting afresh, as perennial beginners, with what actually presents itself to us, seeing clearly and faithfully articulating its fundamental structure as it presents itself to us and only as it presents itself to us--setting aside our preconceptions about what is "really real" and opening our eyes to the reality amid which we in truth live.

A useful starting point for such an endeavor may be one evident yet largely ignored recognition--that the reality in and amid which we live is not "dead matter" but rather, initially and intrinsically, the interwoven, meaningfully ordered context of life. Life, purposive, active being, is an intrinsic and inseparable part to it, not a fortuitous addition which we could omit to avoid observer bias. The Cartesian value-free "objective" reality is a highly sophisticated construct, an abstraction. The world of our actual experience is very much value-laden and purposefully ordered. It is neither "subject free" nor "value free." It is permeated by subject beings--by self-directing, purposive life, by woodchucks, paramecia, trees, porcupines and, yes, human beings. We can never say of it that it simply is. From the start, it is also and always for subjects who have purposes, who value the world as serving them and as hindering them. We might well borrow the convenient term *Lebenswelt* to describe it, but for the unfortunate cluster of associated commonplaces it has acquired in English. The usual English translation of *Lebenswelt* is "life-world," a term no less usually taken to mean "the world of our experience," that is, the "world for us," world as we humans experience it. That, though, is still a Cartesian reading which treats the "life world" as our "mental" reflexion of extensional reality. The point here is that reality is <u>not</u>, as Descartes would have it, first extensional and only subsequently reflected in consciousness. Rather, the reality of our lived

experience is the meaningful context constituted by the presence of intending subjects, constituted intrinsically as life's world, the world of life, a whole defined and structured by the presence of life.

When we set aside our Cartesian preconceptions and set about seeing clearly and articulating faithfully, that is the first recognition: reality is a *Lebenswelt*, life's world, the world of life. That recognition in turn leads to another: as life's world, reality is not in the least value neutral or meaningless, merely extensionally or causally ordered. Simply in virtue of the subject's presence as purposefully acting being, long before any act of reflective cognition or preferential choice, reality not only is but means. Quite simply, because we humans are present in the world as organisms inhaling oxygen and exhaling carbon dioxide, airy places that include green plants and dank dungeons do not present themselves as value neutral--depends on what you like--but as definitely ordered. That order is not a matter of individual reflective interpretation or preferential choice: it is given, simply because we are what we are. Or again, because we are phototropic organisms, orienting to light, sunny places and dark caves are ordered in a non-arbitrary way, their value a relational reality, related to us, but in no sense "relative" in the sense of being an arbitrary "subjective" preference in a value free world. As life's world, the world is intrinsically value structured, simply in virtue of what we are as acting human subjects.

Nor, should we note, are we humans the only subjects. So are all living, purposive beings, endowing reality with a value structure in virtue of their presence. Grass is never simply a value-free *res extensa*: it is valuable just as the woodchuck's fodder. Nor is the sunshine that warms the sunflower ever just a wave or a stream of particles or whatever Dr. DeBroglie concluded. It is also good as it warms the sunflower and fosters its life, photosynthesis in turn sustaining all life. Where there is life, there is goodness and badness. A value structure--and, more broadly, a meaning structure--is an irreducible aspect of life's world. We may first become aware of it as human--what the world means for me or for us. Yet it is not a function of human consciousness or even simply of human presence, but of the presence of all subject beings. Husserl described it

as the *absolut fungierende Subjektivitat*.[1] The scholastics used a different language. *Esse qua esse*, they held, *bonum est*, *esse est bonum*, *bonum et verum*: being, the infinitely rich activity of all that is, the life of woodchucks and porcupines, of sunflowers and humans, is good simply in being, in the activity of being. Life is good because it gives rise to goodness.

When we come so to see the world we see it no longer as "objective" and value free, but as value laden and meaningfully ordered, as having a rightness of its own--or more abstractly, having an order of being. There is a rightness in the oxygen-rich mountain stream in relation to the rainbow trout: polluted water is not simply a "fact"--it is wrong. There is a rightness to the activities of the beaver as he sets purposefully felling birches, damming a stream and storing the young slash in the bottom against the winter. There is a rightness, too, to the freshet that washes out the dam, and to the parasites that control beaver populations. It is an ordered, value-laden world.

In the context of reality perceived and conceived of as a life's world, value-laden and meaningfully ordered, as having its rightness, we can speak of being as not only a fact but also a right--or a legitimate expectation that since we are, we need not justify our being and should not be hindered therein. The beaver can be said to have a right to a habitat in which he can assume his rightful place in the economy of life's world. So do the birches. For that is the basis of all "rights" which are neither earned by prior performance nor bestowed by a higher authority. They are an expression of the legitimate expectation of acting out a being's rightness of place within the order of life's world.

If we learn so to think of reality--and we do have the choice, just as we can think of it as a storehouse of raw material--then the idea of human rights ceases to be anything incongruous. For humans, too, no less than all other beings, have their rightness of place within the order of life's world. Like all other beings, they have their task. They can know truth, they can do the good, they can cherish goodness and grieve its passing, they can preserve life and heal

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[1] Hua VI. 265.

its wounds. It is not pointless to be human, any more than it is pointless to be a porcupine or a beaver, and it entails no less a right to be. And no more.

More formally, we can now supply the suppressed middle premise in what at the start of our inquiry appeared as a short-circuited argument. We had noted the common assumption that humans have a right to be simply because they are. Supplying the middle premise we would need to say, Humans are, there is a rightness to their being within the order of the cosmos, and therefore they have a right to be: the legitimate expectation, which need not be justified and ought not to be hindered, of doing what is distinctive to their way of being, knowing the true, doing the good, cherishing beauty. If we see humans not as alien conquerors of a meaningless world but as dwellers in a meaningful one, the idea of human rights no longer appears as arrogance but as a recognition of our place in the cosmos.

Yet in such a cosmos we are not the only beings who have a rightness and a right to be. The same meaning-structure which ensures our right to be at the same time circumscribes it with the right of other beings who are and have a right to be. In a cosmos so conceived, human rights, while solidly grounded, simply are not unlimited but contingent on a respect for the value structure of life's world. Specifically, the right we claim so confidently, to "life, liberty and pursuit of happiness", depends on the rightness of that life, on its harmony with the web of all of life, and cannot be used as a justification for the heedless destruction of all other life. As we establish the legitimacy of the idea of human rights, we raise, at the same time, the question of how those rights may legitimately be justified.

This is a difficult area, left largely unexplored throughout our Cartesian centuries. Even much contemporary discussion remains restricted to the question of establishing human rights--once established, its satisfaction is assumed to be unproblematic. Yet that is precisely where the problems arise. So as an instance, humans may claim a right to kill a buffalo for their sustenance. That is a part of their rightness, and, as the Zuni hunting song recognises, it is a part of the buffalo's rightness as well. That right, however, becomes a travesty

when we use it to justify William "Buffalo Bill" Cody's indiscriminate extermination of the entire species. Or again, in the rightness of their being, in knowing the true, doing the good, cherishing the beautiful, humans may have a right to draw upon the earth for sustenance, but not without taking account the rightness and so the "rights" of other beings. We can justify use, but, in a cosmos that has a rightness--and in which we alone we can say to have rights--can we ever justify conspicuous consumption? A right to mobility, perhaps, but can that right conceivably justify private automobiles that get 18 miles a gallon when both public transportation and 50 mile per gallon technology are available? Or, more basically still, can the human right to life be extended to justify overpopulating the globe and driving other species to extinction? A right holds as long as it expresses a rightness: what are the limits of human rightness?

That, I would like to suggest, needs be the agenda for future debates about human rights. What are the limits of human rightness? Human rights, we have sought to argue, are no more than a smoke-screen for human avarice unless they are grounded in the recognition of the value of all being and in the rightness of being human in a value laden, morally ordered cosmos. Within such a cosmos humans can claim the right of their special role. But that role is not simply one of perpetuating the species and subduing the earth--that is a claim to conquest denying the very idea of rights. It is, rather, the role of knowing the truth, doing the good, cherishing beauty--and, most of all, of knowing and respecting the rightness of the cosmos.

And so, in concluding, I would suggest that while there may be a great many people for whom the question of human rights is one of securing the minimal conditions of <u>human</u> survival, of the rightness of being human, not simply surviving as a organism from day to day, for us the question needs be different. We are members of an incredibly privileged and very, very narrow segment of humanity and of life's world, greedily consuming a wholly disproportionate share of the earth's resources. For us the question needs be that of the limits of our rights, of obligations to the rest of the cosmos. For, if our analysis has any merit, if we are not willing to recognize the limits that the rights

of other beings impose upon our rights, we shall have no grounds on which to claim any rights in our own behalf.

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Plotinus on Matter

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The elusive principle of matter in Plotinian metaphysics is a difficult one to grasp, for its character lies both outside of being, and outside the activity of knowing. It is dark and indefinite, never making an appearance before either sensible or intellectual sight, yet constantly impinging upon the human soul as deceptive cause of appearance in a false reality. Matter is a merely negative metaphysical principle, unreasonable and unintelligible in itself. If this negative characterization were complete, our problem of exposition would remain a relatively simple one, for although the principle of matter may not indicate anything metaphysically real or noetically intelligible, at least the doctrine as such is clearly expressed and understandable. Discussion of matter as conceived by Plotinus would then tend to focus upon the principle in relation to other metaphysical principles, with an eye toward clarification of that relation within a consistent metaphysical structure. Our present task is less ambitious, for the Plotinian doctrine of matter is neither obviously easy, nor obviously consistent; and one must first become clear concerning the correct exposition of the principle itself, before proceeding to the relation between that principle and the more dominant principles which are abroad in Plotinus' cosmological hierarchy. In attempting to understand what Plotinus means by "matter," we are confronted not merely with the elusive and changeable character of matter as negation, but also with the ambiguous and equivocal senses which Plotinus seems to assign to it. Much of what is said about matter is treated in Ennead II.4, indeed it is here that we encounter a proper presentation of the doctrine of matter. However, it is here also that the problem for our understanding of the principle arises. Thus, we shall presently set forth the Plotinian doctrine of matter as it stands in II.4, before turning to a related text, throwing into relief the major problem which is

in need of solution here, and which will in turn perhaps suggest a solution to that problem.

Matter is by definition recipient of formal qualities, not merely in physical bodies, but also in the Ideal Realm. The presence of matter in the physical order is a well-established postulate of metaphysics, posited in order to account for the inherence of changing forms in material bodies. Matter in this sense would appear to play a similar role as matter for Aristotle: it is posited, not virtually apprehended, as the substratum which underlies sensible qualities. Although not strictly known as an intelligible structure, matter as the substratum for material qualities possesses an unchangeable nature as the recipient of form, separable and distinct from form in order that it may be receptive to all form and not exclusive to some. The similarity in this respect to intelligibility breaks down rather quickly however, for its unchangeable nature, this capacity to be all-receptive, is to be formless and shapeless, and hence, unintelligible. In the *Timaeus*, Plato insisted upon both characterizations, for the Receptacle, the substratum upon which the world of becoming makes its appearance, partakes in some odd way of intelligibility, while at the same time remaining unknowable, or "known by a bastard sort of reasoning, and hardly an object of belief."[2] This language is adopted and appropriated by Plotinus in his discussion of matter, which is indestructible, simple, and incorporeal, while resisting positive characterization as something definite and real. This ambiguity leads to epistemological difficulties, of which Plotinus is eager to warn us: for

> since matter itself does not remain shapeless, but is shaped in things, the soul, too, immediately imposes the form of the things on it because matter's indefiniteness distresses it, as if it were in fear

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[2] Plato, Plato's Timaeus trans. by Francis M. Cornford (New York: Macmillan Publishing Company, 1985) 53 (51b-52b).

> of being outside the realm of being and could not endure to stay for long in non-being.[3]

Thus, we must be careful in our discussion concerning matter, that we may refrain from seeing in matter that which we ourselves, as ensouled beings with intellection, may wish to find, or cannot help putting there.

Matter so characterized should lead us to expect that its presence be confined to sensibility alone, indeed to the very margin of being where the flux of sensibility appears to slip away into constant mutability and non-being. The apparent contradiction which is matter would thereby remain in isolation, separate from true reality; and if we are unable to understand its apparent infringement upon being, at least we may keep its power in exile and flee from its confusion toward the light and safety of intelligibility and rationality. However, despite its fugitive nature, Plotinus finds it necessary to posit matter in the realm of the Forms, as that "which underlies the forms there and the incorporeal substances."[4] There are a number of related difficulties with such a position, which are met cursorily by Plotinus. Foremost is the opposition of natures which would seem to prohibit such a coupling, for matter is utterly indeterminate and multifarious, whereas the Ideae are completely determinate and wholly unified. Both natures derive from separate and contradictory metaphysical origins, the Ideae from the realm of eternal being, matter from the ever-changing sphere of non-being. Such a combination would be unacceptable, for the introduction of matter to the realm of Forms would destroy the simplicity

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[3] Plotinus, Ennead II, English trans. A.H. Armstrong, Loeb Classical Library (Cambridge: Harvard University Press, 1966) 129, (Ennead 2.IV.10). I have used Armstrong's translation of Plotinus' text throughout the present article, and have indicated the particular tract in which the citation might be found following each note.

[4] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 109 (Ennead 2.IV.1).

and unity of being which is the ground of the eternal nature of the intellectual principles, by generating a body in which the Ideae would then reside.

These objections are met not by a denial of the implications of such a coupling, but by denying that such a coupling obtains at the level of the Forms: Plotinus merely denies to the matter of the intelligible realm characteristics which would be foreign to its eternal nature of being. Plotinus offers a clarification of what is meant by matter here; its nature is neither impermanent nor is its origin temporal. Matter in the Ideal realm enjoys the same metaphysical standing as do the Ideae themselves, introducing no division while maintaining an identity with the whole divine order. But what then is the function of matter there, and what is its precise relation to the Ideae? The answer lies in its shapelessness, the only characteristic shared in common with physical matter, which thereby allows it to act as recipient to each and every Idea. Such a principle is necessary in order to secure a unity among the distinct Forms, a distinction which derives from the peculiar shape borne by each. This comparable function warrants our calling the substratum of both the intelligible and the sensible realms by the same name of "matter." It is interesting to point out in passing that the character of matter in the intelligible realm of Ideal-Form comes surprisingly close to that of the One--a unity without shape residing in eternal simplicity. Of course, the One is also causally efficacious in generating the entire cosmos, from intelligence to soul to sensibility, a characteristic which is hardly implied in the idea of receptivity. At any rate, although perhaps it is not admissible to identify intelligible matter with the One, they are, as we shall later see, very closely linked to one another.

The argument for the presence of matter on the realm of Ideal-Form depends upon the necessity of positing a recipient in which those Forms may reside. The same type of reasoning leads to the positing of physical matter, with, however, an important difference. Because of the immutability of Formal matter, the reasoning which leads to its positing is not of a spurious nature, for reason can rest in the permanence of unity which matter there maintains. This is not the case in regard to sensible matter, for the indeterminacy of matter produces a

ceaseless flow of changing forms upon it, rather than the seat of unity for distinctive Forms. However, the point of comparison between Formal and material matter is secure enough in Plotinus' mind to indicate a positive identification of the two, dependent upon a similarity of structure. For, "if there is an intelligible universal order There, and this universe here is an imitation of it, and this is composite, and composed of matter, then there must be matter There too."[5] We shall have occasion later to draw upon Plotinus' metaphor of the image in illustrating the parallel structure which obtains in regard to the realms of the intelligible and sensible; for now it is enough that such a metaphor draws our attention to the similar role which matter plays in each realm, despite the tremendous gulf of difference, both epistemologically and metaphysically, which separates the two matters. What we can safely say about matter at this point is that it is a recipient, of either Form (intelligible) or form (material).

Thus for Plotinus there are two matters, one of a unified nature eternally derived, the other of a divisive nature temporally derived. It is surprising to find the former type of matter being posited by Plotinus, despite the many qualifications which are intended to reconcile the apparently conflicting elements involved in the compound of matter and intelligible Form. And the latter type of matter, in its fully elaborated formula, is rather confusing, for it is unclear whether sensible matter is positively something within being, or completely outside being as absolute negation. For matter appears to play a dual role in Plotinus--posited as providing a substratum which accepts sensible forms, while remaining completely separate from all form, and hence, remaining outside of being entirely. The presence of matter on the intelligible level most clearly draws attention to this difficulty. We have seen in brief outline the reason for positing matter as recipient, beginning with the material world and rising to its intelligible counterpart. In Ennead II.4, the order of presentation is reversed. Here we find the discussion of that higher matter preceding its lower

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[5] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 113 (Ennead 2.IV.4).

parallel form precisely in the order of proper ontological priority. This ordering is not accidental, for the discussion of matter in the Ideal realm sheds light on our understanding of sensible matter, just as the divine Form of beauty shines through and illuminates visible bodies, thereby radiating that beauty which is present on the level of sensibility. Let us turn again to the more familiar world of sensibility for a fuller account of the Plotinian doctrine of that matter which subsists in the state of constant flux. The difficulties of the position will then emerge with greater clarity, after which we shall be able to call upon the curious doctrine of intelligible matter as a clue to solving the problematic and confusing nature of sensible matter.

The evidence for the existence of matter in body is to be found in the phenomenon of changing formal qualities in the sensible world. The appearance of one quality changing into another, witnessed by the process of decay, does not imply the passing of body from being into non-being, but rather the change of one bodily form into another. This analysis applies to body considered as such, the body of the cosmos in general, not body as belonging to this particular being. Such process of change implies a receptive base which accepts such forms, but is not those forms themselves, for it must be capable of receiving all forms without restriction. Matter is therefore without quality, a continuously indeterminate base which excludes no form from its receptivity. Matter is not a body: "since we say that it is the matter of all sense-objects and not the matter of some . . . we should not attribute to its nature any one of the properties which are observed in sense-objects."[6] It is incorporeal, one continuous unformed substratum, distinct from sensible qualities yet giving rise to the appearance of those qualities. Matter is distinct from mass and magnitude, which possess limit and determination, and hence derive their being from intelligibility. "It is not the case that quality is a rational formative principle and quantity is not, since

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[6] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 123 (Ennead 2.IV4).

quantity is form and measure and number."[7] Hence, it is a mistake to call matter a "this," for it lacks particularity, quality, determination, all that would allow of its being apprehended by an act of intellection or sensation. The dubious metaphysical status of matter makes it unknowable and unapproachable through rational apprehension, an implication we should expect from a formalistic metaphysics like that of Plotinus. From this side of being, matter is "beheld" in an intellectual vision without reference, acknowledged but not apprehended in perception as the underlying stuff in which and through which qualities appear. Matter is known, "in a sort of thoughtlessness."[8] It is something distinct from all sensible quality, for it is cognized not through sense perception, but through thought of a spurious nature. The positing of matter is reasoned to, yet matter is not itself apprehended in an act of reasoned intellection.

At the outset of this discussion we suggested that matter for Plotinus performed one of the same functions of matter for Aristotle, i.e. that of providing a substratum underlying formal qualities, "which in itself is not stated as being the whatness of something, nor a quantity, nor any of the other senses of 'being.'"[9] Indeed, this does seem to be consistent with Plotinus' position, for he is at great pains to make it clear that matter is something completely different from formal qualities. Furthermore, matter is not to be identified with mass or extension or corporeality, for matter precedes place and space as a necessary condition for body. However, although it is a *sine qua non* for body, it is not to be identified with body, nor does it share in body as such. For "even corporeality does not belong to it; for if corporeality is a rational formative principle it is

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[7] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 125 (Ennead 2.IV.8).

[8] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 127 (Ennead 2.IV.10).

[9] Aristotle, Aristotle's Metaphysics trans. by Hippocrates Apostle (Grinnell, Iowa: The Peripatetic Press, 1979) 110 (1029a20-2).

different from matter, and so matter is something else; but if corporeality has already come into action and is so to speak mixed, it would clearly be body and not matter alone."[10] Matter is to be divested of all association with the faculties of sensation, for herein only sensible qualities are apprehended. This absolute formlessness reduces matter to a principle of otherness; its manner of being lies in its negative relation to other things possessing being and form, for its whole character derives from "being other than they."[11]

Before proceeding with our explication of the text of Ennead II.4, a further comparison of the Aristotelian doctrine of matter with the position taken up by Plotinus is in order. For Aristotle, matter is linked with substance, at least in potency, as a principle of differentiation among distinct particular beings, for "all sensible substances have matter." And the sense in which matter is said to be the underlying subject, is the sense in which matter can be said to be a "this," indicating a separate substance in potency.[12] As such, matter plays a prominent causal role in the determination of individuality for Aristotle, operating as an underlying material cause. Plotinus departs radically from this position, for matter derives its divisibility not from itself but from the principle of difference; matter is continuous and unified in its shapelessness and formlessness. Matter is not a principle of individuation, for just as the distinct Ideae derive their individuality from their own particular Formal structure, and not the underlying matter, so also do the individual beings of the sensible world derive their identity.[13] Thus, matter for Plotinus plays no role in the differentiation of

[10] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 137 (2.IV.12).

[11] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 141 (Ennead 2.IV.12).

[12] Aristotle, Aristotle's Metaphysics trans. by Hippocrates Apostle (Grinnell, Iowa: The Peripatetic Press, 1979) 137 (1042a25-8).

[13] Cf. Plotinus' general discussion on the Ideal origin of individuals, in Ennead 5.VIII.

particular members of a species, for matter has no relation to substance in providing a ground for the identity of individuals. Ideal Form, not matter, is the principle of individuation. Therefore, one of the major functions attributed to matter in Aristotelian metaphysics is denied by Plotinus, for reasons logically distinct from those which required the positing of matter as a principle of receptivity.

The question which Plotinus now raises is a fairly obvious one, given the previous characterizations of matter as completely lacking in form and substance: is matter to be identified with privation and non-being? Plotinus attempts to answer this question by way of definition and abstraction, focusing upon the relation between matter and privation in so far as privation is an instance of non-being. The discussion here in II.4.14 is baffling, for both terms resist identification and precise formulation, while at the same time Plotinus' treatment of the problem is not as clear as the reader would hope. However, an instructive distinction does arise, which may be summarized as follows. Neither matter nor privation can be known in a positive apprehension of form or quality, but are posited as an unactualized potency, as the absence of some existent quality or property. In a very clear sense, it does seem that sensible matter and privation follow upon one another, but that privation is assigned to beings through the apprehension of a particular lack, e.g. blindness in the eye, whereas matter is an attempt to indicate a more pervasive substratum underlying body as a whole. Drawing upon a brief remark on the cause of ugliness, presented in a different, though not wholly unrelated context, it would appear that for Plotinus the presence of matter, synonymous with the lack of intelligible form, is responsible for all deformity. Matter exercises its power in obscuring the formative principles of the individual, though "even there the perfect formative principles are present, hidden but given as wholes."[14] Thus, privation is to be considered a localized instance of the presence of matter. For "if privation, by

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[14] Plotinus, Ennead V (Cambridge: Harvard University Press, 1966) 227 (Ennead 5.VII.2).

being indefinite and unlimited and without qualities, is the same thing as matter, how do the definitions still remain two?"[15]

The problem of the metaphysical reality of matter, as we have seen, has been transposed into the language of potency and act. It would serve us well therefore, before returning to the remaining passages in II.4, to turn now to Ennead II.5 and Plotinus' treatment of potentiality and actuality. Plotinus' understanding of the relation between potency and act derives from a structure of metaphysical priority. A thing in potency looks forward to what it is to become in actuality, without which there can be no potency. Potentiality is temporally prior to actuality in beings, though in the metaphysical order actuality precedes potentiality. We say that a thing is predisposed to becoming something else in the future, which presupposes the actualized form as present potentiality. Potentiality resides within the realm of being, for not only does it possess the power to actually become something, it must also possess a definite character which bestows this capacity. Therefore, a thing is potential in respect to a particular form which it does not yet possess, but it does possess another form in actuality which makes it capable of becoming something else. Plotinus here likens potency to a receptive substratum, without efficient causality, but nevertheless possessing a cooperative power within the actualization process.

Plotinus next raises the question of what becomes of potentiality in its actualized state. An answer to this question will allow us to see whether matter "exists potentially in relation to the things which are given shape and is something else actually, or whether it is nothing actually."[16] There are two possibilities: 1) the potentiality is taken up into the actuality, in which case we have one being attaining to another form of being; 2) an actual being takes the place of a distinct potential being, in which case actuality and potentiality are

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[15] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 143 (Ennead 2.IV.14).

[16] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 159 (Ennead 2.V.2).

predicated of two different subjects, and the potentiality does not become the actuality. The difference between these two possibilities is important, for in the former case matter as potentiality is unformed form, which becomes form in actuality, whereas in the latter case matter is merely unformed, never becoming form in actuality. It is the difference between a being with form, and non-being. Matter disposed to actualization exists as a (posited) substratum which is informed in order to bring something into actuality. Each particular thing, as a compound of matter and form, owes its existence as that thing to form, as "the actuality of this particular thing."[17] This requires a potentiality which is disposed to such form positively, an actually real potentiality which possesses being. Potentiality owes its future actuality entirely to form, and is in some sense continuous with that form in the order of being. For Plotinus, actuality is form; all actuality must be explained in terms of form. Whatever actuality is possessed by a being derives from form, whatever potentiality is possessed by a being derives from lack of form, which is the presence of matter. Therefore, a potential form which becomes actual is identical to that actual form, and in potency, this we call "matter," for it is the presence of matter which is its potentiality. Matter which remains in mere potency is no form at all, for its actuality can derive only from form. Thus, the term "matter" is used equivocally across the relation of potentiality and actuality, but it is used univocally in so far as it is applied to being or non-being separately. This is because potency and act for Plotinus describe the way in which a non-being comes to have being, through the presence of form. A difficult position, but it is consistent with what is to follow in our remaining discussion of matter, as well as, I think, that which Plotinus sets forth consistently throughout the *Enneads*.

We now ascend to the realm of the purely intelligible, where no division between potentiality and actuality resides, for no such process obtains on this level of being. Intelligible matter possesses no potentiality, for it is wholly form

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[17] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 161 (Ennead 2.V.2).

and is in no process of becoming or taking on the form which it is to become. The difference between the intelligible realm, and the realm of discursive knowledge and sensible compounds, lies in the distinction between an actual existent and an actuality. The latter derives its actuality from a prior existent form, which makes it what it was to become. The former is actually form, for it needs nothing prior to itself in order to make it what it was to become. Indeed, this is a misleading way of speaking, for Form is already an actuality. "For potential existence wants to be brought to actuality by the coming to it of something else, so that it may become something actually, but that which has itself from itself unchanging identity, this will be actuality."[18] We thus assert the same Plotinian proposition: actuality is Form.

The priority of actuality over potentiality is the priority of form over matter. We must trace all potency which becomes actual to form, for form is that which possesses actuality to the highest degree. "Everything else, then, which is potentially something, has actual existence as something else; and this something else which already exists is said to exist potentially in relation to another thing."[19] The appeal to intelligible matter, the point at which, as Plotinus says, "this preliminary discussion was directed,"[20] made clear a line of continuity which obtains between potency and act, matter and form, in so far as both terms are held within being. Matter is posited as the substratum of Forms in the intelligible order: its nature bears no trace of potency, for it is fully actualized being. The realm of becoming is a compound of potentiality and actuality: it is here that a lack of form resides, although it is not a complete lack. For becoming

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[18] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 165 (Ennead 2.V.3).

[19] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 165 (Ennead 2.V.4).

[20] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 161 (Ennead 2.V.3).

has a future, a potential to become a further actuality by obtaining a form which is not yet manifest. Matter is present as actuality in the intelligible order because it has already become all Forms at once. Matter is present as potentiality in the generated order because it has become only a particular form here, a particular form there, but not all forms all at once in a unified way, though it is potentially this all-embracing recipient. All that it does possess of actuality and intelligibility derives from form, and that which it lacks is due to the presence of matter, which is merely potentially form.

We are now in position to decide the metaphysical standing of matter. Matter is not potentially one form through possessing another distinct form; matter is defined as being potentially all forms, and therefore nothing in actuality. It is not in any way an existent thing, for it does not partake of the forms which come to be in it. Matter is neither an actuality nor a form; matter has no relation to the intelligible realm, nor the image of that realm which is generated, for it has no eternal being and no future being. Matter is in the curious position of standing as substrate to all things; as pure potentiality "its potential existence is not being something, but being potentially everything; and since it is nothing in itself--except what it is, matter--it does not exist actually at all."[21] It is distinct from the realm of becoming in that it does not possess the potentiality of being informed by any particular form, since it lacks all form whatsoever. Plotinus, in a clear and succinct passage, summarizes the history of matter which shall always remain what it is--nothing:

> It was not anything actually from the beginning, since it stood apart from all realities, and it did not become anything; it has not been able to take even a touch of color from the things that wanted to plunge into it, but remaining directed to something else it exists potentially to what comes next; when the realities

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[21] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 167-9 (Ennead 2.V.5).

> of the intelligible world had already come to an end it appeared and was caught by the things that came into being after it and took its place as the last after these too. The being of matter is precisely its non-being, for it always is nothing actual, and hence, a completely non-existent thing. Even in its origin it is derived from what is not, and what it will never be.[22]

Let us return now to the remainder of Ennead II.4, which is devoted to discussing matter under the aspect of its essential unlimitedness. For matter in principle is opposed to rationality and being, the seat of limit and order: "matter is not something limited, nor is it limit," it "is the unlimited."[23] However, the point at which we would least expect Plotinus to introduce such a principle into the realm of Forms, we find him pointing to the presence of the unlimited in that intelligible realm. Matter there derives "from the unlimitedness or the power or the everlastingness of the One; unlimitedness is not in the One, but the One produces it."[24] Previously in this paper we had introduced a similar comparison between intelligible matter and the One in regard to the characteristic of unity; here we find Plotinus explicitly drawing a connection between the unlimitedness of intelligible matter which derives from, though is not identified with, the One. Surely the unlimitedness of intelligible matter differs from that matter which has no being, but in what manner? Plotinus responds thusly: "They differ as the archetype differs from the image."[25] In this case, the matter of the intelligible

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[22] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 169 (Ennead 2.V.5).

[23] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 145 (Ennead 2.IV.15).

[24] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 145 (Ennead 2.IV.15).

[25] Plotinus, Ennead II (Cambridge: Harvard University Press, 1966) 145

realm mirrors the matter of non-being. For intelligible matter serves the same function of purely potential matter in securing a substratum for Form, in this respect "imaging" its respective nature. However, this point of comparison obtains beyond the metaphysical spectrum of being, for the two types of matter are separated by the most fundamental metaphysical ground: being itself. There really are two matters, but they are substrate for such diametrically opposing natures that their manner of mirroring one another indicates their complete opposition to one another. The receptive nature of intelligible matter, its unlimitedness, consists in its ability to actually be all Forms at once, as the ground of unity for all Ideae. The receptive nature of matter in pure potency, its unlimitedness, consists in its incapacity to actually become any form whatsoever, even sensible form, for it is completely opposed to all Ideae and all intelligibility. Potentially, the two appear as identical, for they both strive to encompass all being in one transcendent act. Actually, the two are contraries, not in regard to genus or species, but in regard to what is, being. Intelligible matter is so completely actual that it meets with complete metaphysical success in attaining to being, whereas non-intelligible matter is so utterly lacking in actuality that it meets with complete metaphysical failure in attaining to being.

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(Ennead 2.IV.15).

Foundationalism Defended*

Olaf Tollefsen

I

I take the classical version of foundationalism (hereafter, CF) to be the doctrine that human knowledge is possible only if it rests finally on incorrigible truths, i.e., if it is not possible that there be incorrigible truths known as such, knowledge generally is not possible; mere belief is all that anyone can have. CF is thus opposed to two other sorts of doctrines about knowledge: scepticism, the claim that nothing more than mere belief is possible; and a variety of other doctrines which have in common the claim that knowledge is possible without so strong a foundation as CF requires. Although I shall discuss both kinds of alternatives to CF here, I shall do no more than sketch out the considerations which lead the proponent of CF to reject the weaker anti-sceptical positions. My main concern here will be with the sceptic's attack on CF, and, in particular, with those arguments specifically intended to show that it is not possible to know infallibly (or, with complete certainty) that one knows an incorrigible truth. If those arguments were sound, it would follow that one could not be certain that one knows an incorrigible truth, and hence that one could not be certain that the truth was incorrigible, which amounts to saying that so far as the knower is concerned, there are no incorrigible truths. My aim is to show that these arguments fail.

*This article is published posthumously. The footnotes are unavailable. We have retained the numbers in the text where the footnotes were to be inserted.

II

I begin, however, with some brief observations about those positions which purport to avoid scepticism without requiring for knowledge foundations as strong as those the proponent of CF claims are necessary.

Some such positions are nothing more than redefinitions of cognitive terminology, and are consequently beside the point as they do not address the issue of whether knowledge, in the sense of that term used by the proponent of CF, is possible. In such positions, "knowledge," "truth," "evidence," and other cognitive terminology is redefined so as to avoid various difficulties in traditional attempts to establish and explain the possibility of knowledge. Thus Mary Hesse defends a form of relativism as a hypothesis which (she alleges) provides a more plausible account of "what we call knowledge" (especially scientific knowledge) than does a more traditional, realist epistemology.[1] In the course of her defense she responds to several standard objections to relativism, including the objection that relativism is self-refuting. The objection is that the assertion of relativism is itself a knowledge-claim, and, if relativism is true, no such claim can be cognitively justified. In sum, if relativism is true, there can be no grounds for believing it to be true.[2] To this Hesse replies that the objection is beside the point, for relativism implies the redefinition of the cognitive terminology employed in stating the relativist thesis; the relativist's claim to know that relativism is cognitively warranted cannot be understood in terms of non-relativist conceptions of knowledge and truth.[3]

Now, if Hesse is to be taken seriously, her claims are irrelevant to the proponent of CF, as he is concerned to show that knowledge, in a non-relativist sense, is possible. Thus the assertion of relativism in appropriately redefined cognitive terminology is not a denial of CF; what the relativist affirms is not the contradictory of what the proponent of CF asserts.[4] Hence positions of this sort can be safely ignored in the context of the present discussion.

There are, however, many versions of the position that no incorrigible foundations are required for human knowledge. Proponents of such positions seek to show that our ordinary and corrigible knowledge-claims can resist the attacks of the sceptic; if they succeed in that project, then CF is clearly wrong in what it claims is necessary for the possibility of knowledge.

The sceptic attacks positions of this sort with a version of the criterion argument. Consider my belief that at this moment there is a cup of tea on my desk. I not only believe this to be so, I claim to know that it is so; I make that claim because I see that there is a cup of tea on my desk, because I remember placing it there, and so forth. Granted I could be wrong; neither my vision nor my memory are infallible. But I have no reason to think I am wrong; I know of no fact which suggests, never mind shows, that either my vision or memory have failed in the present case. Hence my belief that there is a cup of tea on my desk seems to be cognitively justified. The mere possibility of error is hardly a justification for thinking error has occurred, nor does it justify any significant degree of cognitive uncertainty about my belief. To be seriously in doubt about whether there is a cup of tea on my desk in the face of substantial evidence for that belief and no evidence to the contrary seems to be simply irrational.

But to this the sceptic has a response. He can point out that my belief that there is a cup of tea on my desk presupposes the truth of other beliefs about what counts as evidence for and against beliefs about the world I perceive; my confidence in the truth of my belief about the cup of tea depends upon that belief satisfying certain truth-criteria. And those criteria, the sceptic will claim, stand in need of some kind of cognitive justification. Otherwise my claim to know that there is a cup of tea on my desk will rest finally on a mere belief--the truth-criterion my belief that there is a cup of tea on my desk has satisfied--and, given that a belief cannot be cognitively stronger than the grounds which justify it, my belief that there is a cup of tea on my desk will itself be no more than a mere belief. But any attempt to justify the relevant truth-criterion will require an appeal to yet other truth-criteria, and they in turn will require justification, and so on *ad infinitum.* In the end, I cannot justify any of my beliefs, for I cannot

stop the regress without making the ultimate foundation of my system of knowledge-claims a mere belief.

The argument is a familiar one and I do not wish to belabor the point. It is also relatively easy to answer the argument in the form in which I have put it, for on the face of it it is nonsense to suppose that I can both understand what it means for there to be a cup of tea on my desk and not know what would count as evidence for or against that belief.[5] But that does not give the sceptic his due, as Descartes understood so well. The sceptic really has something more serious in mind than I have so far given him credit for: *suppose the world just isn't intelligible in the way presupposed by my understanding of what it means for there to be a cup of tea on my desk*?

What gives this supposition weight is that my very understanding of what it means for there to be a cup of tea on my desk--not my belief that that is the case--presupposes that a number of my more fundamental beliefs about the world are true, for if they were false, then the very concepts I employ in framing my belief that there is a cup of tea on my desk might fail to refer to anything that is really there in the world. In other words, what if my fundamental ontology is unsound? What if there is no world to which concepts such as *cup*, and *desk*, and *on top of* can be fit in the ways presupposed by my belief that there is a cup of tea on my desk?

This is of course only a sketch of an argument, and I intend it only to suggest the kinds of considerations which lead the proponent of CF to reject weaker anti-sceptical positions. The problem, simply put, is that the weaker anti-sceptical positions seem too weak to exclude cognitive relativism. Since they allow that the foundations of one's system of knowledge-claims are corrigible, it seems they must also allow that it is possible that there are many coherent but conflicting sets of possible knowledge-claims, and no trans-systematic criteria for judging the merits of these different systems.[6] And for the proponent of CF relativism of this sort is a form of scepticism, for it allows that even both members of a contradiction can count as knowledge if they are asserted in different systems of beliefs.

III

If considerations of this sort are ultimately sound--I do not claim that the previous analysis shows that to be so--then CF seems to be the only alternative to scepticism. Hence I move to the central problem of this paper: the defense of the claim that there are incorrigible truths which can be known as such. If that claim is true, then such truths would establish (at least in part) the fundamental ontology needed to determine what other beliefs it is rational to think can, when properly confirmed, count as knowledge. I begin my defense of this claim by once more considering the criterion argument.

In the case at hand, it is the claim that incorrigible truths can be known as such, i.e., known to be incorrigible, that is the immediate target of the criterion argument. The argument runs like this.

It is possible to be mistaken in one's belief that one knows an incorrigible truth.[7] If so, then any such claim must be justified by showing that it satisfies some criterion of knowing an incorrigible truth. However, that criterion must itself be either an incorrigible truth known as such, or derived from such a truth. Otherwise one's belief that one knows an incorrigible truth would be corrigible, and so too would be the alleged incorrigible truth, for one would lack cognitive certainty about the validity of one's criterion for knowing an incorrigible truth, and, consequently, about the results of its application. Now, if the proposed criterion for knowing an incorrigible truth as such is alleged to be itself an incorrigible truth known as such, then it is possible to be mistaken about it, and some further criterion of knowing an incorrigible truth as such will be required to establish the credentials of the first such criterion proposed. But the same difficulty will recur; this horn of the dilemma leads to an infinite regress and no criterion of knowing an incorrigible truth as such at all. The other horn of the dilemma, that the criterion of knowing an incorrigible truth as such is derived from an incorrigible truth known as such, either leads to the same infinite regress or to a vicious circle. To avoid the infinite regress, it must be

claimed that the proposed criterion, derived from an alleged incorrigible truth known as such, just is the criterion which shows that the truth from which it is derived is an incorrigible truth known as such. But that is hopelessly circular. Hence no one can know that they know an incorrigible truth as such.

The straightforward reply to this argument is to show that no criterion of knowing an incorrigible truth as such is necessary, because if one did know an incorrigible truth as such, one knows that one knows it as such, and one knows that one cannot be in error. In order to make this case, however, an analysis of what is meant by "incorrigible truth" is needed first.

I define an incorrigible truth as a proposition known to be true, and about which one also knows that no cognitive doubt of its truth is possible. By cognitive doubt I mean having a reason for thinking a proposition false, and I define the possibility of cognitive doubt in this way. I understand "true" and "false" here in a semantic sense, i.e., a true proposition is one which picks out a state of affairs which is actually the case; a false proposition is one which picks out a state of affairs which is not the case.[8] Thus cognitive doubt is possible in any case in which a proposition picks out a state of affairs such that the necessary conditions for that state of affairs being the case are not given in that state of affairs itself, and are not otherwise known to be the case. Cognitive doubt is also possible when the necessary conditions for the state of affairs being the case are given in the state of affairs itself, but are not understood to be so given. Propositions which pick out states of affairs of these kinds (under the conditions of knowing specified) are corrigible; one knows that, *given what one knows about the relevant state of affairs*, one could be wrong about the truth of such propositions. Conversely, then, an incorrigible truth is a proposition which picks out a state of affairs such that the necessary conditions for that state of affairs being the case are given in that state of affairs itself, and are recognized as being so given. In short, an incorrigible truth is a necessary truth known to be necessarily true.

It follows that if there are any necessary truths, and if someone knows such a truth to be necessarily true, then he can also know that he cannot be in

error, i.e., he knows no cognitive doubt about that truth is possible. Necessary truths cannot be false; if one knows that a truth is necessarily true, one knows that there can be no factors which would justify cognitive doubt about that truth.

Of course this argument doesn't show that there are any necessarily true propositions, nor does it show that anyone knows any necessarily true propositions as such--two points the sceptic will be quick to make. It is the second point that is the real issue, for if it is true that someone does know a necessarily true proposition as such, there is no question about whether there are such propositions. And if it is false that anyone knows a necessarily true proposition as such, no one could show that there are any necessarily true propositions; any such argument would rest on premises subject to cognitive doubt, and would thus be open to the usual sceptical objections. So the issue seems to be whether it can be demonstrated that someone knows a necessarily true proposition as such. And this the sceptic will deny for the following reason.

The proponent of CF must grant that it is not necessarily the case that anyone know a necessarily true proposition as such, and hence that propositions of the form, "X knows a necessarily true proposition as such" are not incorrigible truths. Since every claim to know an incorrigible truth as such either presupposes or implies a proposition of the form "X knows a necessarily true proposition as such," then every claim to know an incorrigible truth as such is itself corrigible, and so too are any alleged incorrigible truths. That is, if a claim to know an incorrigible truth as such presupposes the truth of the relevant proposition of the form "X knows a necessarily true proposition as such," then since that proposition could be false, so too could the claim to know an incorrigible truth as such. Alternatively, a claim to know an incorrigible truth as such implies the truth of a proposition of the form "X knows a necessarily true proposition as such," then since that proposition could be false, so too could the claim to know an incorrigible truth as such (by *modus tollens*). In either case, the claim to know an incorrigible truth as such will itself be corrigible, and, hence, so too will be the truth which is alleged to be incorrigible.

This particular problem is nicely illustrated by Descartes' claim that whenever he entertains (or doubts, or affirms, or denies) the proposition "I exist," he knows infallibly that he exists. Now, the proposition "Rene Descartes exists at time **t**," where **t** is that moment at which Descartes is contemplating the proposition "I exist," is certainly not necessarily true. Yet its truth does seem to be presupposed by Descartes' claim to know infallibly that he exists at **t**, for if it is false that Descartes exists at **t**, then it is certainly not true that he knows--infallibly or otherwise--that he exists at **t**. And, since the proposition "Rene Descartes exists at time **t**" can be false, it is corrigible, and so too is Descartes' claim to know infallibly that he exists at **t**.

Of course it is odd to talk about the possibility of Descartes' non-existence at the moment he is entertaining a proposition, but I shall leave that difficulty aside. Instead I propose to respond directly to the sceptic's claim that the preceding argument undercuts CF. The force of that argument depends upon the claim that propositions of the form "X knows a necessarily true proposition as such" are incorrigible. But that claim will be false in one key case: the case in which someone does know an incorrigible truth. In any case in which someone does know a necessarily true proposition as such, and knows that they know infallibly, they can also know that no cognitive doubt is possible for them about the relevant proposition of the form "X knows a necessarily true proposition as such." That is to say, someone who knows an incorrigible truth as such knows that any claim which contradicts it is false. It is that incorrigible truth which is the starting point for the demonstration that the relevant proposition of the form "X knows a necessarily true proposition as such" is true.

This illustrates an important point about the incorrigible truths the proponent of CF claims are at the foundations of human knowledge: they are themselves indemonstrable, being the principles upon which all demonstration proceeds. *Hence the question at issue, whether anyone knows an incorrigible truth as such, can be directly answered affirmatively only by someone who actually knows an incorrigible truth as such; to demand a demonstration of this is already to have rejected the claim.* Of course the sceptic claims this is

unconvincing; the proponent of CF has failed to give him--the sceptic--a good reason for thinking that anyone knows an incorrigible truth as such. But it should be asked if that amounts to anything more than an admission by the sceptic that he doesn't know any incorrigible truths as such. Is than an argument against CF? Is the proponent of CF somehow required to get the sceptic to grasp an incorrigible truth in order to make good his claim to know such a truth? Surely one does not want to say that the sceptic's failure to know an incorrigible truth as such undercuts the cognitive certainty of someone who does know an incorrigible truth as such. Moreover, the sceptic cannot claim to <u>know</u> that knowledge is impossible, or that knowledge of incorrigible truths is impossible, or that some individual's claim to know an incorrigible truth is false. To the extent that scepticism has anything like a rational foundation, it must proceed by showing that those who claim that knowledge is possible refute themselves--their positions cannot meet the truth-criteria advanced in those positions. The sceptic must claim that those positions fail on their own terms, not on his; he is, after all, a sceptic, and makes no claims to know anything. But CF, as I have elaborated it here, is not self-refuting; all that is left for the sceptic is to complain that he doesn't know any incorrigible truth as such. That may be true, but it is no reason for someone who does know an incorrigible truth as such to suppose that he doesn't.

IV

CF, then escapes the direct attack of the sceptic. But that is not the end of the matter, for although the sceptic cannot refute CF, neither can anyone demonstrate that he knows an incorrigible truth as such, as was pointed out earlier. And that <u>is</u> a problem. For if we shift ground here and ask, not whether someone can know an incorrigible truth as such, but what role that knowledge can play in the dialectic of philosophical controversy, the fact that foundational truths--incorrigible truths known as such--are indemonstrable seems to make philosophical knowledge claims open to some kind of sceptical attack. At the

least, it makes their utility in philosophical argumentation dubious. Consider the following argument (a modification of an argument James Ross uses against the notion of self-evident truths[10]): A philosopher, Smith, knows an incorrigible truth, P, as such, and asserts its incorrigibility to Jones, another philosopher. Jones does not know P to be incorrigible, and worse yet, he sees that P implies the falsity of another proposition, Q, which Jones believes he has good reason to think true. Jones therefore reasonably denies the truth of P, and Smith, it seems, can do nothing to show that Jones is wrong, even though Smith knows that Jones is wrong. P is indemonstrable, so no argument will establish its truth; all Smith can do, it seems, is to try to get Jones to see that P is true. In short, incorrigible truths known as such seem to have no significant role to play in establishing philosophical conclusions.[11]

The traditional response to this difficulty is to try to show that a denial of an incorrigible truth is in some way self-refuting, and the model of such an argument is Aristotle's defense of the principle of non-contradiction in Book Gamma of the *Metaphysics*. Against someone who denies the validity of the principle Aristotle makes the following argument:

> We can, however, demonstrate negatively . . . that this view is impossible, if our opponent will only say something; and if he says nothing, it is absurd to seek to give an account of our views to one who cannot give an account of anything. . . . Now negative demonstration I distinguish from demonstration proper, because in a demonstration one might be thought to be begging the question, but if another person is responsible for the assumption we shall have negative proof, not demonstration. The starting point for all such demonstrations is not the demand that our opponent shall say that something either is or is not (for this one might perhaps take to be a begging of the question), but that he shall say something which is significant both for himself and for another; for this is

> necessary, if he really is to say anything. For, if he means nothing, such a man will not be capable of reasoning, either with himself or with another. But if anyone grants this, demonstration will be possible; for we shall already have something definite. The person responsible for the proof, however, if not he who demonstrates but he who listens; for while disowning reason he listens to reason. And again he who admits this admits that something is true apart from demonstration.[12]

The point of Aristotle's "negative demonstration" is perhaps best brought to light by considering the kind of reply a sceptic might make. It is true, the sceptic might argue, that Aristotle has avoided begging the question by using the principle of non-contradiction as a premise in his argument--Aristotle's caution here is obvious enough. But, as William Young has pointed out, Aristotle must presuppose the principle in quite another sense, i.e., as a rule of inference.[13] For if the principle of non-contradiction is not valid, Aristotle's conclusions have no cognitive force. Hence (the sceptic concludes) the "negative demonstration" fails; it is rationally compelling only for someone who already admits the validity of the principle of non-contradiction.

Now, it is certainly true that Aristotle has presupposed the validity of the principle of non-contradiction as a rule of inference, but in fact the principle plays an even stronger role in Aristotle's argument than that: Aristotle also presupposes it as a metalogical condition which must be satisfied if one is to be able to express determinate meaning in one's utterances.[14] Thus, if the principle of non-contradiction is false, the world is not such that one can in any case say or understand what is and is not; nothing has that kind of intelligibility, that kind of determinate structure. Hence one who denies the principle of non-contradiction is either saying nothing or is asserting a necessarily false proposition.

It should be noted too that it makes no difference whether the principle of non-contradiction is denied or doubted. The change in propositional attitude does not affect Aristotle's argument as I have interpreted it, for what is at stake is the possibility of determinate meaning, not affirmation, denial, doubt, and so forth. Thus someone who doubts the principle--someone who claims not to know whether the principle is valid--nonetheless presupposes the validity of the principle if he claims to express some determinate meaning in his utterances. And, if he claims not to know whether he has actually expressed some determinate meaning in his utterances, then one need not continue the argument. To do so would be, as Aristotle says, absurd.[15]

Now, if this argument is sound, it certainly answers the objection that incorrigible truths are useless in philosophical arguments because no establishment of them is possible. Of course it cannot be inferred that every incorrigible truth can be established by a negative demonstration, or even that all such demonstrations will have equal cognitive force. For not every incorrigible truth serves as a metalogical criterion of meaning, or as a rule of inference; in some cases of incorrigible truths, perhaps the best that can be managed by way of a negative demonstration is to show that the denial of the incorrigible truth leads to a position which is clearly implausible. That, however, is a problem for another essay.

V

To sum up, I have argued here that the sceptic cannot undercut claims to know incorrigible truths as such, nor make the case that such claims can have no philosophical establishment because they are indemonstrable. To some these arguments will seem unconvincing, or at least unsatisfying, for in the end what they demand or hope for from such arguments is impossible. What I have argued here, in effect, is that knowing and establishing need to be distinguished because knowing that P, when P is an incorrigible truth known as such, cannot be equivalent to establishing P as true. P is indemonstrable. The only evidence

which will show (with complete certitude) that P is an incorrigible truth, and is known as such, is directly available only to one who actually knows that he knows P as an incorrigible truth. But in the face of that claim it is almost impossible to resist the temptation to ask, "But does anyone really know any incorrigible truths as such? How do we know they do?" What is wanted here is a kind of public certainty, a kind of certainty that excludes psychological as well as cognitive doubt, a certainty that transcends the infirmities of individuals' acts of understanding and judging.

No such certainty is available about any belief. Every establishment, every public warrant for accepting some knowledge-claim as true, finally rests on individuals' acts of understanding and judging, and such acts cannot be incorrigibly known to occur except by those who actually do the understanding and the judging. If we leave out of account the knowledge individuals have of their acts of understanding and judging, and view human knowledge solely from its objective side, it will have to be admitted that it is possible that no one understands anything, or judges correctly of the truth or falsity of any proposition. If this is an objection to CF, then the proponent of CF can only reply that he understands, and hence judges mistaken, the point of the objection, and assumes further that the point of the objection was also understood by the individual who advanced the objection. The rest, as it is said, is silence.

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ACTUAL INFINITY: A CONTRADICTION?

Peter Senna

In the thirteenth century, there was a fascinating and heated debate over whether or not one could know that the world is not eternal. This debate expands to include questions concerning actual infinity, such as whether or not an infinite past necessarily entails an actual infinity, whether or not an actual infinity can exist,[26] and if it can, what its ontological status might be. What has made the debate over the eternity of the world such a heated one is the complexity of the issue, a complexity which, for the most part, has resulted from the crucial role of the notion of the infinite. The notion of the infinite is very dangerous in that it is easily abused, and philosophers who are not careful tend to think that they can know it in a way they really cannot--as a totality. Thus, it would appear a worthwhile endeavor to examine our knowledge of the infinite and to determine what the idea can and cannot contain, given the types of knowers we are--mortal and only capable of knowledge of finite things.[27] Once the notion of the infinite is properly understood, the impossibility of an actual infinity will reveal itself--an impossibility the nature of which must be understood, as it plays a large role not only in arguments for the non-eternity of the world, but in the entire discipline of metaphysics.

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[26] St. Thomas Aquinas raises this question at the end of his De Aeternitate Mundi when he states that "no demonstration has as yet been forthcoming that God cannot produce a multitude that is actually infinite."

[27] One might object that we have knowledge of some infinite things, such as God, but the type of knowledge with which we are concerned refers to the positive grasping of the essence of a thing, and not knowing simply that a thing exists.

The first argument for the non-eternity of the world put forth by St. Bonaventure in part two of his *Commentary on the Sentences of Peter Lombard* is a good place to begin an examination of the infinite, since this argument is centrally concerned with the nature of infinity.[28] This argument is actually two-fold; the first part states the following: If the world were eternal, it would have endured an infinite duration. Given that there is no quantity larger than infinity, it is impossible that the infinite should be increased by addition. Thus, it would be impossible to add to the duration of a past which is eternal. But with each passing day we do add to the duration of the past, additions which would be impossible if the universe were infinitely old. Therefore the past must be of finite duration.

The problem with this argument is that its notion of the infinite is inapplicable to the problem of eternal past time. This point can be seen by way of an analogy, using a geometrical line of infinite length to represent infinite past time.[29] It is evident that it would be impossible to lengthen such a line, for one could never find the end of the line in order to add more length. This may be the

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[28] For the purposes of this paper, the question of whether St. Bonaventure aligned himself with these arguments can be left aside. Our concern here is only with the arguments themselves and the notions of the infinite contained therein. Steven Baldner has published an article on this particular question in the Spring 1989 issue of The New Scholasticism, entitled "St. Bonaventure on the Temporal Beginning of the World".

[29] Those who are somewhat familiar with these sorts of questions would surely object to this analogy, saying that (1) such a line cannot exist, even in the mind, and (2) the analogy is a poor one anyway, since the line is actual whereas the past is not. I respond to the first that, for the purposes of this analogy, one need not imagine the line in its totality, but only as a magnitude of which there is always more to be had. As it concerns the second objection, the actuality of the line does not represent or suggest any actuality in the past, but merely represents the infinite quantity ascribed to the past in the argument. Strictly in terms of quantity, then, the analogy is valid, as both the line and the past are of infinite quantity.

nature of the impossibility which Bonaventure hits upon in his argument: namely that an increase is only possible given a boundary to be increased, a boundary which Bonaventure seems to assume the infinite cannot have. But is Bonaventure correct in this assumption? One might turn to the analogy of the line for an answer. Is there a problem with supposing that the line be infinite in one direction only and bounded on the other side? Not at all; all one need do is to conceive of an endpoint from which a line proceeds, extending without limit.

For the purpose of convenience let us refer to the line that is infinite in both directions as line A, and the line that is infinite in one direction only as line B. Note that it is perfectly reasonable to suppose that one would be able to add line segments to the end of line B, while one could never add any line segments to line A.[30] Thus, in order for Bonaventure's argument to arrive at the necessary impossibility concerning addition, it needs to use a notion of the infinite past which is analogous to line A. The question, then, becomes: which line provides a more accurate representation of infinite past time? The answer would seem to be line B, for the past certainly ends in the present, just as line B ends at a point. Bonaventure's notion of the infinite, if it is of infinite extension in two directions, is not applicable to past time, whereas a notion of the infinite analogous to line B is. And, as Thomas Aquinas says, "there is nothing to prevent an addition to the infinite on the side on which it is finite."[31]

A defender of Bonaventure's argument might object to our analysis, saying that the impossibility of adding to the infinite does not lie in not being able to find an endpoint, but rather in not being able to increase an infinite magnitude. This is a valid point. What could one possibly mean when he says

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[30] One might be able to divide the line at some intermediate point, 'push' the ends apart and insert a line segment, thereby adding to line A. This conception of addition to the infinite, however, does not serve us as it concerns Bonaventure's argument, for time is not able to be divided and separated in such a manner.

[31] St. Thomas Aquinas, Summa Contra Gentiles, Book II, chapt. 38.

that he *adds* to the end of line B? Surely, he does not mean that he makes the line any longer, for it is already of infinite length. But is it not essential to addition that the magnitude added to becomes greater--otherwise, what could one mean by *addition*? There are two ways out of this dilemma. One way is to speak of a relative increase. This is to say that one can consider only the last ten feet of the line, and by adding his piece, he has added onto that last ten feet. Thus, relative to a point ten feet from the endpoint, the line has been lengthened, and one is able to make sense of the addition in this way.

The second way out of the dilemma hits directly upon the main topic of this paper. It has to do with the distinction between things which contradict our reason and things which surpass our reason. Note that neither line A nor line B can be grasped as a totality. Try as one might, one is unable to conceive of the whole of a line of infinite length, whether it be in one or two directions. In the same way that one is unable to conceptualize the whole of a line which is infinitely long, human reason is unable to comprehend the infinite as a whole or as a totality. Thus, we are unable to understand how an addition to the end of line B could increase the line considered in its entirety, for we can have no understanding of the line in its entirety in the first place. But note that this inability to understand is not the result of a contradiction, but rather a result of our entertaining concepts which transcend our abilities. As it concerns addition, a contradiction can only be had given a *finite* quantity; one cannot make an addition of a quantity to a like finite quantity without a resulting increase. As it concerns addition to infinite quantity, human reason is not equipped to identify a contradiction. The crucial point, however, is that one can know that the reality to which a contradictory statement refers cannot exist, whereas one can make no such judgment about the realities referred to by statements containing notions which transcend one's grasp. If, then, this analysis of the argument is correct, Bonaventure's mistake in denying that the infinite can be added to is to confuse that which transcends our understanding with what is a contradiction.

The second part of Bonaventure's argument involves the following: If the world has existed through an eternal past, then the revolutions of the sun

and the moon are infinite in number. But the moon revolves about twelve times for every one revolution of the sun. Thus, the infinity which equals the number of revolutions of the moon is larger than the infinity which equals the revolutions of the sun. It is absurd, however, that one infinity should be larger than another. Therefore the world must have existed for a finite amount of time.

This argument is very valuable, for it demonstrates the importance of maintaining a coherent notion of what sort of reality the notion of the infinite can represent. In examining this argument, we must first inquire whether the absurd conclusion that one infinite need be larger than another can be arrived at (for if this conclusion cannot be arrived at, the absurdity is not produced and the argument does not follow), and then we must determine whether the nature of the absurdity is such that the contradictory of the supposition that the world is eternal necessarily follows upon the establishment of the absurdity.

One might argue for the conclusion that the infinity which represents the moon's revolutions is larger than the infinity of the sun's revolutions by saying that the revolutions of the moon stand in a twelve to one correspondence with the revolutions of the sun. That is, given that both the moon and the sun have always co-existed, and given that moon has always revolved twelve times for every single revolution of the sun, it only stands to reason to conclude that whatever the number of revolutions be, the moon must have revolved more times than the sun. Indeed, it can even be known how many more times: twelve; and one need not know what the total number of revolutions be in order to reach this conclusion.

There seem to be problems, however, with the "correspondence system" of establishing one infinity as greater than another. It seems that, using the same system of comparison, one is also able to establish equivalent numbers of revolutions, thus rendering the correspondence method entirely inconclusive. William Lane Craig demonstrates how equivalence can be established in this manner using Cantorian set theory.[32] Briefly, all one need do is establish the

[32] William Lane Craig, The Kalam Cosmological Argument (New York: Barnes and Noble, 1979) 73.

revolutions at a one-to-one correspondence regardless of the years during which they occurred, starting at the present and working backwards. Of course, in establishing such a correspondence, one will go back twelve "sun years" for every single "moon year," but this will not cause any problems because an infinite number of years is available on both sides. Having established a one-to-one correspondence, one could conclude that the two infinities are equal. Given that the only means of establishing one infinite as larger than or equal to another is through the ability to establish such correspondences, this conclusion follows with as much necessity as the first, which established one infinity as larger.

Still, one might object to the establishing of such a correspondence, saying that the one-to-one correspondence does not provide an accurate representation of what really happened--that no correspondences are valid unless they are established according to the years during which the revolutions occurred. This objection is fair enough, but even if it is granted that one infinity can be established as greater than another in this manner, there remains another problem--what can this conclusion mean?

The question posited at the end of the last paragraph may seem a bit odd. Are we losing sight of the function of the conclusion in Bonaventure's argument that one infinity is larger than another? In fact, the argument takes the logical form of a *reductio ad absurdum*; the conclusion that one infinite is larger than another is not supposed to make any sense--it is an absurdity. It is through the establishment of an eternal world's necessarily entailing an absurdity that Bonaventure is able to conclude that the world must be finite. There is, however, a distinction between not making any sense and being absurd. What is needed here in order to make clear this distinction is an investigation into the nature of unintelligibility.

As I see it, there are two kinds of unintelligibility: that which contradicts reason or the absurd, and that which surpasses reason. In order for reason to recognize an absurdity, it must first be able to make sense of what is said--all the notions contained in the absurd proposition must have *meaning*; they must fall within reason's grasp. Just as two men who do not share a

common language cannot argue, so reason cannot recognize as absurd that which it is unable to grasp. Thus, to be absurd and to make sense necessarily go together, whereas that which surpasses reason can neither make sense nor be absurd. What must be determined, then, is whether Bonaventure's absurdity is really absurd or simply transcends reason.

The "absurd" conclusion under investigation is that one infinity is larger than another. A good determination of the nature of the absurdity requires that the meanings of the terms "infinity" and "larger" be made clear. As mentioned above, it is impossible to conceive of the infinite as a totality. This means that nothing infinite can be known by us to have any real unity or completeness inasmuch as it is infinite; infinity must, and can only, be understood as a never-ending process of "always another." As it concerns an infinite number of past revolutions, these must be understood as there always being another revolution before any given revolution.

As it concerns the term larger, there are two possibilities. One is the common meaning, which entails a comparison between two *finite* quantities or magnitudes. It is necessary that the quantities or magnitudes be finite because to say something is larger is to make a comparison concerning size, and the size of a thing is assessed according to its boundaries. Note that this meaning of the term "larger" is inapplicable to infinite quantities, as they have no boundaries. Thus, to employ the term "larger" in this sense is to make a category mistake.

The other possible meaning of the term "larger" in this case is to say that a twelve to one correspondence has been established. If this is all that larger means, however, a big problem arises: the absurdity of the situation has been removed. Note that there is no real problem with conceiving of a world which has always existed, where for all of eternity the moon had been making twelve revolutions for every single revolution of the sun. If one takes the time to try to conceive of a universe in which, regardless of how far in the past one may go, the moon has always revolved twelve times for every one revolution of the sun, one will discover that there are no immediate contradictions which render the conception unintelligible. In fact, Aristotle himself built his entire cosmology

around a similar conception of the universe. Thus, by the term larger, Bonaventure cannot mean something like the ability to establish a twelve-to-one correspondence, for if he did, then the notion of one infinity's being larger than another would no longer be absurd, and the *reductio ad absurdum* would fall apart.

The question that remains, then, is: What is the problem with the absurdity entailed in the notion of one infinity's being larger than another that prevents it from being a true contradiction, and renders the *reductio* argument ineffective? The problem is this: Any valid *reductio ad absurdum* argument must be able to be formulated in such a way that an assumed premise leads to a contradictory conclusion that takes the form of "X and not X," where both X and not X are intelligible. For example, if an assumed premise leads to the conclusion that an object is both all blue and all red, I can safely reject that premise as false, for I have a complete understanding both of what it is to be blue and of what it is to be red and thus I can know that it is impossible for an object to be both purely blue and purely red at the same time in the same respect. Bonaventure's argument, however, does not produce this sort of contradiction. As mentioned above, in order to compare the size of two things, the things compared must have boundaries and they must be considered in their entirety. The notion of the infinite, however, cannot be understood in this manner, for we are unable to grasp the infinite, inasmuch as it is infinite, as a totality. Thus, the word "infinity" in the statement "one infinity is larger than another" does not have any real meaning.[33] Note, however, that the term "infinity" represents a basic

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[33] One might object that the infinite considered as a totality is not an entirely meaningless notion. Is it not possible to consider all of the past revolutions of the moon in an eternal world? Is it not possible to consider, as Cantor does in his infinite set theory, the set of all the natural numbers? When these sorts of considerations are made, however, the object of consideration which produces the apparent totality is not the quantity of the thing, but rather a consideration of the thing which supports the quantity. When one refers to all of the natural numbers, he is able to do this in virtue of the fact that they are all numbers; that is, he grasps the nature of number. When one refers to all of the revolutions of the moon, he is able to do this because he can know that all of the revolutions

concept in the statement, for it is the comparison of the sizes of two infinities which is supposed to produce the contradiction, not the notion of the infinite in itself. But if the individual concepts in a statement do not have meaning, then the statement as a whole cannot produce a contradiction. Because we are unable to conceive of the infinite as a totality, to consider how one infinity might be larger than another transcends our abilities. As mentioned above, statements which transcend reason tell us nothing about what may or may not exist, and thus the conclusion that one infinite is larger than another cannot serve to invalidate the assumed premise that the world lacks a beginning. Note that once again, the mistake on Bonaventure's part has been to confuse that which contradicts with that which surpasses reason.

An interesting question arises here. If the infinite considered as a totality really escapes our reason and does not contradict it, is it possible to make any judgments concerning whether an actually infinite magnitude or multitude can exist? This question is even more intriguing considering Aquinas' statement at the end of his *De Aeternitate Mundi* that no proof has yet been forthcoming to show that God could not create an actually infinite multitude. Given that God's omnipotence does not include performing the impossible, Thomas' statement seems to suggest that an actual infinity may not be an impossibility.

Before we can determine whether or not an actual infinity can exist, however, it is necessary that we make clear exactly what sort of reality the infinite can have. In the *Physics*, Aristotle says that the infinite is an essential attribute of number or magnitude.[34] This is to say that whatever existence the

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were revolutions, even supposing there were an infinite number of them. As mentioned above, however, infinity is an essential attribute of magnitude or quantity, and must be grasped as such. Thus, a grasping of the infinite as a totality would require a grasping of the revolutions qua quantity, not qua nature of the thing which supports the quantity. An infinite totality, however, cannot be known by us qua quantity, for all quantities known in their entirety by finite knowers such as ourselves are also necessarily finite. Thus, strictly speaking, the infinite considered as a totality is meaningless.

[34] Aristotle Physics, Book 3, 204a17-9.

infinite has, its existence depends on number or magnitude in the same way that accidents depend on underlying substances. Number and magnitude, in turn, depend on sensible things for their existence. Thus, the infinite depends for its primary existence on sensible things, which are the objects of the science of physics.

Given that the infinite depends on sensible bodies for its existence, it would seem that in order to be able to establish an actual infinity as a possibility, one would need to establish an actually infinite body as a possibility. A major problem arises here, however: as Aristotle observed, an actually infinite body contradicts the formula of a body as "that which is limited by a surface."[35] If it is the case that to be a body is to be limited, and the infinite is necessarily unlimited, then it can be known for sure that an actually infinite body could not exist. This can be known because a contradiction is produced, namely that an unlimited limited thing would have to be. Moreover, if there can be no infinite body, then there can be no actual infinity, for as mentioned before, the infinite can exist primarily only in sensible substances. Another mode of existence of the infinite is in the potentially infinite divisibility of a magnitude. The actually infinite, however, cannot exist here either, for in order to have an actually infinite number of divisions, a magnitude would have to be exhaustively divided. But this is impossible, as the division of a magnitude in no way diminishes it, and thus there would always be magnitude left to be divided. It would seem, then, that given that a body is the sort of thing which is necessarily limited, the existence of an actual infinity can be known to be impossible.

Questions can be raised, however, as to whether or not it is necessary that all things which support magnitude be bodies. For example, is there a contradiction inherent in the notion of an infinitely extended quantity of water? Admittedly, such a thing could not meaningfully be called a body, but is this to say that it could not support magnitude, or that it could not exist? As Aristotle has shown in Book Three of the *Physics*, such a thing cannot exist in this

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[35] Aristotle, Physics, Book 3, 204b5-6.

universe, but to speak of what cannot exist in this universe is not the same thing as to speak of what cannot exist in principle. An answer to this question requires an investigation into the nature of the first principles of physics and the relationship between physics and metaphysics; an investigation which extends far beyond the scope of this paper.

It is the case, however, that an *a priori* consideration of a limitless magnitude, such as that which would be supported by an infinitely extended quantity of water, does not bring with it a logical contradiction. Indeed, it cannot, for as stated earlier, such a consideration could not be meaningfully entertained by the human mind. Furthermore, the consideration of magnitude or sensible substance in itself does not necessarily include a limit. Indeed, as limits consist of nothing other than the *termination* of a sensible substance or magnitude, it would not seem possible for limits to enter into the essence of sensible substance or magnitude considered in itself. It would be odd to claim that the existence of a substance or magnitude depends necessarily on its termination. This is not to say that such a reality could ever be grasped in its entirety by a human mind, for as discussed earlier, this is impossible. This is to say, rather, that as a result of the sheer transcendence of the notion of the actually infinite, the impossibility of its existence cannot be known through a direct consideration of actual infinity in itself. If the actually infinite can be known to be impossible, it must be so known through the first principles of physics. If it is the case that a body is not the only sort of reality which can support magnitude or number, then the first principle of physics which states that a body is necessarily limited cannot lead us to the impossibility of an actual infinity; but only to the fact that we cannot have an actually infinite body. If this is the case, then to hold that an actual infinity cannot exist is to make the Bonaventurian mistake of confusing that which contradicts with that which transcends human reason.

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