1. Aristotle—Teacher of Those who Know *

I

The now rather pompous title maestro di color che sanno did not seem at all out of place at the time it was given by Dante (Inferno, IV, 131) to Aristotle. Not only in philosophy but also in science and theology the Stagirite's concepts and methods dominated university teaching at the beginning of the fourteenth century. His logic provided the categories and the norms that guided organized human knowledge during the epoch. Later the humanistic trends of the Renaissance, the Biblical emphasis of the Reformation, and the mathematical penetration of modern science played havoc with this dominating reputation of the ancient Greek thinker. Nevertheless his works continued to be studied and used. especially by the nineteenth century philologists and the Neoscholastic philosophers and theologians, and in a lively modern tradition developed notably at Oxford but spreading to the major centers of culture throughout the world. The world-wide interest finds expression in the Symposium Aristotelicum held in a different country every third year, and in a continued output of books and articles that keep enriching present-day knowledge of Aristotle. This mentality seems crystallized in the observation that "the wisdom of Aristotle grows on the mind as one ponders upon it, and the future will be all the better if it continues to digest his wisdom."

There is, of course, opposition. An existentialist may decry the effort "to impose on Gothic evangelical inspiration the deforming tyranny of Aristotelianism." A theological writer may call for the complete dehellenization of Western culture, in the interests of a new religious spirit. A devotee of belles-lettres may be inclined to look upon the Aristotelian tradition as "dry as dust" Peripateticism. A modern

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philosophical critic may regard the Stagirite's thinking as naively realistic. Someone immersed in laboratory techniques may assess Aristotle's whole accomplishment as antiquated science. Yet his thinking continues to thrive in spite of all these severe attacks, just as it has withstood the inroads of adverse criticism down through the centuries.

Surely a way of thinking that has survived so much deeply rooted opposition and continues to flourish amid so much hostility deserves serious consideration. Its history alone would make it part of the intellectual concern of a truly educated person. Its presumed potentialities for service to the ongoing development of Western civilization make advisable a fairly profound acquaintance with its basic principles and workings. It is, whether one likes it or not, a long built-in feature of the Western mentality. It should accordingly be understood in sufficient depth by anyone who claims to take a rational part in present-day intellectual life. An educated person today should be in a position to form his own considered judgment on the merits and shortcomings of Aristotle's thought, on the role it has actually played in shaping Western culture, on its possibilities for influence on the future, and upon the sources of the multiple adverse criticism against it that have been perennial from the time of its origin in the fourth century B.C. Only in this way is one equipped to make a balanced assessment of the role the Stagirite has played and continues to play in the Western world.

H

Aristotle is regularly associated with Stagira, in eastern Macedonia. There his father, though resident at the Macedonian court as royal physician, had his property. At the age of seventeen, or almost seventeen, Aristotle went to Athens. He remained there till he was nearly thirtyseven. During that time he was closely associated with Plato's Academy. Practically nothing is known with certainty of his personal relations with Plato, though his writings show a profound grasp and throughgoing influence of Plato's thought. Nor is anything known definitely about his motives for leaving Athens around the time of Plato's death in 347 B.C.A wave of anti-Macedonian sentiment is the most likely guess. During the next three years he was at the court of Hermias, who ruled the coastal towns of Atarneus and Assos in Asia Minor and who was an admirer of Plato. Then he lived for a short time at nearby Mytilene. A year or so later he was called to Macedon to act as a tutor to Alexander for the next eight years. A short time after Alexander's accession to the throne he returned to Athens for a second stay, of about twelve years. After Alexander's death anti-Macedonian feeling forced him by the early spring of 322 B.C. to leave for Chalcis on the island of Euboea, where he owned property. By mid-fall he had died of stomach trouble, a little over sixtytwo years in age.3

From the time of his first Athenian period Aristotle had engaged in both teaching and writing. He taught rhetoric, in accord with the popular demand of the time, and also the philosophy contained in his treatises. His writings were voluminous. The surviving works are in the form of school logoi, a traditional Ionian literary genre. They are neither mere lecture notes nor writings given a format for presentation to the general public, but carefully written and condensed coverages of philosophical topics that were meant to serve as the basis for lively discussions within highly specialized circles of "hearers." For purposes of citation the treatises allowed themselves to be grouped in narrower or wider collections, according to the viewpoint of the moment. Each grouping had an appropriate title. But besides the treatises, other works of Aristotle were read and quoted in antiquity, and under very different titles. Only the quotations have survived, with some brief references and descriptions. These are now published under the heading of Fragments.4 The fragments often show an ornate style, indicating that the works were meant for the general literary public and not precisely for school activity.

Very little about their chronological order can be deduced from these Extensive efforts have been made to arrange writings. chronologically on the basis of passages that are alleged to show doctrinal proximity to or distance from Plato's thought. But there is no general agreement. Read in one way, the texts labelled "Platonic" are interpreted as revealing a docile pupil who accepted Plato's teaching without question. Other texts then present Aristotle as gradually maturing towards independent thought, while the passages that show him a fulfledged "Aristotelian" come last in order of time (Jaeger). Read in the opposite direction, the same passages reveal a brash young student who opposed his master on point after point, but in mature life began to see that the old man was not so stupid after all, and then finally became to a notable extent a "Platonist." Actually, the indications are far too tenuous to give firm support to any general chronology. A few works, such as the Topics and the De Caelo, may for various reasons be placed comparatively early. But for most, any dating remains uncertain. Moreover, the nature of the treatises as school logoi would allow additions or changes at any time in Aristotle's teaching career.

According to a sufficiently reliable account (Strabo, XIII, 1, 54; Plutarch, Sylla, XXVI, 1-2), the treatises were taken to Skepsis in Asia

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Minor after the death of Aristotle's pupil Theophrastus. There they lay buried in an underground hiding place till early in the first century B.C. Yet the ancient lists as well as other evidence indicate the copies of many of the treatises were in use during that period along with the works meant for general circulation. However, after the Skepsis find the treatises were edited and published by Andronicus of Rhodes in the first century B.C., and became the subject of commentaries in Greek down to the fourteenth century A.D., while the works meant for the general public were allowed to perish. In this tradition five logical works (Categories, De Interpretatione, Prior Analytics, Posterior Analytics, Topics and De Sophisticis Elenchis) were grouped together as the Organon or instrument for learning. Then followed the works on the philosophy of nature, the Physics covering the overall considerations of nature while De Caelo, On Generation and Corruption, De Anima, Parva Naturalia, and several detailed works on the animals, dealt with particular areas. Fourteen treatises had gradually been gathered into the collection called the Metaphysics, focusing ostensibly on things that are "beyond nature."6 Further, there were three sets of ethical treatises called the Nicomachean Ethics, the Eudemian Ethics, and with division of modern opinion on its authenticity the Magna Moralia. There were also the Politics, which was meant as a continuation of the ethical doctrine, and the Rhetoric, and a work on literary criticism called the Poetics. Together these are known as the Corpus Aristotelicum, and in the nineteenth and twentieth centuries the fragments from the lost works have been added. Some unauthentic works had slipped into the collection with the course of time, but these are now carefully distinguished from the others in any good modern edition or translation. Suitable English translations are readily available in The Works of Aristotle (ed. W. D. Ross), the Loeb Classical Library, and in many particular renditions of individual works.

Ш

In general, the traditionally accepted order of Aristotle's writings tries to reflect his doctrinal assessment of the various disciplines. Logic, though called a science by him and conforming to the procedure he requires for a science, is not included by him in his formal divisions of the sciences (Metaph., E 1,1025b22-1026a23; K 7,1063b36-1064b6). It is regarded as something that has to be learned first, something that is required before one is able to deal scientifically with reality or truth, (Metaph., \Gamma_3,1005b2-5). With the role of logic so understood, the truly basic division marking the general types of sciences is located between

the theoretical sciences on the one hand, and the practical and productive sciences on the other. The reason for this basic division lies in the nature of their respective starting points. These are either independent of the mind or else a result of its activity. The starting points for theoretical sciences are found in things, those for practical sciences are found in human choice, and those for productive sciences are found in human ideas or plans. Since the practical and productive sciences are always for the sake of something else, namely the action or the product, they are regarded as of lesser worth than the theoretical sciences, which in principle are for their own sakes and not necessarily for the sake of anything else. Hence the traditional approach to the Aristotelian treatises reflects this doctrinal division. Logic comes first, as a prerequisite. Then come the theoretical sciences, as superior in nature, to the practical and productive sciences. As able to command the productive sciences, practical science in the form of ethics or politics comes next. Rhetoric and poetics, as productive sciences, conclude the extant Aristotelian entries in the general schema.

The Aristotelian logic divides simple objects of thought into "categories." The longest list, given only twice by Aristotle himself (Cat., 4, 1b25-27; Top., I 9,103b22-23), has ten. Of these the first and basic is substance, for instance a man. The other nine, called "accidents", presuppose and are dependent on substance. The most important are the qualitative, the quantitative, and the relative for instance the ways in which a man is educated, is six feet in height, and is a husband or father. Elsewhere Aristotle gives shorter lists, according to his purposes at the moment. The things that go in the categories are regarded as univocal when they come under the same concept in being designated by a common name, as for instance Socrates and Plato are each called a man in the sense that the identical notion "man" is found in each. On the other hand things are equivocal when the concepts are different even though the designating name is identical, as when the instrument for writing and the place to keep pigs are each called a pen. Aristotle does not give examples of this extreme or pure equivocality. He is interested rather in cases where the difference in concept is only partial, as when the notion "being" is applied to a man and to a color, or to any of the other accidents. All are said to be, but what is meant for the substance is being in itself, while for the accident what is meant is being in something else, namely in a substance. The combined sameness and difference are found in the things themselves, and both have to enter into the concept by which these things are understood. In this way the most important Aristotelian concepts keep in close touch with reality. Since the concepts are basic in logic, their flexible correspondence to reality will ground a logic that is not restricted in grasp to any single category, such as the quantitative or mathematical. It likewise allows the same existent to be known individually as Socrates, specifically as a man, generically as an animal or a living thing or a corporeal thing, and supergenerically as a being or as good.

Neither truth nor falsehood is found in these simple objects of the categories, objects that are designated by mere names. Only when the objects are joined with or separated from one another as expressed in the complexity of a proposition or sentence do truth and falsity arise. When the conjunction or separation can be observed immediately by the mind in things, as for instance that one thing is not another, that the whole of a thing is greater than any one of its parts, that Socrates is pale, and so on, the proposition is immediately known. Where a proposition is not immediately known, it may become known through the mediation of other propositions, and in this way is mediately known. The process by which human knowledge thus increases is called reasoning, or to use the Greek term, "syllogism". What is contained is neither of two propositions independently known, is cognitionally engendered through their union in the syllogism. Aristotle illustrates the workings of the syllogism by an example of ancient knowledge about the relative distances of celestial bodies from the earth. A modern counterpart will make the point much clearer today. An astronomer observes in the spectroscope the shift towards red in the spectra of the outer galaxies. Independently he has the other proposition that a shift to the red means that the body is receding at great speed. He draws the conclusion, present in neither of the propositions taken separately, that the outer galaxies are receding with tremendous velocity. Knowledge genuinely new has been attained by the reasoning or syllogistic process. Aristotle's Analytics consist in working out the norms by which reasoning is able to function correctly and avoid errors. The basic propositions or premises have to be immediately known as true, the proper universality of the mediating term or concept that brings the two premises together has to be assured, and the new proposition or conclusion follows in an arrangement or "figure" in which this universality becomes operative. Where only probability is had in one or both of the premises, only probability can be expected in the conclusion.

As in its concepts so in its propositional phase this logic is obviously regulated by close correspondence with reality. The propositions are true if the objects are united in reality as they are synthesized in the mind. The further the reasoning proceeds from immediate observation the more in-

tricate and difficult will the concepts become, but the ultimate criterion of truth will always be the immediately observed reality on which the reasoning was basically grounded. The Aristotelian logic is accordingly a propositonal as well as a predicate or class logic. It may sometimes be found contrasted with Stoic logic or modern logic precisely from this class viewpoint. But just as it is impossible to draw an exact line between formal logic and material logic, since both have to use matter as well as form, so any logic has to make both concepts and propositions operative. The difference lies in relative degree.

Almost everywhere today Aristotelian logic has been replaced in school teaching by modern mathematical logic. Because of its essentially mathematical character and the marvelous advances it has made in the last century, the mathematical logic is eminently adapted to the quantitative procedures of the experimental and statistical sciences. Whether or not Aristotelian logic is open to profitable development in this direction, it has not in point of fact been elaborated in the mathematical area and could hardly achieve any useful purpose in attempting to duplicate or rival the achievements of the mathematical logicians. On the other hand many modern philosophers, though sufficiently acquainted with mathematical logic, have not found it very helpful for work in philosophical disciplines such as metaphysics or ethics. The Aristotelian logic is much better suited to deal with the polyvalent concepts of metaphysics and the flexible and ever varying notions in moral and political philosophy. It still has advantages of its own.

The different logical frameworks also enable one to understand the contrasts in the acceptation of the notion "science". Science, from the Aristotelian viewpoint, includes any organized body of knowledge obtained by proceeding from premises, originally accepted as true, to their logically drawn conclusions. Accordingly metaphysics, philosophy of nature, and ethics come under the Aristotelian division of the sciences. They are sciences in his logical framework, just as astronomy, optics, harmonics and mechanics likewise were sciences. Modern use of the term, quite in accord with the framework of mathematical logic, tends to restrict the notion "science" to the experimental, mathematical, and social sciences, excluding metaphysics and ethics. However, the terminology "philosophical sciences" as well as "theological sciences" has never quite been lost, and is understandable against the background of the Aristotelian logic. Against this background it is not at all strange to find metaphysics regarded not only as a science but as the highest of sciences, and to find ethics in spite of its flexible character ranged as a prominent and genuine kind of science. It is this approach that has to be kept in mind in assessing the various disciplines that Aristotle regarded as sciences.

Sensible things, one should always remember, are the origin of human cognition for the Stagirite. In their concrete totality they are dealt with by the philosophy of nature, which analyzes them into their basic principles of matter and form in order to explain their observable changes. The reasoning in the philosophy of nature concludes that their movement is eternal and ultimately caused by the eternal rotatory movements of the heavenly bodies. In the course of these general discussions in the Physics, many problems of time, place, the void, chance, movement and nature are dealt with, but always from the viewpoint of the basic principles matter and form. The treatment does not correspond to any procedure used in modern science. Nor is it meant to be a philosophy of science, since it deals not with science but directly with nature, though on a level different from that of the experimental sciences.

Particular areas of the natural world are dealt with in other works, though on the same philosophical plane that receives its general development in the Physics. The stars and planets are treated of in the De Caelo (On the Heavens). Comets, meteors, and other phenomena considered intermediate, are discussed in the Meteorologica. Terrestrial changes are studied in De Generatione et Corruptione. Corporeal living beings constitute the subject matter of De Anima (On the Soul), though one part of the human soul, namely the mind, presents an aspect that seems to call for study by the science that transcends the natural order, namely metaphysics. But particular vital phenomena, such as sensation, recollection, respiration and sleep continue to be treated on the level of the philosophy of nature in a group of rather short treatises that since medieval times has been called the Parva Naturalia. Five longer and detailed works, History of Animals, Parts of Animals, Generation of Animals, Progression of Animals and Movement of Animals, survey the then known animal kingdom. The exact and painstaking research of the Parts of Animals drew from Darwin the admiring comment: "Linnaeus and Cuvier have been my two gods, though in very different ways, but they were mere schoolboys to old Aristotle." However, even in this field Aristotle's viewpoint remained that of his philosophy of nature. Anything in the world of nature should be studied scientifically by taking the thing's basic form as the starting point. From that form the properties and characteristics of the thing are deduced, just as the details of a house may be learned by studying its blueprint: "For elsewhere, as for instance in house building, this is the true sequence. The plan of the house, or the house, has this and that form; and because it has this and that form, therefore is its construction carried out in this or that manner . . . Thus we should say, because man is an animal with such and such characters, therefore is the process of his development necessarily such as it is; and therefore is it accomplished in such and such an order. this part being formed first, that next, and so on in succession; and after a like fashion should we explain the evolution of all other works of nature" (PA, I 1,640a15-b4; Oxford tr.). This is the conception of natural science actually projected in the Parts of Animals. Elsewhere (e.g., De An., I 1,402b16-25) Aristotle acknowledges the necessity of reaching essence through properties. But a Greek optimistic confidence in the power of the human intellect to penetrate natural essences seemed to blind him to the fact that the qualitative aspects of material things do not give the mind any objective manifestation of the inner nature.

On the other hand, quantity does manifest its own nature, with the result that on the mathematical level the situation is different. Aristotle delights in using mathematical examples, for here his conception of scientific procedure works perfectly. From the nature of a triangle one can without added evidence deduce its properties. He was sufficiently familiar with the arithmetical and geometrical knowledge of his time, but there is no evidence that he worked at advancing it. His bent lay rather in showing how it grounded a distinct level of scientific investigation. It was able to take things "in abstraction" from their sensible qualities, and thereby enjoy a strictly quantitative object whose nature is penetrated by the human mind and serves as the basis for the demonstration of properties. On this level function also "the more physical branches of mathematics, such as optics, harmonics, and astronomy" (Ph., II 2,194a7-8), with mention elsewhere of mechanics and, in its own way, of medical science. These are regarded as mathematical sciences. They formed the subject of Aristotelian works now lost. They had their qualitative counterparts, such as "acoustical harmonics", but the qualitative aspects did not furnish grounds for cogent and positive deductive demonstration, as the quantitative aspects do (APo., I 13,78b35-79a16).

Here one may make some observations of one's own. The Aristotelian conception of corporeal things finds a basis for scientific reasoning in their extension and quantity, because the nature of quantity is penetrated by the human mind. Correspondingly, however, the substance of these corporeal things is penetrated by the mind insofar as the substance is something extended. The substance remains specifically the same thing. water or gold for instance, while it is extended through quantitative parts

without any formal difference occurring. It thereby manifests itself as a nature consisting of specifying form and non-specifying matter, as its substantial components. By them it is constituted a mobile being and provides the basis for cogent reasoning about corporeal substances in their generic grade as bodies. Only on that generic grade is the Aristotelian philosophy of nature valid as a science in the epistemological framework in which it was developed. It is barred from scientific penetration into the qualitative aspects and corresponding particular natures of things. These can be penetrated *only* on the mathematical level. One's own reflective awareness of the successive grades of vegetative, sentient, and intellectual life is no exception, for the reflexive awareness, while sufficient to distinguish the substantial grades as constituting different genera, does not make manifest any specific natures.

Aristotle himself does not make these observations. In the sixteenth century his scientific method found itself pitted stubbornly against the surging quantitative conceptions of modern science. In the nature of his doctrine there was no ground whatever for this deplorable opposition. Sciences like astronomy and mechanics had fitted neatly into his divisions. Chemistry and modern physics and all the new experimental and statistical sciences should likewise have appeared as normal developments of his quantitative approach to things of nature. His broad view allows amply for all the laborious research and exact measuring and cataloguing that keep achieving magnificent triumphs. The neat Aristotelian synthesizing, it is true, may seem thrown ludicrously out of balance by the vast preponderance of the modern experimental sciences. But may not this reflect the overall paradox that the area in which the human mind is by far most proficient fails to provide the answers to its deepest aspirations and most agonizing problems?

The third and highest kind of theoretical science deals with what is beyond nature but reached through the findings of the philosophy of nature. The eternally unchanging movements of the heavens, as these have been established in the *Physics*, require as their ultimate cause a type of substance that has no potentiality whatever for change. This type is without matter, since matter is potentiality for change. It exercises its causality through being loved and desired. In number it corresponds exactly to the number of original celestial movements observed by the astronomers (*Metaph.*, Λ 6-8, 1071b3-1074a17). In the *De Anima* (II 12,424a17-24; III 4,429a15-18), form received without matter causes cognition. Accordingly Aristotle without hesitation regards form existent without matter as existent cognition. The result is that separate substance is a cognition and a life far higher than the human counterparts: "And

God is in a better state. And life also belongs to God; for the actuality of thought is life, and God is that actuality; . . . for this is God" (Metaph., A 7,1072b26-30; Oxford trans.). Lacking potentiality to anything else, this subsistent thinking can have only itself as its object: "Therefore it must be of itself that the divine thought thinks (since it is the most excellent of things), and its thinking is a thinking on thinking" (9,1074b33-35; Oxford trans.). The science that deals with this primary instance of being will thereby treat universally of all beings: "... if there is an immovable substance, the science of this must be prior and must be first philosophy, and universal in this way, because it is first. And it will belong to this to consider being qua being" (E 1,1026a29-31; Oxford trans.). Hence "first philosophy" and "theological philosophy" (a19) designate indifferently for Aristotle the highest theoretical science, later called "metaphysics."

Philosophy of nature, mathematics, and metaphysics are accordingly the three kinds of theoretical philosophy for Aristotle. Contradistinguished from them is practical philosophy, which unlike them does not start from objective things but from human choice: "The origin its efficient, not its final cause is choice" (E N, VI 2,1139a31-32: Oxford tr.). Each man chooses the ultimate end to which he directs all his actions. Some locate it in pleasure, others in honor and reputation, others in the life of thought. Wealth, though it might seem most sought after, is obviously pursued for something else, namely for what it will bring. The purpose of moral philosophy is to make people good by enabling them to choose correctly both as regards the ultimate end and as regards each individual action. Cultivation of the virtue of practical wisdom or prudence, and of the moral virtues of temperance, courage and justice, provides the means for this purpose. These virtues are interdependent, each requiring all the others. They are cultivated by life and under good laws and by proper education (paideia) from earliest childhood. As an aid, Aristotle projected an extensive collection of the laws of Greek city-states. Only one of these studies, the Constitution of Athens, is extant, having been recovered in the last decades of the nineteenth century on Egyptian papyri. Aristotle himself locates the ultimate goal of human endeavor in the life of contemplative thought. To enable people to attain that life all individual and social or political activity should be directed. Political life in this way provides a secondary type of happiness, in subordination to the primary type, contemplation. In this setting moral philosophy and political philosophy obviously coincide. since their object is the same. Yet so profound and universal are the Aristotelian moral principles that they offer a method open "to any

social and cultural materials, to any set of institutions and standards, to any cultural heritage." Perhaps for this reason is the Nicomachean Ethics usually found to be the most fascinating of all Aristotle's works.

Of the "productive" sciences, that is, those that have their starting point in some idea or plan in the human mind, only two are found developed in the Corpus Aristotelicum, namely rhetoric and literary criticism. The Rhetoric studies persuasive arguments and how they are to be used in literary compositons (III, 8) and in speeches. The Poetics, which from the sixteenth century on has found use as a basic text in literary criticism, still excites interest through its conceptions of Mimesis as the explanation of fine art, and of Catharsis as a purification in tragedy of either events or emotions.

IV

Such is the tableau of the sciences that constitute philosophy as Aristotle envisaged it. Though the practical and productive sciences have radically different starting points from those of the theoretical, nevertheless all three function in the same real world. The world that people know through the theoretical sciences is the world in which they live and work. This Aristotelian approach is very hard to appreciate today. The stark and uninhibited protrusion of reality throughout the philosophical sciences lies open now to radical misunderstanding. Descartes' intellectual asceticism had isolated human thought and made it serve as the starting point for subsequent Western philosophy. Mid-twentieth century procedure has focused upon the interpersonal phenomenon of language as the starting point. Through language and thought one has to make one's way to the real. To this mentality the Aristotelian attitude can hardly appear as anything else than a claim, utterly absurd, to a "hot line" for communication with the real world. It would bypass language and thought.

Epistemologically, however, there is no "line" of any kind involved in the immediate Aristotelian grasp of reality. The forms of sensible things are received in the percipient without their matter ($De\ An.$, II 12,424a17-24). So received they cause the percipient, whose soul is potentially all things, to be actually the things perceived or known (III 7-8,431b16-432a10), just as the same forms received in matter cause the things to be absolutely. Only by becoming the other things cognitionally, moreover, is the human mind able to know itself (4,429b5-10). Only concomitantly in the cognition of something else is there any awareness of the perception or intellection (Metaph., Λ 9,1074b35-36). This means

that cognitionally the mind is first and foremost the thing that is other than itself. It does not require any mediation or "line" to reach the real object that it perceives or knows. It is that thing, more fundamentally even than it is itself, in the cognitional order. Language and thought, though objects of immediate awareness, are so only concomitantly in the basic awareness of the thing. Here the thing functions as the message, and likewise is the medium in which language and thought, though attained immediately, are represented and probed. Far from appearing as a naive realism, this understanding of cognition is not even a "moderate realism" or any other authentic type of realism, for "realism" as used by people to characterize their own epistemologies implies a procedure from thought to the justification of real, external things. This procedure is not only lacking in Aristotle, but is rendered superfluous and impossible by his understanding of human cognition.

So assessed, the innate potentiality of the human mind to be all things leaves it open to every kind of knowledge and to indefinite expansion of its vision. This natural openness of the human mind finds vivid expression and fertile development in Aristotelian philosophy. Throughout the centuries people who have used Aristotle's principles have come to very different conclusions from those he reached. By becoming immersed in his philosophy they learned to think for themselves. Like Stagira itself, set deeply within a horseshoe formation of mountains that opens out into the broad expanses of the sea, Aristotle's conclusions are adapted to his times while flowing from principles that offer indefinite possibilities of fruitful application in other climes and eras. Not only his ethical conceptions, but also his procedures in theoretical philosophy remain open to the problems of today's world. Aristotle does not give the answers, but his philosophy equips the mind to think out and as far as possible solve those problems as they arise.

Answers are needed in philosophy as in everything else. They should be the right answers. In the technological atmosphere of today right answers are required everywhere, and they are wanted fast. In philosophy, however, a fast answer usually turns out to be a wrong answer. Long and painstaking exploration is necessary. Only at one's peril may one neglect the wisdom that has endured down through the centuries. The answers have not been handed on ready made by Aristotle. He does not think for any other age. But he does introduce the readers of other ages, including the present, to profound philosophical thinking that opens marvelously on their own problems and guides them to right answers in the pursuit of requisite knowledge. In that way he continued to be, in Dante's words, the teacher of those who know.