

# Metaphysics

## INTRODUCTION

**I**N this chapter, as in MATHEMATICS, we must distinguish controversies about the science we are considering from controversies in it. But here the situation is complicated by many ambiguities. In the tradition of western thought, the name of science has never been denied to mathematics, no matter how its subject matter has been defined or what conception of science has prevailed. But controversies about metaphysics often begin, in modern times at least, by questioning our right to use the word "science" when we speak of metaphysical inquiry or speculation. The challenge usually implies that metaphysics cannot be regarded as a body of valid knowledge because the peculiar objects it has chosen to investigate are not susceptible to scientific inquiry.

If experimentation were the *sine qua non* of scientific knowledge, it would follow, of course, that a discipline which could not perform experiments or even less rigorous types of empirical research could not be called a science. But by that standard mathematics would also be ruled out. It does not seem to be the case, however, that mathematics and metaphysics stand or fall together.

Hume, for example, admits the one and excludes the other. If we are persuaded of his principles concerning science, what havoc, he says, must we make when we run over our libraries. "If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, *Does it contain any abstract reasoning concerning quantity or number?* No. *Does it contain any experimental reasoning concerning matter of fact and existence?* No. Commit it then to the flames; for it can contain nothing but sophistry and illusion."

Nor does Kant make experimentation or

empirical research indispensable to valid and certain knowledge. On the contrary, pure, as opposed to empirical, physics is for him like mathematics in having the superior status of *a priori* knowledge. They are both sciences in the highest sense of the term because they consist of valid synthetic judgments *a priori*. Kant, therefore, does not exclude metaphysics from the ranks of science because he thinks that "metaphysics, according to its proper aim, consists merely of synthetic propositions *a priori*." Not the method of metaphysics, nor the form of its propositions, but the character of its objects seems to be the cause of its frustration, reducing it to what Kant calls an "illusory dialectic" rather than a valid science.

It might be supposed that those who take the opposite view—that metaphysics is a science, even, perhaps, the highest of the sciences—would agree in defining its objects or the scope of its inquiry. This does not seem to be the case, any more than it seems to be true that all those who criticize metaphysics conceive its subject matter in the same way.

Following what he takes to be the traditional conception of metaphysics in the medieval schools, which appears to him to be continued in the writings of René Descartes, Gottfried Wilhelm Leibniz, and Christian Wolff, Kant says that "metaphysics has for the proper object of its inquiries only three grand ideas: God, Freedom, and Immortality." This also seems to be at least part of what Hume has in mind when he refers to "school metaphysics" and associates it with "divinity," by which he means theology, natural or sacred. Yet we find William James saying that "Hume is at bottom as much of a metaphysician as Thomas Aquinas," because he is engaged in

speculations concerning the relation or lack of relation, the identity or lack of identity, in the discrete elements of immediate experience. Here the question seems to be not about God, freedom, and immortality, but about the existence of enduring substances underlying all perceptible qualities, or about a fixed order of reality behind the sequence of phenomena in experience. According to James, "the whole question of interaction and influence between things is a metaphysical question, and cannot be discussed at all by those who are unwilling to go into matters thoroughly."

In the Preface to his *The Principles of Psychology*, James declares his plan to limit his own inquiries to what can be known by the empirical methods of the natural sciences. Psychology, like physics, must assume certain data. The discussion of these assumptions, he says, "is called metaphysics and falls outside the province of this book . . . The data assumed by psychology, just like those assumed by physics and the other natural sciences, must sometime be overhauled. The effort to overhaul them clearly and thoroughly is metaphysics; but metaphysics can only perform her task well when distinctly conscious of its great extent." The implication seems to be not that metaphysics is impossible but rather that metaphysics, as James conceives it, does not yet exist in any mature or satisfactory development. "Only a metaphysics alive to the weight of her task," he writes, can hope to be successful. "That will perhaps be centuries hence."

JAMES COULD NOT have fully foreseen the departures in the name of metaphysics that were to occur in the 20th century, though he did have a sympathetic understanding of the direction taken by Bergson. According to Bergson, "Science and metaphysics . . . come together in intuition. A truly intuitive philosophy would realize the much-desired union of science and metaphysics . . . It would put more science into metaphysics, and more metaphysics into science." But we also find Bergson saying that "positive science works . . . with symbols," whereas "*metaphysics . . . is the science which claims to dispense with symbols.*"

The volume in this set that contains 20th-

century contributions to philosophy contains two treatises on metaphysics—one by Bergson and one by Heidegger. In the latter, we find a totally different approach to the subject. Heidegger defines metaphysics as the history of the truth about what-is. "If indeed the question of Being as such is the all-embracing question of metaphysics, then the question of Nothing proves to be such as to span the whole metaphysical field"; adding that "because the truth of metaphysics is so unfathomable there is always the lurking danger of profoundest error. Hence no scientific discipline can hope to equal the seriousness of metaphysics. Philosophy can never be measured with the yard-stick of the idea of science."

Physicists and mathematicians in the 20th century also venture into the discussion of metaphysics. Planck remarks that "metaphysical reality does not stand spatially *behind* what is given in experience, but lies fully *within* it . . . The essential point is that the world of sensation is not the only world which may conceivably exist, but that there is still another world. To be sure, this other world is not directly accessible to us, but its existence is indicated, time and again, with compelling clarity . . . by the labors of science." Planck maintains that "scientists have learned that the starting point of their investigations does not lie solely in the perceptions of the senses, and that science cannot exist without some small portion of metaphysics."

The mathematician G. H. Hardy first distinguishes between physical and mathematical reality. He then maintains that "a man who could give a convincing account of mathematical reality would have solved very many of the most difficult problems of metaphysics. If he could include physical reality in his account, he would have solved them all."

As Russell sees it, "Most of the great ambitious attempts of metaphysicians have proceeded by the attempt to prove that such and such apparent features of the actual world were self-contradictory, and therefore could not be real. The whole tendency of modern thought, however, is more and more in the direction of showing that the supposed con-

traditions were illusory, and that very little can be proved *a priori* from considerations of what *must* be."

WE CANNOT FULLY explore the issue concerning the objects of metaphysics without observing that other names are used in the tradition of the great books to designate the discipline which, rightly or wrongly, claims to be the highest human science. The Greeks initiated the conception of a discipline which should be preeminent because it deals with first principles and highest causes. It not only searches for wisdom about the ultimate realities; it also lays the foundations for all other sciences. But the Greeks do not have one name for this discipline, nor is "metaphysics" even among the various names they use.

Aristotle, whose *Metaphysics* is the first great book to have this word in its title, never uses the word to refer to the science which he is trying to define and establish. In the opening chapters, he speaks of it under the name of wisdom, for "all men suppose what is called Wisdom to deal with the first causes and the principles of all things." There are other theoretical sciences, such as physics and mathematics, which investigate causes or deal with principles, but they do not reach to the highest causes or first principles, nor do they take all things in their most universal aspect as the object of their inquiry.

Though "physics also is a kind of Wisdom," says Aristotle, "it is not the first kind"; and elsewhere he says that "both physics and mathematics must be classed as *parts* of Wisdom." Physics deals only with material things in motion; and "the mathematician investigates abstractions"—objects which, except as abstracted, cannot exist apart from matter and motion. "If there is something which is eternal and immovable and separated from matter, clearly the knowledge of it belongs to a theoretical science—not, however, to physics nor to mathematics, but to a science prior to both." It is that science which is the highest part of wisdom.

Aristotle gives two names to the supreme form of human wisdom or the highest of the theoretical sciences. He denominates it both

from the position it occupies in relation to all other disciplines and also in terms of the kind of substance which it alone investigates. If there is "no substance other than those which are formed by nature, natural science (*i.e.*, physics) will be the first science, but if there is an immovable substance, the science of this must be prior and must be first philosophy." But this highest science also deserves to be called "theology" as well as "first philosophy." There are, Aristotle says, "three theoretical philosophies, mathematics, physics, and what we may call theology, since it is obvious that if the divine is present anywhere, it is present in things of this sort," *i.e.*, the eternal, immutable, immaterial.

THERE IS STILL another name for the highest speculative discipline in the Greek conception of the order of the sciences. "Dialectic" is the name which Plato gives to the search for first principles and for the knowledge of the most intelligible realities. As appears in the chapter on DIALECTIC, Aristotle contrasts the dialectician and the philosopher as respectively concerned with opinion and knowledge, but Plato regards the dialectician as preeminently the philosopher. Not only does dialectic belong to the realm of knowledge rather than opinion, but in the realm of knowledge, mathematics occupies the lower, dialectic the upper part. The mathematical sciences build upon hypotheses which they do not and cannot establish. Dialectic uses hypotheses only "as steps and points of departure into a world which is above hypotheses, in order that she may soar beyond them to the first principle of the whole; and . . . by successive steps she descends again without the aid of any sensible object from ideas, through ideas, and in ideas she ends."

Despite all the relevant differences between Plato and Aristotle concerning being and becoming, reason and sense, the intelligible and the sensible, it seems possible to compare the knowledge which Plato calls "dialectic" with what Aristotle calls "first philosophy" or "theology."

Both, for example, proceed from first principles and establish the foundations of the

inferior sciences. On its downward path, dialectic, according to Plato, brings the light of reason to bear on the understanding of the hypotheses which are the principles of mathematics. Though Aristotle thinks that mathematics rests on axioms or self-evident truths, he also says that "it must be the business of first philosophy to examine the principles of mathematics" because the mathematician only uses them in a special application without investigating their general truth. Furthermore, the question concerning how the objects of mathematics exist is a question for the first philosopher, not the mathematician.

In the *Sophist*, Plato, to illustrate the difference between the sophist and the dialectician or philosopher, develops an analysis of such terms as being and nonbeing, true and false, same and other, one and many, rest and motion. These, it seems, are the fundamental concepts in the philosopher's knowledge of the ultimate reality. But these are also the fundamental concepts in Aristotle's *Metaphysics*. In the medieval period when "metaphysics" generally replaces "dialectic" as the name for the first philosophy, the so-called transcendental terms—such as *being, essence, other, one, true, good*—are treated as the basic metaphysical concepts; and what is characteristic of them as abstractions helps to characterize the nature of metaphysics as a science.

The word "metaphysics" comes into use as a result of the title supposedly given by the Alexandrian librarians to the work in which Aristotle treats the problems of the first philosophy. The word is short for "the books which come after the books on physics." Plotinus uses the word and connects it with the Platonic meaning of "dialectic." In the training of the metaphysician he says, dialectic is the ultimate study.

Dialectic, according to Plotinus, "is the method, or discipline, that brings with it the power of pronouncing with final truth upon the nature and relation of things—what each is, how it differs from others, what common quality all have, to what kind each belongs and in what rank each stands in its kind and whether its being is real-being, and how many beings there are, and how many non-beings to

be distinguished from beings." But we must not think of dialectic, Plotinus declares, "as the mere tool of the metaphysician." It goes beyond metaphysics as vision or contemplative wisdom goes beyond discursive reasoning and demonstration. "It leaves to another science all that coil of premises and conclusions called the art of reasoning."

THE QUESTION which Plotinus raises—whether there is a higher science or form of knowledge than metaphysics—is naturally considered by the great Christian theologians. In part their answer resembles that of Plotinus; in part it differs. Where Plotinus speaks of dialectic as "the most precious part of philosophy" because it transcends reasoning and argument and reaches the sort of immediate apprehension of reality which cannot be expressed in words, theologians recognize the supremacy of mystical knowledge—a foretaste in this life of what the vision of God will be like in the life to come. But, unlike Plotinus, they do not think such knowledge, here or hereafter, is natural wisdom. Rather it is supernatural knowledge, the divine gift to man of a contemplative wisdom to which his nature cannot attain by its own unaided powers.

The subordination of metaphysical science to knowledge which is both supernatural and nonscientific (*i.e.*, neither discursive nor analytic nor demonstrative) is considered in the chapters on THEOLOGY and WISDOM. Another subordination of metaphysics, considered there also, must be mentioned here as well. That is the subordination of metaphysics to theology. Both metaphysics and theology may be conceived as sciences which are engaged in reasoning and argument and in trying to demonstrate conclusions from principles. But one is merely a human science working with the principles of reason, whereas the other is what Aquinas calls "sacred doctrine," in order to signify that its principles are articles of religious faith.

In the hierarchy of human sciences, metaphysics remains supreme—the first philosophy. It suffers only by comparison with theology insofar as the latter rests upon divine revelation and, since it enjoys the certainty of faith,

escapes the insecurity of reason. Though metaphysics and theology differ in their principles and somewhat in their methods, they do not differ entirely in their subject matter. Both, for example, may treat of God and of the existence of immaterial and imperishable beings. Aquinas, therefore, must face the objection that there is no need for any knowledge in addition to metaphysics because "everything that is, is treated of in philosophical science—even God Himself, in that part of philosophy called theology, or the divine science, by Aristotle." To this he replies by giving two reasons for sacred theology.

It is necessary, he says, "for the salvation of man that certain truths which exceed human reason should be made known to him by divine revelation. Even as regards those truths about God which human reason could have discovered, it was necessary that man should be taught by a divine revelation; because the truth about God such as reason could discover, would only be known by a few, and that after a long time, and with the admixture of many errors." Furthermore, he continues, there is no reason "why those things which may be learnt from philosophical science, so far as they can be known by natural reason, may not also be taught us by another science so far as they fall within revelation. Hence the theology included in sacred doctrine differs in kind from that theology which is a part of philosophy."

These two kinds of theology are traditionally distinguished as natural and sacred. When Francis Bacon divides the sciences "into theology and philosophy," he adds that "in the former we do not include natural theology." Natural theology is the divine part of philosophy, yet it is clearly distinct from sacred theology or what Bacon calls "inspired divinity."

This distinction, in whatever language it is made, raises two problems. The first concerns the relation of natural to sacred theology, especially with regard to the scope of natural theology and the precise nature of its independence of sacred doctrine. On this question there seems to be considerable difference between such writers as Augustine and Aquinas, or Bacon and Descartes. As already noted, the various issues involved are reserved for discus-

sion in the chapter on THEOLOGY. The second problem is directly pertinent to metaphysics alone. The question is whether metaphysics and natural theology are identical in subject matter or scope, or whether natural theology is only a part of metaphysics.

Aristotle seems to answer this question when he suggests that "first philosophy" and "theology" are interchangeable designations for the highest branch of speculative knowledge. To the extent that he declares this science to be an inquiry concerning the existence and nature of immaterial and imperishable substances, his definition of the object of metaphysics would seem to justify the title of theology.

Descartes, who also separates metaphysics from physics by reference to the immateriality and materiality of the substances which are their objects, even more explicitly seems to give the whole of metaphysics a theological character. In the Preface to his *Meditations on First Philosophy*, he says that he is concerned to treat of "God and the human soul"; for, as he explains to the professors of Sacred Theology of the Sorbonne, "I have always considered that the two questions respecting God and the soul were the chief of those that ought to be demonstrated by philosophical rather than theological argument."

Though he adds the freedom of the human will to the existence of God and the immortality of the soul, Kant's definition of the objects of metaphysical speculation similarly makes metaphysics an inquiry into things which lie outside the realm of physics and associates it with the traditional subject matter of theology, at least in the sense that here reason tries to prove propositions which are the main tenets of religious faith. In his Preface to the first edition of *The Critique of Pure Reason*, Kant remarks that when reason "finds itself compelled to have recourse to principles which transcend the region of experience," it "falls into confusion and contradictions . . . The arena of these endless contests is called Metaphysic."

IF NOTHING IMMATERIAL exists, if there are no beings apart from the changing things of sense-

experience, or if, although such things exist, they cannot be known by reason proceeding in the manner of speculative science, does it follow that metaphysics must also be denied existence, at least as a speculative science? The answer seems to be clear. If the declared objects of a science do not exist, or if those objects are unknowable by the methods which that science proposes to follow, then it seems difficult to defend its claims to be a valid science against those who challenge them. The controversy over the validity of metaphysics would thus appear to turn on the truth or falsity of the two "ifs" just mentioned.

But the matter cannot be so resolved if natural theology does not exhaust the whole of metaphysics; that is, if metaphysics considers objects other than the immaterial, and if it inquires into their nature rather than their existence. Aristotle's definition of the subject matter of the first philosophy seems to contain an alternative conception of metaphysics, one which may be quite consistent with the conception of it as theology, but which, however, gives it problems to solve in the realm of physical things.

"There is a science," Aristotle writes, "which investigates being as being and the attributes which belong to being in virtue of its own nature." This definition of the first philosophy seems to differentiate it from mathematics and physics as sharply as the other definition in terms of immaterial and imperishable substances. The other sciences, according to Aristotle, do not treat of "being *qua* being universally." The properties of anything which is "in so far as it has being, and the contraries in it *qua* being, it is the business of no other science to investigate; for to physics one would assign the study of things not *qua* being, but rather *qua* sharing in movement"; and mathematics is concerned with the attributes of things insofar as they are "quantitative and continuous." These sciences "mark off some particular kind of being, some genus, and inquire into this, but not being simply, nor *qua* being . . . Similarly, these sciences omit the question whether the genus with which they deal exists or does not exist, because it belongs to the same kind of thinking to show what it is and that it is."

Only the first philosophy "does not inquire about particular subjects in so far as each has some attribute or other, but speculates about being, in so far as each particular thing is." Its subject matter, then, includes *all* existing things as existing, and involves not only the question how anything which exists exists (*i.e.*, the properties of being), but also the question whether certain things, whose existence can be questioned, do in fact exist. Whatever truths hold good for all things *qua* being—such as the principle that the same thing cannot both be and not be in the same respect at the same time—belong to the first philosophy, even though, as in this case Aristotle points out, the law of contradiction may also belong to logic as the principle of demonstration.

THIS BROADER CONCEPTION of the first philosophy explains, as its restriction to natural theology could not explain, why the central books in Aristotle's *Metaphysics* treat of sensible, physical substances; their nature as substances; the distinction between substance and accident, form and matter, potentiality and actuality, as principles of the composite nature of changing substances; and the properties of such existences in virtue of their having being, *e.g.*, their unity and divisibility, their sameness and otherness.

Aristotle does not inquire whether such substances exist. He seems to take their existence as unquestionable, for he frequently refers to physical things as "the readily recognized substances." But in addition to the question "how sensible substances exist," there are such questions as "whether there are or are not any besides sensible substances . . . and whether there is a substance capable of separate existence, apart from sensible substances, and if so why and how." These latter questions lead to the concluding books of the *Metaphysics* which inquire into the existence of the non-sensible, the immaterial, the immutable. If Aristotle's theology begins here, then theology is only a part—the crowning part, perhaps—of a larger science whose object is not a special realm of being, but all of being.

Hobbes and Bacon go further than Aristotle in the direction of opposing the identification

of metaphysics with theology. Where Aristotle seems to admit theological subject matter as a part of the first philosophy, they exclude it entirely.

Hobbes does not use the word "metaphysics" in his own classification of the sciences; he employs it only as a term of derogation to refer to scholastic doctrines which he repudiates. His own classification makes *philosophia prima* that branch of natural philosophy which is prior to the mathematical and mechanical sciences. The latter deal with determinate quantity and motion. The antecedent science deals with "quantity and motion *indeterminate*." These "being the principles or first foundation of philosophy," the science which deals with them "is called *Philosophia Prima*."

Bacon distinguishes between first philosophy and metaphysics and between metaphysics and natural theology. First philosophy, he says, is "the common parent of sciences." It is concerned with "axioms, not peculiar to any science, but common to a number of them" and also with "the adventitious or transcendental condition of things, such as little, much, like, different, possible, impossible, entity, nonentity, etc." Natural theology, which is the divine part of philosophy because it inquires about "God, unity, goodness, angels, and spirits," is separate from the rest of natural philosophy.

"But to assign the proper office of metaphysics, as contra-distinguished from primary philosophy and natural theology," Bacon writes, "we must note that as physics regards the things which are wholly immersed in matter and movable, so metaphysics regards what is more abstracted and fixed; that physics supposes only existence, motion, and natural necessity, whilst metaphysics supposes also mind and idea . . . As we have divided natural philosophy into the investigation of causes and the production of effects, and referred the investigation of causes to theory, which we again divide into physical and metaphysical, it is necessary that the real difference of these two be drawn from the nature of the causes they inquire into." Physics, according to Bacon, inquires into efficient and material causes; metaphysics, into formal and final causes; and as

mechanics is the practical application of physical theory, so what Bacon calls "magic" is the practical doctrine that corresponds to the metaphysical theory of forms.

AGREEMENT OR disagreement concerning the subject matter and problems of that which claims to be the highest human science, however named, does not seem to be uniformly accompanied by agreement or disagreement concerning the status and development of the discipline in question.

There seems to be some similarity, for example, between Plato's dialectic as an inquiry into forms and Bacon's notion of metaphysics as concerned with formal causes—a similarity which Bacon himself observes. But where Plato seems to think that dialectic exists, to be taught and learned, Bacon's judgment is that this part of metaphysics, if not the part dealing with final causes, has not yet been developed because the right method has not been employed.

Again, Aristotle's conception of metaphysics as concerned with the primary axioms, the universal principles applicable to all existence, and the transcendental properties of being, seems to bear some resemblance to Bacon's primary philosophy. But Bacon writes as if Aristotle's *Metaphysics* had not been written, or at least as if it had not succeeded, as Aristotle might have supposed it had, in establishing the science which Bacon finds for the most part in a defective or undeveloped condition.

If we turn to natural theology, either as a part of metaphysics (with Aristotle), or as separate from metaphysics (with Bacon), or as identical with metaphysics (with Descartes), we find the same situation. Aside from some verbal and some real differences concerning the objects of the inquiry, Aristotle, Bacon, and Descartes think that the existence of beings apart from the sensible world of matter and change can be demonstrated and that something can be known of their nature—whether they are called immaterial substances, spirits, and intelligences, or God, angels, and souls.

With some alterations in language and thought, Plato and Plotinus, Augustine and Aquinas, Spinoza and Locke can be added to

this company. They are theologians in that sense of "theology" which implies a rational knowledge—without religious faith, and either by intuition or demonstration—of beings which really exist, yet are not sensible or material or mutable or finite. Spinoza, for example, does not use the word "metaphysics," but he holds that "the human mind possesses an adequate knowledge of the eternal and infinite essence of God." Although Locke's use of the word "metaphysics" is derogatory, and though the purpose of his essay *Concerning Human Understanding* is to prevent human inquiries from extending beyond man's capacities, he attributes greater certainty to our knowledge of God and the soul than to our knowledge of bodies, and finds no greater difficulty in our speculations about spirits than about particles of matter.

"Experimenting and discovering in ourselves knowledge, and the power of voluntary motion, as certainly as we experiment, or discover in things without us, the cohesion and separation of solid parts, which is the extension and motion of bodies," Locke writes, "we have as much reason to be satisfied with our notion of immaterial spirit, as with our notion of body, and the existence of the one as well as the other . . . But whichever of these complex ideas be clearest, that of body, or immaterial spirit, this is evident, that the simple ideas that make them up are no other than what we have received from sensation or reflection; and so is it of all our other ideas of substances, even of God himself."

As we have already seen, Hume and Kant deny metaphysics (so far as it is identified with what is traditionally natural theology) the status of a valid theoretical science. For them it is incapable of taking its place beside physics and mathematics. Hume, in addition, denies validity to metaphysical speculation concerning causes and substances in the natural order. Unlike Hume, who simply removes metaphysical problems from the realm of questions worth thinking about, Kant does not reject the problems but rather offers alternative methods of stating and solving them. He hopes thereby to accomplish a reformation rather than an abolition of metaphysical inquiry.

The existence of God, freedom, and immortality must be affirmed, Kant thinks, in the order of practical, not speculative reason. They are indispensable "conditions of the necessary object of our will . . . that is to say, conditions of the practical use of pure reason." Yet, he adds, "we cannot affirm that we *know* and *understand*, I will not say the actuality, but even the possibility, of them."

Furthermore, by redefining metaphysics to mean "any system of knowledge *a priori* that consists of pure conceptions," Kant not only gives his fundamental treatises in morals and ethics a metaphysical character, but sees the possibility of a genuine metaphysic emerging from *The Critique of Pure Reason*. Once "the dogmatism of metaphysic" has been removed, "that is, the presumption that it is possible to achieve anything in metaphysic without a previous criticism of pure reason . . . it may not be too difficult to leave a bequest to posterity in the shape of a systematical metaphysic, carried out according to the critique of pure reason."

Kant's transcendental philosophy, and especially what he calls "the architectonic of pure reason," is in a sense that metaphysic already begun. In subject matter, if not in its method or conclusions, it resembles the traditional inquiry concerning the universal principles and transcendental properties of being. The objects of natural theology are, of course, excluded as being beyond the power of reason to know in a speculative manner.

Metaphysics as a possible science is for Kant "nothing more than the inventory of all that is given us by *pure reason*, systematically arranged . . . Such a system of pure speculative reason," he says in his original preface to the *Critique*, "I hope to be able to publish under the title of *Metaphysic of Nature*." And in the last pages of the *Critique*, wherein he criticizes all speculative efforts in the sphere of natural theology, Kant reaffirms "the speculative and the practical use of pure reason" to constitute "a Metaphysic of Nature and a Metaphysic of Ethics." The former, he says, is "what is commonly called Metaphysic in the more limited sense." Both together "form properly that department of knowledge which may be termed, in the truest sense of the word, philosophy.

The path which it pursues is that of science, which, when it has once been discovered, is never lost, and never misleads."

CONTROVERSIES ABOUT metaphysics can be distinguished from metaphysical controversies—that is, disputes within the field of metaphysical thought. We have confined our attention to the former throughout this chapter. But it may not be possible to judge, much less to resolve, the issues about the scope, methods, and validity of metaphysics without engaging in, or at least facing, issues which are themselves metaphysical.

The only way to escape this would be to suppose that psychology (as an analysis of the powers of the mind) or epistemology (as a theory of the criteria of valid knowledge) could determine in advance of any examination of metaphysical discussion whether the matters

to be discussed fall within the range of questions concerning which the human mind has the power to find and validate answers. But if this supposition is untenable in itself; or if it is untenable because psychology and epistemology, when they are treated as the first philosophy, themselves presuppose a metaphysics or conceal their metaphysical presuppositions; then no alternative remains but to judge metaphysics directly by its fruits.

In that case, the issues surveyed in this chapter require an examination of the metaphysical discussions to be found in such chapters as GOD, ANGEL, IDEA, SOUL, IMMORTALITY, WILL (which are relevant particularly to the problems of natural theology); and (as relevant to other parts or problems of metaphysics) such chapters as BEING, CAUSE, FORM, MATTER, ONE AND MANY, RELATION, SAME AND OTHER.