# FIRST PHILOSOPHY: METAPHYSICS OR EPISTEMOLOGY?

Ι

THILOSOPHY, and especially metaphysics, today enjoys less respect and influence than at any time in the last 800 years, since Aristotle was rediscovered by the Medievals. Philosophy once was the realm of the controversies and upheavals that determine man's perspectives and attitudes; today that realm is the sciences and arts. Once "the queen of the sciences", philosophy is rapidly becoming their handmaiden or stepchild. The very relevance of philosophy for life is seriously being questioned in many quarters. Today's "empiricists" are decreasingly concerned with philosophy in the traditional sense, and increasingly concerned rather with the methodology of certain disciplines, such as science, logic, grammar, etc.—if not with the outright destruction of philosophy itself. And even the speculative metaphysicians of today seem to find literature more conducive than philosophy to the quest and expression of their ideas. Sartre expresses himself philosophically in plays and novels and Heidegger's works become increasingly poetic; he has expressly called philosophy the "bad danger" to thought, as opposed to poetry, the "good danger".1

A common source of this attitude toward philosophy may be found in the critical rejection of traditional philosophy (metaphysics) by Kant, the one philosopher respected by, and influential in, perhaps all schools of contemporary philosophy. However, the reasons for this rejection of traditional philosophy precede Kant, and infuse the entire movement of modern philosophy from Descartes onward—this, despite the claim by virtually every philosopher in this period to have broken with the past and begun anew. In spite of all the claims to epoch-making originality, they have all remained "modern philosophers"; they all share something that has prevented any of their revolutions from taking

<sup>&</sup>lt;sup>1</sup> Aus der Erfahrung des Denkens, #5.

hold decisively enough to begin a new philosophical era, as Augustine began a new era via the Christian revolution, and Descartes via the scientific revolution.

If, therefore, the current impotence of philosophy is a source of concern to us, it is of the utmost importance that we examine the nature of our philosophical commitment, to determine whether there are alternatives to our present course.

#### $\mathbf{II}$

Descartes is often called the father of modern philosophy. Granted that he, as any philosopher, had his antecedents and influences, nevertheless it was his transformation and formulation that was decisive. The Cartesian revolution may be seen in the opening pages of the First Meditation,2 where he examines the certitude offered by the three faculties of the mind: sensation, imagination, and understanding. In sensation, he argues, the only thing certain is that images are present to him; whether they resemble or are even caused by external things cannot be determined, as he might be asleep. He therefore turns to the faculty of images, the imagination. Is there anything certainly true in these images, or might they all be pure fabrication? They cannot all be fabricated: at the very least, the ultimate elements of all possible images cannot themselves be fabricated, he argues, but are rather "things simple and universal which are true and existent..."3 He specifies only one such concept, "corporeal nature and its extension", which is shown to involve the description of bodies in purely quantitative or mathematical terms (shape, size, number, place, time, etc.).4 By this analysis he has shown that

all of our sense experience is presented via images, which themselves are determined by concepts of the understanding that are the elements of all possible images. These mathematical concepts, since they precede experience, are innate (cf. p. 39: 22-4). All of our sense experience is thus constituted according to the mathematical nature of our mind. Our sense experience, therefore, is conformed to mathematics, and can be comprehended only through mathematical science (p. 20: 20-7)

What Descartes has done here is to sketch out what Kant was later to systematize: the universal conditions of any possible experience. That this is quite deliberate is evident, for example, from the fact that his inability to distinguish sleeping from waking experience is voluntary, not necessary. The proof that he is not asleep, given only on the last page, could as easily have been given here, as it rests solely on coherence, without reference to clarity and distinctness. It is not given here because Descartes chose not to give it: like Kant, his aim is to lay the groundwork for scientific certitude (p. 17), which requires the determination of the conditions for any possible experience—"asleep or awake", as he continually reminds us (pp. 20, 28, 70-1, etc.).

The effect of this approach is nothing less than the setting of "First Philosophy" on a new footing.<sup>5</sup> Formerly, first philosophy was ontology or metaphysics, inquiry into the ultimate nature of being; in Descartes' hands it becomes epistemology, inquiry into the human conditions for experience.<sup>6</sup> The completeness of this revolution is attested by the universality with which subsequent philosophy has taken the "mental conditions of experience", rather than the "things themselves" as its starting point:<sup>7</sup> e.g., empiricism, philosophies of mind, of language, of logic, idealism,

<sup>&</sup>lt;sup>2</sup> The following analysis of the First Meditation owes a great deal to Richard Kennington.

<sup>&</sup>lt;sup>3</sup> Meditations, Adam and Tannery edition of the Latin text, p. 20. References to Descartes are to page and line numbers of this text, unless otherwise noted. English translations are either from the Laurence J. Lafleur translation or are my own.

<sup>&</sup>lt;sup>4</sup> He also mentions the psychological irreducibility of colours. This makes colour a useful illustration of his point, but even what is *psychologically* primary may be derived *physiologically* from quantitative extension. Thus, in an earlier work Descartes has already argued that colours are in fact reducible to quantitative elements, i.e., shape (*Rules for the Direction of the Mind*, Rule XII).

<sup>&</sup>lt;sup>5</sup> Thus the title, Meditations on First Philosophy.

<sup>&</sup>lt;sup>6</sup> It is perhaps significant of Descartes' attitude toward metaphysics that the only reference to it in the *Meditations* is at p. 36: 25, where "metaphysical" is used as synonymous with "tenuous."

<sup>&</sup>lt;sup>7</sup> By this I do not mean that every post-Cartesian philosopher believed that one had to work out an epistemology before one could turn to metaphysics. Obviously, this is not the case, although it is true in a large number of instances. Rather, I mean that modern metaphysics presupposes that the difference between appearance and reality is an epistemological one, not an ontological one. This will become clearer in what follows.

III

If the world is mathematical in that it is susceptible of mathematical description, and if our mind is also mathematical in that mathematics is a natural mode of thought, rather than something learned wholly empirically, 9 there are two ways (apart from sheer coincidence) that this correspondence can be explained. Either the mind and the physical world ultimately derive from the same source (e.g., nature, or Being); or else the mathematically structured mind transforms experience—imposes its mathematical forms onto experience—in order that we may be capable of experiencing it in the first place. To put it differently, there are initially three logical possibilities: the mind and physical objects have a common source, the mind imposes its forms on the objects, or the objects impose their forms on the mind. The third possibility, taken exclusively of the others, may be ruled out in the case of mathematics, since induction or purely empirical generalization is incapable of accounting for the apodictic nature of mathe-

As we have seen, Descartes holds the second position (the mind imposes its forms on objects): the basic "simple and universal" concepts of the understanding determine what forms the imagination can take, and the imagination, in turn, provides the way that sensible things appear to us. The source of "truth" is the human mind itself, not a third (metaphysical) entity that guarantees the commensurability of the knower and known.

matical truth. This leaves the first two possibilities as alternatives.

It might be objected, of course, that God plays precisely this role of a mediator in Descartes' philosophy. However, it can be seen that, at least in the *Meditations*, God functions as, at best, a confirmation of this commensurability, and not as Descartes' primary guarantee of truth. The primary criterion for truth is the psychological or rationalistic, rather than theological, indubitabi-

phenomenology, etc. Thus Locke is concerned not so much with what things are in themselves, as with how our ideas of them arise. Even Heidegger, despite his endeavour to return to pre-traditional ontology, and his interpretation of phenomenology as meaning "to the things themselves", begins Being and Time with a discussion of the decisiveness of one's initial epistemological position; and, indeed, his conclusions are often dependent on his decisions to employ the methodology of phenomenology, despite his claim that phenomenology is "epistemologically neutral". The overall aim of the work is to explicate the existential-structure of Dasein as a necessary preliminary for understanding Being itself. This procedure is post-Cartesian, not pre-traditional.

Let us now take a closer look at this revolution and its relation to the classical position. For the sake of brevity it is necessary to limit our scope, while at the same time trying to retain enough breadth to support the sweep of the thesis. Perhaps this can best be done by concentrating for the most part on the continental tradition in modern philosophy, since it corresponds more closely than the British one to the speculative approach to philosophy of the ancients, and thus affords us the basis for a more pointed comparison between the ancient and modern positions. Nevertheless the empirical tradition to which Locke gives rise is also very much a product of the Cartesian revolution, and the impact of this revolution can be felt today in linguistic philosophy. The view, that one cannot step outside language to see the world as it is apart from linguistic forms, is a version of the general view that reality is so transformed, by the forms through which we perceive it, that we can never perceive it as it is in itself.

In the following discussion of modern philosophy four philosophers have been singled out: Descartes, Kant, Spinoza, and Heidegger; the first two because they are the key figures in the establishment of the modern view, and the latter two (somewhat arbitrarily) as representative of positions which might at first seem to be exceptions to the argument.

<sup>&</sup>lt;sup>9</sup>The impossibility of a wholly empirical mathematics is attested at least by our acceptance (if only implicitly) of the principle of non-contradiction, a principle that is already presupposed in any empirical learning. Any additional principles that are presupposed by mathematics must also in some sense be a priori, because of the apodictic and universal nature of mathematical reasoning, and our ability to "figure out" mathematics ourselves.

<sup>&</sup>lt;sup>8</sup> See, for example, William Richardson, S. J., *Heidegger: Through Phenomenology to Thought*, the Hague: M. Nijhoff, 1963, pp. 42-4.

lity of clear and distinct ideas, as is evident from his use of this psychological indubitability to prove God's existence in the first place, as well as his own.<sup>10</sup> This priority is especially visible in the Third Meditation, where the rationalistic and theological positions clash head on in a dilemma:

Every time that this idea of the supreme power of a God, as previously conceived, occurs to me, I am constrained to admit that it is easy for him, if he wishes it, to bring it about that I am wrong even in those matters which I believe I perceive with the greatest possible obviousness. And on the other hand, every time I turn to the things I think I conceive very clearly, I am so convinced by them that I am spontaneously led to proclaim: "Let him deceive me who can; he will never be able to bring it about that I am nothing while I think I am something, or, it being true that I now am, that it will some day be true that I have never been, or that two and three joined together make more or less than five, or similar things in which I recognize a manifest contradiction and which I see clearly could not be otherwise than as I conceive them" (p. 36).

On the hypothesis of an omnipotent God, nothing is certain: I may be wrong about even that which seems most obvious. This uncertainty is taken to include (as it must) even the cogito and other statements whose denial implies a contradiction—and, therefore, even the law of non-contradiction—as is evident from their inclusion in the contrasting half of the dilemma. On the other hand, according to the doctrine of clear and distinct ideas, some things are certain—anything whose denial is a "manifest contradiction". The doctrines are thus seen to be wholly incompatible: one makes certitude impossible, the other makes it possible. There is no doubt which of these opposed positions prevails in this encounter. The cogito had been based on a clear and distinct perception (p. 35: 8-10) whereas the omnipotent deity had been introduced merely as an "old opinion" (vetus opinio, p. 21: 1-2), precisely the sort of thing Descartes had resolved to "set aside" at

<sup>10</sup> Pp. 35: 6-15, 46: 5-8, 53: 9-15. Cf. the crucial role of the "natural light" (e.g., p. 40: 21), whose truth is similarly based on psychological indubitability (p. 38: 23 f).

the outset.11 Thus here the omnipotent deity is called merely an idea which "occurs to me", whereas the opposing ideas are believed to have "the greatest possible obviousness", are conceived "very clearly", and seem that they "clearly could not be otherwise than as I conceive them". Accordingly, the way Descartes extricates himself from this dilemma amounts to sacrificing the theological position to the rationalistic: he reminds us that we do not yet know that God exists, and proceeds, therefore, to accept his clear and distinct perceptions as indubitable. And, of course, his subsequent proofs of God's existence presuppose the laws of logic. Similarly, even when this dilemma is "resolved" in the Fourth Meditation by showing that God cannot be a deceiver, it is assumed without doubt that the proper and sufficient basis for establishing this is logical inference. Thus the criterion for truth, and basis for the possibility of knowledge, furnished by the mind precedes and even makes possible its theological counterpart.

Therefore, although God may function in Descartes' system as a metaphysical link guaranteeing the commensurability of the knower and the known, this explanation is subordinate to the psychological or rationalistic explanation, according to which the mind furnishes its own guarantee of certitude. Both positions are present in Descartes, and this tension between his rationalism and theology has been remarked often enough; what I am concerned to show here is that the rationalistic position is the dominant one, or, at least, that it is distinct from his theological position, and prefigures the Kantian epistemological position in a way that was influential on Descartes' successors.

It was Kant, not Descartes, who first set forth formally the epistemological theory that objects conform to the mind; but the germ of that theory was developed by Descartes and is inseparable from his rationalistic position, a germ which was elaborated by Leibniz and Hume before being formalized by Kant. If there are,

<sup>11</sup> Pp. 17-8 (cf. French, Adam and Tannery edition, p. 13: "anciennes opinions").

<sup>12</sup> The related question, whether this inconsistency was due to an inadvertent conflict of two allegiances, or to a deliberately insincere payment of lipservice to theological dogma in order to escape the fate of Galileo, or to some other cause, need not be considered here.

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as Descartes maintains, a priori concepts that underlie and determine our experience, and which are the spatio-temporal forms of mathematics (shape, size, number, place, time, etc.), then it follows not only that we must look to the mathematical sciences for "certitude and indubitability" (p. 20), but also that any speculation as to the nature of things in themselves—things not reconstructed in spatio-temporal categories by the perceiving mind—is futile, since it seeks experience that contradicts the mind's very mechanism for experiencing. Descartes' lack of sympathy with metaphysics, as opposed to science, stems from the same source as Kant's: if the mind experiences only by reconstructing things according to innate concepts, then obviously the thing can never be experienced as it is in itself. Where knowledge is concerned, we must deal with things as they appear to us, and ignore the question of what they may be in themselves; and this means that we must renounce any claim to metaphysical knowledge. Thus, after arguing that our experience is ultimately dependent on mental forms or concepts, Descartes ignores any question of the independent nature of the entities experienced. In fact, he regards it as the virtue of his approach that it "cares little whether or not (these forms) are in the nature of things" (p. 20).13

For Kant as well as Descartes, the concepts or categories of the understanding dictate a priori what form sensation must take in order that we be able to experience it. To be sure, in Kant the forms of sensibility are distinct from those of the understanding, as they do not seem to be in Descartes. According to Descartes, time and space are part of the "universal concept" of "corporeal nature in general and its extension", from which "all these images of things are formed in our minds" (p. 20). Kant, however, says that "there are two stems of human knowledge, namely, sensibility and understanding, which perhaps spring from a common, but to us unknown root". <sup>14</sup> Nevertheless, it cannot be denied that the understanding exercises a decisive a priori influence on the

sensible appearances, as is evident in both versions of the Transcendental Deduction:

All appearances, as possible experiences, thus lie a priori in the understanding, and receive from it their formal possibility... (A127; cf. A105 and A107).

All possible perception is thus dependent upon synthesis of apprehension, and this empirical synthesis, in turn, upon transcendental synthesis, and therefore upon the categories (B164; cf. B144, B153-4, B160-1 and note).

All sensible appearances are, for example, conditioned by the categories of quantity (since, being spatio-temporal, they have magnitude) and quality (e.g., colour) even before we begin to reflect on them. The mind, therefore, preconditions and modifies sensible appearances not only with regard to their sensibility, but also with regard to their knowability; and this is the source of Kant's preference, like Descartes', for science over metaphysics.

So decisive was Descartes' starting point that it was taken for granted even by those who disagreed with his attitude toward metaphysics. They differ with him rather in claiming that the mind has an additional faculty of intuition or introspection which can enable it to overcome its distortion of entities. From then on Descartes' starting point went virtually unchallenged, with the result that the concept of metaphysical entities, and therefore metaphysics, took on a new meaning.

The claim that experience is conformed to our mind implies that the objects of experience are modified by our experiencing them. This leads to a disjunction between things in themselves and things as experienced—although the disjunction need not be as strong as in the case of Kant's insistence that the things in themselves are utterly unknowable. Thus, if metaphysics is concerned with a distinction between appearance and reality, in virtually all post-Cartesian metaphysics this distinction has been equated with the distinction between things as experienced and things in themselves. Whereas for the Greeks metaphysical entities were "separate" entities that were the ground of the intelligibility (and being) of worldly things, for the moderns they are

<sup>&</sup>lt;sup>18</sup> This is, of course, distinct from the question of the existence of the external world, as Kant later showed.

<sup>&</sup>lt;sup>14</sup> Critique of Pure Reason (Kemp Smith translation), A15/B29.

analogous to Kant's "thing in itself". The intelligibility of worldly entities (and their being, as phenomena) is ascribed not to non-worldly entities, but to the human mind. To put it differently, for the Greeks the metaphysical entities were the formal or final causes, the Forms of Plato or the deity of Aristotle, and the realm of appearances had objective existence, independent of the activity of the perceiving mind; for the moderns, however, the metaphysical entities become (in Kant's sense) the material cause, that which furnishes the material content to our perceptions while the mind furnishes the forms, and the realm of appearances is the mind-dependent world that has been modified by these forms in the process of being perceived.

Thus, for Spinoza the difference between reality and appearance is the difference between infinite, unitary substance (God), and finite diverse modes. In itself, the world is a single, though variously modified, necessary substance. As it appears to us, however, it seems a collection of independent, finite and contingent individuals. Spinoza's metaphysics thus is not directed toward a realm of entities separate from the entities of our experience, but rather seeks to replace the inadequate appearance of the world with a conception adequate to the world as it is in itself. Since the inadequate apparent realm exists only as a result of the mind's perception of the world, there must be a sense in which the nature of the mind distorts the world in the act of perceiving it; in which case the mind must have a determinate character that alters or re-forms reality. In the Ethics, the mind is understood as "the idea of the body" (Book II, Proposition 13) and, as such, its initial and usual way of perceiving substance is in terms of corporeality (e.g., II, 11 and 14)—i.e., substance appears to the mind primarily, though not adequately, through the attribute of extension. As a result, the tendency of the mind is to attribute properties of substance-as-extension to substance absolutely. For example, people "erroneously ascribe to substances a beginning like that which they see belongs to natural things" (I, 8, Scholium 2; W. H. White translation). This is the bias of our mind, which transforms reality into the inadequate appearances we perceive. Thus,

The reason why we do not possess a knowledge of God as distinct as that which we have of common notions is, that we cannot imagine God as we can bodies; and because we have attached the name God to the images of things which we are in the habit of seeing, an error we can hardly avoid, inasmuch as we are continually affected by external bodies (II, 47, Scholium).

Similarly, the false significance we attach to such concepts as goodness, evil and beauty, and to universals generally, is due to this corporeal bias of our mind—the dominance of imagination (I, Appendix; and II, 40, Scholium 1). Thus, for Spinoza, although "it is the nature of reason to perceive things truly, that is to say, as they are in themselves", the imagination veils this truth from our mind (II, 44), and this is because the imagination has its basis in corporeality (II, 49, Scholium). If Imagination thus functions as a determinate character of the mind, which comes between reality and the receptivity of reason, so as to produce the delusive realm of appearance. This is clearly a post-Cartesian position, as opposed to the classical view that the world of appearance exists independently of our mind rather than as a product of its (biased) activity.

In Leibniz, the apparent world is similarly identical with the real world (complexes of monads), being the mind's spatial representation (and therefore distortion) of it. In the same way, Kant's phenomena are the mind's spatio-temporal representations of the unknowable noumena, and Schopenhauer's world-as-representation is the mind's representation of the world-as-will. Whitehead's world as process is, again, the same entity as the apparent world, although properly conceived.

Heidegger is even closer to Descartes and Kant than the others. He says, for example, <sup>16</sup> that his investigation of the meaning of Being "does not puzzle out what stands behind Being. It asks about Being itself insofar as Being enters into the intelligibility of

<sup>&</sup>lt;sup>15</sup> It is questionable whether Spinoza's non-interacting parallelism of thought and extension can support the view that the body influences the mind in this way. Nevertheless that is how Spinoza accounts for the mind's failure to perceive reality immediately and necessarily, despite its intrinsic disposition to do so.

<sup>16</sup> Being and Time, London: SCM Press, 1962, p. 193.

Dasein". This suggests a distinction between Being and something which "stands behind Being". The latter, which does not "enter into the intelligibility of Dasein", seems clearly analogous to Kant's unknowable noumena. Heidegger accepts Kant's claim that the thing-in-itself is unknowable and irrelevant to philosophy, but he preserves ontology against Kant's devastating conclusion by understanding Being not as a function of (in Kant's terms) the noumena, but of the phenomena. Thus, whereas Being had traditionally been understood as the causal ground of entities, for Heidegger it becomes the meaning of entities (pp. 192-3). Accordingly, since meaning can occur only in relation to Dasein, Being 'is' "only insofar as and as long as Dasein is", which is not the case with entities (p. 272). But since entities can exist without Dasein (and once did), so does their causal ground. The causal ground is thus different from Being-as-meaning, and, since a 'ground' becomes accessible only as meaning (p. 194), the causal ground must remain inaccessible to us. Moreover, in transferring Being to the phenomenal realm, Heidegger must make a distinction within that realm between Being and appearance; for if Being directly appeared to us as it is in itself, there would be no need of ontology. Here, too, Heidegger shows himself to be in the post-Cartesian tradition, for Being is distinguished from entities not as separate from them ("Being means the Being of entities" -p. 26), but as "hidden" due to the influence of the Existentialen which are responsible for our "everyday" understanding of the world-i.e., the bias of the mind.

This is not to deny the very considerable differences among these philosophers, but only to indicate that there is a fundamental attitude shared by all of them, however much they may otherwise differ. As noted above, they all, with the exception of Kant and, in a way, Heidegger, provide for a way of overcoming the mind's customary distortion of its object, and thus achieving an insight into the ultimate reality. But their concepts of the nature of reality, or metaphysical entities, all are analogous to the "thing in itself" and are thus firmly rooted in a post-Cartesian tradition. This equation of the distinction between appearance and reality with the distinction between things as experienced and things in themselves has been taken for granted almost

without question by virtually all post-Cartesian metaphysics.<sup>17</sup> What makes this significant is that this equation was so far from self-evident to the Greeks, that they just as unanimously did not make it.

## IV

The Greeks were well aware that perception is subjective, in that the senses contribute something to the act of perception, with the result that our sense perception of entities, and the nature of the entities in themselves, are never identical. Where the Greeks differ from the moderns is that they do not make the inference that, because the senses modify their object, so must the mind. Thus the point of the *Theaetetus* is not that, because the object of sense perception is modified, so therefore must be the object of knowledge, but rather that therefore knowledge is an altogether different thing from sensation. Thus, too, both Plato and Aristotle concluded that although knowledge is possible, knowledge of individual sensible things is not.

The basis of this difference between the Greek and the modern points of view is that whereas Descartes and Kant connect the formal character of the sensible appearances with formal "universal concepts" or "categories" of the understanding (via the imagination), in Plato and Aristotle the sensible appearances are independent of the understanding, and occur prior to any mental subsumption under a category or form—as is evident in the Platonic doctrine of recollection and the Aristotelian doctrine of abstraction. For them, unlike the others, the form is "in" or "present to" the thing, prior to and independently of our perception.

But since in abstraction and recollection the objects of knowledge are derived, at least in part, from sensation (which modifies its object), how can the object of knowledge derived from it not

<sup>&</sup>lt;sup>17</sup> Two exceptions are Hegel and (in places) Russell, both of whom are closer to Plato in this.

<sup>18</sup> E.g., Plato, Theaetetus 153d-160b.

be correspondingly modified as a consequence? This can be answered in terms of something in sense perception which is objectively valid, not dependent on the subjectivity of sensation: its relations—and it is with these relations that knowledge is concerned. For example, we cannot say that "whiteness", which we perceive, is "in" the thing perceived; we can properly call a thing "white" only if we mean that it has the property of producing the sensation of whiteness in vision. <sup>19</sup> But this relation of power is really the only sense of whiteness with which knowledge is concerned. It is no doubt true that we could not say what a thing would "look" like if it were not modified by vision, but this is a specious paradox that is ultimately without intelligible content.

This subjectivity of sensible appearances can thus be admitted, without prejudice to the objectivity of logical, mathematical, scientific, and philosophical relations. Experience awakens us to the principle that A and non-A cannot both be true (non-contradiction) nor both false (excluded middle), but the objective validity of the relations expressed in these principles is not affected by the fact that when we talk about, for example, white or non-white we are speaking of purely subjective qualities. So little, in fact, are these principles dependent on sense experience that not only can they not have been derived from it (since they are presupposed in any interpretation of experience), but even their application to it can often be achieved only arbitrarily and "unnaturally", due to the imprecision of our senses. For example, since we cannot say with certainty where whiteness ends and non-whiteness begins, a borderline case may seem either to be both white and non-white, or neither white nor non-white; this limits the usefulness of the laws in imprecise situations, but does nothing to discredit the validity of the laws in terms of clearly defined relations. Similarly, we may be awakened by experience to the concept of "equality", one of the fundamental concepts of mathematics; but the objective nature of the relation of "equality" is not affected by the fact that those things which seemed to be the same size may have different natures than appeared to our senses. Like the principles of logic, "equality" is not reducible to, and therefore not dependent on our sense experience; for the concept carries with it the idea of precision and exactness, whereas the sensible equality of things is always attended by uncertainty and approximation.<sup>20</sup> Again, experience may evoke in us the concept of causality, and therefore the principle that everything must have a cause, which is the basis of science; but the objective validity of this relation is not necessarily annulled by the fact that our perception of the entities involved included certain subjective sensations. As Kant points out (and Hume indirectly), the apodictic nature of the principle shows that it is not wholly dependent on the testimony of our senses.

This is true of philosophical concepts, as well. The series of relations which constitutes a just action is in no way invalidated by the element of subjectivity which attaches to our sensible image of the entities involved. The idea of justice, exemplified in that action, is in no way made subjective simply by the fact that, for example, the colours involved are subjective. The same holds true for the idea of beauty: if, by calling a thing beautiful, we mean that it is so constituted as to affect us in a certain way, the judgement that something is beautiful remains valid even despite the subjectivity of the colours that enhance that effect; for this very subjectivity is comprehended in the idea of beauty as a relation between us and the object. And so with other "philosophical" ideas, such as goodness and wisdom.

It is thus as consistent with the facts of sense experience to maintain that the object of knowledge is not modified by human apprehension, as to maintain that it is. And for someone who regards the compatibility of mental and natural operations as due to a common ground (Plato's Good and Aristotle's teleological unity toward divine thought), there is more reason for assuming that the mind does not inform, and thereby "falsify" the nature of things, than for assuming that it does. In itself, neither position assumes more than the other, just as, in itself, it is no less an assumption to call the universe absurd than to call it meaningful. We have the tendency to believe that to assume the worst is less

<sup>19</sup> Cf. Theaetetus 156c-157a.

<sup>20</sup> Cf. Phaedo 74b f.

of an assumption than to assume the best, for we are less likely in that case to be deluded by wishful thinking. But we may then be deluded just as much by pessimism. The fact remains that an optimistic assumption assumes no more than a pessimistic one. Obviously, one of the present alternatives is true, and the other false, since they are contradictory, but the truth is certainly not self-evident, and apparently not demonstrable.

The classical position is affirmed in Aristotle's assertion in de Anima (III 4, 429a18 f) that the mind must itself be uncharacterized (formless), since otherwise its own quality would modify those of its objects. The possibility that the mind might, in fact, have qualities, and may therefore be incapable of knowing its object as such is rejected as unacceptable: it simply seemed to Aristotle to assume too much.

In this Aristotle and Plato are at one. Aristotle's "empiricism" is not a radical one: he affirms, for example, that mathematical and logical reasoning must be present, by nature, in the soul.21 And in the case of knowledge, according to de Anima (III 5), objects do not act directly on the mind, but require the cryptic "active intellect", which is to knowing what the sun is to seeing. This is, of course, the same metaphor that Plato had used in the Republic (VI, 508a-509b) to depict the Good: as the sun furnishes the eye with vision and its objects with visibility, the Good furnishes the knower with the power to know and the objects with knowability. This link is made intelligible in Plato by his making the Good the source of the generation of intelligible objects (and, therefore, of intelligence, since φρόνησιs is one of the Forms), as the sun is the source of visible objects (and, therefore, of the eye), so that the epistemological link is founded on an ontological one-a foundation that is reaffirmed in the Timaeus (29a, 39e). Aristotle agrees with Plato that the mind and its object have something in common (the form—in the latter case immanent, in the former abstracted and applied to the mind by the active intellect) which assures that our experience does not essentially modify or distort its object. Here, too, the epistemological link is founded on an ontological one. To be sure, any ontological connection between

the power of the active intellect and the teleological unity of all things is left obscure, as is everything about the active intellect. It can be seen, however, that the source, understood as the teleological and first cause, of the activity of the mind and that of the world is identical: the deity. The initial impetus and direction of both human reason and the world is ascribed to a desire  $(\tilde{o}\rho\epsilon\xi\iota s)$  for pure (self-thinking) thought.<sup>22</sup>

But how in this case is metaphysics possible—or rather, what need is there of it? If the things as experienced are essentially no different from the way they are in themselves, the highest knowledge would seem to be empirical description, or science. Thus in the Metaphysics (E I) Aristotle argues that physics will be first philosophy, unless it is incapable of knowing all kinds of being, unless there is some being which is beyond the scope of physics, i.e., something non-material (separable) and unchangeable (unmoved). For Aristotle, first philosophy is therefore "theology", the attempt to apprehend the nature of the deity, in which alone the unity and purpose of the universe may be found; just as for Plato first philosophy is noesis, the looking toward the nonmaterial, unchanging Forms. The distinction between appearance and reality was for them not a distinction between things as experienced and things in themselves; but rather a distinction between those entities which appear to our senses and those which, being non-material, cannot so appear, but whose existence is necessary for the existence and intelligibility of the material world. Thus, when Aristotle rejected Plato's claim that the Forms were separate from matter, he found it necessary to posit a different sort of non-material entity-the deity-to take their place as a suprasensible foundation of the sensible realm.

I am not here concerned to show whether the post-Cartesian position represents an advance or decline from the Platonic-Aristotelian position, but rather that the two positions are fundamentally different, the classical treating the difference between appearance and reality as an ontological difference, the modern as an epistemological difference.

<sup>21</sup> E.g., de Memoria 452b8-19, 453a12-14.

<sup>&</sup>lt;sup>22</sup> Metaphysics, A1 and 17 (õpeğis at 890221 and 1072226).

V

The Cartesian position had, of course, its antecedents. Thus, the Protagorean position<sup>23</sup> that, due to the subjectivity of the senses, objective knowledge is impossible and man is the measure of all things, bears a certain unsophisticated (although not necessarily unsophistic) resemblance to the modern view. But Protagoras' position is, as far as I know, merely an analogue of the modern position, rather than direct influence. The first impetus toward the modern view came, I believe, from another direction: medieval theology.<sup>24</sup>

It is very likely no accident that Descartes chose to make his starting point (cogito ergo sum) a repetition of Augustine's starting point (si fallor sum), for Descartes is following Augustine in a decisive respect: he accepts (but goes beyond) Augustine's claim that truth is to be found not in or through entities, but within man himself—philosophy must primarily be introspection of our mind.<sup>25</sup>

It is but a step from the Platonic position that the same Forms inform the mind as determine the things, to the Cartesian-Kantian position that the forms of the mind directly inform our experience; just as it is but a step from the position that our perceptions are copies of the things, to the Berkeleyan position that our perceptions are the things. But it is a step that need not be taken. Augustine, however, makes the first decisive move in that direction.

Plato had regarded the source of the possibility of knowledge as a metaphysical entity, the Good, which generated both the Ideas and the intellect, thus linking the knower with the known. In Augustine this metaphysical entity becomes a personal God, in whose image we are made. Further, the origin of the Ideas is in the mind of God,<sup>26</sup> of which our mind is an image. Because of

this relationship, the common ground that accounts for the commensurability between our mind and the world is repeated or "echoed" within us in a more definite and tangible manner than was the case for Plato or Aristotle: it is not merely accessible to our mind, but articulates in the mind a structure that, for the Greeks, it did not have.<sup>27</sup> To be sure, the source of the Forms is not our mind, as with Descartes and Kant, but it is a personal mind, and one with which we are intimately related. That is why for Augustine the starting point of philosophy is introspection, whereas for Plato it is "recollection" through experience. In this shift in the doctrine of Forms, making them dependent upon and subordinate to an intellect, Augustine was followed even by Aguinas.28 Thus, although Aristotle's objection to Plato's theory of Ideas was to their separation from matter, Aquinas says, "Thus Aristotle likewise rejects the opinion of Plato, who held that Ideas existed of themselves, and not in the intellect"29 (my italics).

Now, if the possibility of knowledge is within us because of our relation to God, it follows that this internal principle should be discoverable by psychological introspection alone—i.e., without reference to theology (although this step, too, need not be taken). Thus Descartes arrives at the certainty of clear and distinct ideas and the natural light introspectively, not only prior to proving God's existence, but even in order to do so (pp. 35, 38). His theology, such as it is, is virtually limited to the statements that God exists and that he is no deceiver—the latter providing no more than confirmation of what he has already affirmed indubitable on a psychological basis. In fact, theological considerations are so far from central to Descartes' method that he banishes teleological or final causes from natural philosophy on the grounds that we cannot hope to know the purposes of God (p. 55).

With this step the medieval position becomes transformed into the modern. Plato had regarded the source of the possibility of

<sup>23</sup> Cf. Plato's Theaetetus 161b ff.

<sup>&</sup>lt;sup>24</sup> Thus, in his Battle of the Books, Swift has the Medievals aligned with the Moderns against the Ancients.

<sup>&</sup>lt;sup>26</sup> E.g., Augustine, de Vera Religione, XXXIX, 72; de Libero Arbitrio, Book II, Chapter III f.

<sup>26</sup> de Ideis, 2.

<sup>&</sup>lt;sup>27</sup> E.g., de Trinitate, IX; de Libero Arbitrio I: VIII: 51; II: VIII, 81. The tripartite souls of Plato and Aristotle are divisions of the soul but not of the mind: within them reason—the mind—is uniform.

<sup>28</sup> Summa Theologica, Book I, Question 15.

<sup>&</sup>lt;sup>29</sup> Ibid., First Article, Reply Obj. I (Dominican Translation). Cf. Aristotle, *Metaphysics* II 2, 997b6.

knowledge as a metaphysical entity which linked the knower with the known. Augustine regarded it as the divine mind, with which man had a personal relationship and even kinship; and Descartes concentrated on this source as the human mind itself—discoverable prior to any theological considerations. The three positions may be distinguished as ontological, theological and humanistic.

The humanistic position would obviously be much more amenable to the scientific spirit of modern times than would the others, for it alone posits no basic entity, suprasensible and inaccessible to science, the knowledge of which is nevertheless requisite for any complete statement of the nature of the world. For Plato, scientific knowledge would be at the third level from the top of the divided line-niones: belief or conviction-the highest knowledge of sensible things possible without investigation of their purely intelligible foundation. Similarly, the telos of Aristotle's teleological physics may be found only in theology, first philosophy; physics without metaphysics is incomplete. Modern philosophy, however, becomes deistic. Because God's purposes are unknown to us, scientific procedure must ignore him. And because the distinction between appearance and reality does not presuppose any such separate entity, but only the nature of man himself, scientific procedure may ignore any supposed metaphysical entity, without having to admit to any lacunae in its scope. Where the distinction between appearance and reality is merely the distinction between the "experienced" and the "in itself", the claim of science to be comprehensive can be maintained; for even if science is said to observe only the world as experienced, it nevertheless investigates the complete set of entities constituting the world-including man himself, in whom the basis for the distinction resides. In the former positions, however, the most fundamental entities of all are beyond the scope of scientific method.

It is significant, however, that although the classical metaphysics may be less amenable to the scientific mind, as it posits metaphysical entities distinct from those accessible to science, it is nevertheless perfectly compatible with modern science, and therefore cannot at all be considered discredited by the success of science. Plato himself shows the relationship between metaphysics of Forms and science of elements in the *Phaedo* (103a ff) when he discusses the Forms and the elements which "bear the Forms", as well as in the discussion in the *Timaeus* (55d ff) of the elemental triangles. Similarly in the *Metaphysics* (B3) Aristotle takes due note of the fact that entities may be described either in terms of their constitutive elements or their formal nature. That this compatibility holds true for contemporary science as well has been remarked by philosopher and scientist alike. The metaphysical doctrine of Forms and the scientific doctrine of elements are complementary and compatible.

The relationship between science and each of the two metaphysical positions can be expressed as follows. For modern philosophy there is, on one hand, the world as it is in itself, and, on the other, the appearance to which it gives rise in the act of being perceived. The former is the province of metaphysics. The latter is the province, first, of confused common sense, and, subsequently, of science; the first representing the phenomenon as initially perceived, the second representing it as reduced to a consistent set of concepts and laws. Ancient metaphysics differs from this only in that the metaphysical entities are not the same world we perceive, though as it is in itself, but are rather something like universals (which includes, for Aristotle, the deity-Metaphysics E, 1026a 29-31). To put it differently, it was remarked earlier that ancient metaphysics was concerned with the formal or teleological causes, whereas modern metaphysics is concerned with (in Kant's sense) the material cause. Modern science, on the other hand, concerns itself with their complement, the efficient cause, and thus does not essentially conflict with either of them.

## VI

I have attempted to show essentially two things in this essay: first, that certain fundamental assumptions have been subscribed to virtually uncritically by modern philosophy since Descartes; second, that the neglected alternatives to these assumptions were

<sup>&</sup>lt;sup>30</sup> E.g., Paul Friedländer, *Plato*, vol. 1, Princeton: Princeton University Press, 1958, Chapter XIV; and Werner Heisenberg, *Physics and Philosophy*, New York: Harper and Row (Torchbook), 1962, pp. 67-75.

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never refuted, and are perfectly consistent both with sense experience and mathematical science. Nevertheless, ever since these alternative ways of philosophical understanding were rejected by Descartes and his followers, they seem to have become forgotten, at least as alternatives. Plato and Aristotle may be read as much as ever, but this fundamental difference between their ways of approaching philosophy and ours (as distinct from the differences in conclusions) no longer seems, for the most part, to be noticed. This is so much the case that even those who today most radically seek to break out of the stranglehold of tradition and begin anew, remain firmly committed to fundamental Cartesian principles.

A re-examination of all we take for granted in the modern philosophical tradition is urged not for empirical reasons, since both sets of alternatives are perfectly compatible with "empirical facts", both sensible and scientific, but on theoretical grounds. Man's inborn desire to know is not fully exhausted in the discursive knowledge of science, knowledge of the inter-relationships among entities; there are those who, now as always, seek ultimately a noetic insight into the unitary nature of the whole. Man seeks not only the knowledge that is power, but also the knowledge which gives meaning, and which, for example, enables the individual to see even the realm of science in a perspective more promising than that "whatever works" is true, beautiful and good.

Man's aspiration toward knowing has been constant, but philosophy no longer seems equal to it, and it is now seeking other avenues, as old as philosophy but more vital. In our quest for a working knowledge of nature we have understandably turned to philosophy's more "efficient" offspring, mathematical science. But in our quest for insight into the nature of reality as a whole, philosophy is being turned away from, not because it has given birth to something more efficient, but because it seems to have reached an impasse. Today, when metaphysics seems to be impotently beating its wings against the weight of the "egocentric predicament", we ought to make a radical effort to determine whether our decisive choices have been the right ones.

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