

## Individuals in Aristotle

By way of introduction, I offer a few remarks to give an overview of the subject of this paper. Aristotle assumes that, in addition to *objects*, there are *properties* of objects. This assumption is rather stronger than one might think, since it turns out that statements about properties are not just reducible to statements about objects; on the contrary, the truth of at least some statements about objects is to be explained by assuming that there are properties. For example, the truth of a statement like ‘Socrates is ill’ is to be explained by noting that there are not only objects, like Socrates, but that there are also such things as illness; illness is not to be construed as yet another object but as something standing in certain relations to objects, relations on the basis of which one can say of objects that they are ill. Besides this division of things into objects and properties, Aristotle, in the *Categories*, makes use of the distinction between *general* and *particular*, between individuals and universals. Although Aristotle does not, in this treatise, use any term like ‘universal’ (katholou), he does speak of ‘individuals’, and he contrasts these with their kinds. These two divisions, into objects and properties, on the one hand, and into particular and general, on the other, do not turn out to be the same. For Aristotle counts as general not only properties but also the kinds, into which objects fall, i.e., the genera, species, and differentiae of substances; and these are to be differentiated strictly from properties. When we say, ‘Socrates is a man’, we are not speaking of any property of Socrates; rather, we are speaking of two substances, Socrates and the species man. When, however, we say, ‘Socrates is ill’, we *are* speaking of a property. The species is something general, yet, unlike illness, it is not a property. (Furthermore, for Aristotle, there is not, in addition to the species man, some property of being a man.) Both properties and kinds, then, turn out to be general. Moreover, Aristotle construes the distinction between general and particular in such a way that the notions of particular and individual are not restricted to objects, but can also apply to properties. Thus, the two distinctions do not collapse into one, they cut across

each other, resulting in a four-fold division, into individual objects, individual properties, general properties, and general objects (cf. *Cat.* 2).

At this point, three difficulties arise. First of all, how is it possible to speak of individuals in the case of properties; second, how can there be a single notion of being an individual that can be applied to objects as well as properties; and third, what sorts of objects are these general objects, the genera and species, supposed to be? These difficulties, especially the first two, will be our concern in the first part of this paper, which deal with the *Categories*.

In the *Metaphysics*, Aristotle denies that there is anything general—at least, he denies that there are kinds, into which objects fall. Thus, he also abandons the notion of an individual which he had relied on in the *Categories*, since it presupposes that there are general things, that there are universals. Given that Aristotle does not identify properties with the general, denying that there is anything general does not result in the notion of an individual just collapsing into the notion of an object. Rather, the denial that there is anything general has this consequence: now the relation between objects and properties simply cannot be viewed as the relation between individual things and general concepts under which these fall. Because of this, Aristotle faces some odd results concerning what is actually particular, what is actually an individual object, what is to count as primary substance. These results will be our concern in the second part of this chapter.

### I. Individuals in Aristotle's *Categories*

Looking at either Lewis and Short's *A Latin Dictionary* or Glare's new *Oxford Latin Dictionary* would lead one to conclude that, in ancient Latin, 'individuum' and 'individuus' were not used in the sense of 'individual'.<sup>1</sup> This conclusion, however, would be completely erroneous; for we find 'individuum' and 'individuus' used in precisely this sense rather frequently in later antiquity, especially in Marius Victorinus (*Adv. Ar.* I; 34, 20) and Boethius (*In de int. alt.* p. 334, 2 Meiser), but also in St. Augustine (*De trin.* VII, 6, 11), Martianus Capella (VI, 352), and Cassiodorus (*Inst.* II, 14; 123, 9), as well as in various grammarians, e.g., Priscian (*Inst.* II, 25; p. 58, 25).

The origin of this use of the word can be explained quite easily: it is simply the result of translating literally the Greek word "atomon," which can be used in just this sense of 'individual' or 'individual thing'. Aristotle, in the *Categories* (1<sup>b</sup> 6; 3<sup>a</sup> 34, 38, 39; 3<sup>b</sup> 2, 7, 12), is the first to use the term in this way. However, for reasons of which I shall speak later, he seems to have given up this use of atomon in his later works. It is only with the increasing influence of the *Categories* in the 2nd and 3rd centuries A.D. that this term comes again to be used by Greek philosophers, albeit rather sparingly (cf. Plotinus VI, 3, 1, 15). Galen (*De Plat. et Hipp. dogm.* VIII, 2 p. 664, 6–7 (Müller)), tell us that

philosophers were in the habit of calling, e.g., Dion an individual substance. From the fact that Galen finds this worthy of comment and from the fact that he uses *atmētos* here, whereas the philosophers actually use *atomos*, we might infer that, in Galen's time, the philosophical use of this term was still rather rare (but, cf. Alexander *In Met.* 211, 30 and *passim*). At any rate, because of the influence of the *Categories* and Porphyry's introduction to the *Categories*—in which Porphyry speaks rather frequently of individuals (cf. 2, 18; 3, 3)—its use does come to be firmly established. This use, then, is simply taken over by the various Latin authors. The translations of the *Categories* and of the *Isagoge* by both Marius Victorinus and Boethius were, no doubt, of special importance in introducing and securing this use of the term in Latin.<sup>2</sup>

At any rate, it is especially these two, and authors depending on them, who use 'individuum' in the sense familiar to us. And the continued use of this term in this sense was assured by the prominent position in the curriculum of the schools the *Categories* and Porphyry's *Isagoge* came to occupy and continued to occupy till the very end of the Middle Ages.

If Aristotle, then, is the first writer to call individuals 'individuals', the question arises what is it he had in mind when he calls them 'indivisible'; for that is just what 'individuum', rather, "atomon" means. And given that "atomon" and "atomos" had already been used in two different philosophical contexts—atomists of all sorts had used the term for indivisible magnitudes, e.g., atoms, and Platonists had used it for *infimae species*—this question becomes all the more pressing.

Aristotle provides some indication of the answer when, in the first passage in which he speaks of individuals (*Cat.* 1<sup>b</sup> 6–7), he offers "and that which is one in number" as a gloss on "individuals" (cf. also 3<sup>b</sup> 12). As a matter of fact, Aristotle does, in various places, invoke the principle that that which is one is, as such, also indivisible; and so, we may assume that it is somehow with respect to their being one that individuals are said to be indivisible. However, being one is not a *proprium* of individuals: species and genera, i.e., the kinds into which objects fall, also have a kind of unity. One can, for example, count the species of a given genus. The kind of indivisibility characteristic of individuals must, then, be a special kind of unity. And it seems reasonable to suppose that the expression "in number," in the phrase "that which is one in number," serves precisely the function of pointing out the special kind of unity and so, too, the kind of indivisibility characteristic of individuals.

Now, Aristotle uses the expression "one in number" more frequently by way of contrast with "one in kind or species" and "one in genus." Two or more things are one in kind, if both belong to the same species. Thus, Plato and Socrates are one in kind, namely, man. Plato, Brunellus, and Fido, however, are only generically one, namely, animal. Since Brunellus is a donkey and Fido a dog, they do not belong to the same species and thus are one only in genus.

Now let us suppose that a genus is the set of objects that are generically one, and correspondingly, that a species is the set of objects that are specifically one. We could go on to say that the kind of unity that characterizes genera, i.e., that makes one genus *one* genus, is generic unity and, correspondingly, that the unity characteristic of species is specific unity.

If we go on to connect this division, of kinds of unity, with the notion that that which is one is, as such, also indivisible, we get the following result: something that has generic unity cannot be divided insofar as it has *this* unity. If we consider, for example, Socrates, Plato, Brunellus, and Fido only insofar as they are generically one and the same, namely, animal, we cannot distinguish them. They cannot be divided according to their genera. But, to the extent that Socrates, Plato, Brunellus, and Fido lack specific unity, we can distinguish them and divide them into their species, viz., into the sets of men, donkeys, and dogs, respectively. Now, if we go on to the set of men, Socrates and Plato, we cannot distinguish between them and cannot divide them as long as we consider them as a specific unity, i.e., as long as we consider Socrates and Plato insofar as they are one and the same, namely, man. Since, however, this set lacks numerical unity, we can indeed divide it, viz., according to number. And what we end up with, when we divide the set in this way according to number, are just the individuals.

In the *Categories*, then, Aristotle seems to be relying on a notion of division according to which genera and species, in a certain respect, *are* one and, hence, indivisible, but, in another respect, *are not* one and, hence, divisible; individuals, however, turn out to be completely indivisible on this schema of division. Indeed, this seems to me to be the explanation for the fact that Aristotle calls individuals 'indivisible' in the *Categories*. Yet, this explanation will be of little help in getting a grip on the notion of an individual as long as we do not have a clearer idea of what sort of division it is with respect to which the individuals are indivisible.

Some indication of what notions of division and part are at work here is provided by Aristotle at 3<sup>b</sup> 16–18, where he explains that the species man and the genus animal are not individuals, because they have a plurality of subjects (*hypokeimena*); for there are many things of which one can truly say that they are a man or an animal. This explanation strongly suggests that an individual does not have any actual parts and is indivisible, because it has no subjects. In the relevant sense of 'part', then, x would be a part of y if, and only if, x is a subject of y. To distinguish between this sense of 'part' and the more familiar one, we can avail ourselves of the Scholastic terms 'integral' and 'subjective': a wall is an integral not a subjective part of a house, since we cannot say of it that it is a house; Socrates, though, is a subjective not an integral part of man, since we can say of him that he is a man. An individual, then, is something which has no subjective parts; indeed, it itself is a subjective part of an *infima* species

into which the things having only generic or specific unity are themselves divided.

We shall have understood the relevant sense of 'division' and 'part', if we understand in what sense Aristotle is speaking of subjects here. According to the *Categories*, there are only two ways in which  $x$  can be the subject of  $y$ : either  $y$  is said of  $x$  as its subject, or  $y$  is in  $x$  as its subject. These two relations can be defined as follows:

- (A)  $y$  is *said of*  $x$  as its subject if, and only if,
  - (i)  $y$  is truly predicated of  $x$ ; and
  - (ii) the name of  $y$  occurs as a predicate-noun in the sentence in which  $y$  is predicated of  $x$ ; and
  - (iii) if, in that sentence, the definition of  $y$  can be substituted for the name *salva veritate*.
- (B)  $y$  is *in*  $x$  as its subject if, and only if,
  - (i)  $y$  is truly predicated of  $x$ ; and
  - (ii)  $y$  is not said of  $x$  as its subject.

These two definitions would require rather extensive elaboration. We would, for example, need to note that predication is a relation between entities not expressions, and we would need to explain what the name of an object is and what a definition is. I shall, however, restrict myself to providing an example to help clarify these definitions. Let us suppose Socrates is both healthy and white. Socrates, then, is the subject of health and of the color white. Now, health and the color will be in Socrates, as a subject, not said of him as a subject: for, when we predicate health of Socrates we do not use the name of health, viz., 'health', but the corresponding adjective; we do not say that Socrates is health but that he is healthy. As for the color, while we do use its name when we say that Socrates is white, we find that here the third condition is not satisfied; for we cannot replace 'white' by its definition and say that Socrates is such-and-such a color. If, on the other hand, we say that Socrates is a man, we do use the name of an object as a predicate-noun, viz., the name of the species man, and do not use a corresponding adjective. (If we were to say either that Socrates is manly or that he is humane, we would be saying something quite different and would be referring not to the species man but to the quality either of manliness or of humaneness.) In addition, we can replace the name 'man' by the definition of man; for we can say that Socrates is a rational animal. Thus, man is said of Socrates as its subject.

If we take this distinction as given, we can go on to ask in which way  $x$  must be a subject of  $y$  for  $x$  to be a subjective part of  $y$ . There are three possibilities:

- (i)  $x$  is a subjective part of  $y$  if, and only if,  $x$  is a subject of  $y$ , regardless of which way it is a subject of  $y$ , i.e.,  $x$  is a subjective part of  $y$  if, and only if,  $y$  is truly predicated of  $x$ .

- (ii)  $x$  is a subjective part of  $y$  if, and only if,  $x$  is a subject of  $y$  in this manner:  $y$  is *said of*  $x$  as its subject.
- (iii)  $x$  is a subjective part of  $y$  if, and only if,  $x$  is a subject of  $y$  in this manner:  $y$  is *in*  $x$  as its subject.

The third possibility can be easily eliminated. Genera and species quite obviously have subjective parts, viz., individual substances, but they are not in anything as their subjects. The first possibility can be ruled out as well, for the following reason. As we can see from the second chapter of the *Categories*, Aristotle not only assumes that there are individual substances, but also that there are non-substantial individuals, individual qualities, and quantities. In addition, Aristotle assumes that an attribute, say, a quality, will belong to an individual substance as its subject in all and only those cases where this quality also belongs to the species and the genus of the individual substance. Aristotle can make this assumption, because (i) he takes a sentence of the form 'a man is running' to be a sentence about the species; and (ii) he believes a sentence of the form 'a man is running' is true only if a sentence of the form 'this man is running' is also true; and (iii) he believes that if a sentence of the form 'this man is running' is true, then sentences of the form 'a man is running' and 'an animal is running' also must be true. A result of these assumptions is that any attribute, whether it is individual or general, has at least two subjects, namely, an individual substance and a kind of substance. That, however, means that there could be no individuals in categories other than substance, if being an individual were only a matter of something having a plurality of subjects independently of which way these subjects are subjects. But since Aristotle wants to distinguish between individuals and their kinds also in the case of non-substances, and since this distinction can only be maintained if we distinguish between the two ways in which something can be the subject of something, only the second possibility remains.

We thus arrive at the following result:  $x$  is a subjective part of  $y$  if, and only if,  $y$  is said of  $x$  as its subject. Corresponding to this, we could define an individual in this way:  $x$  is an individual if (i) it is the subjective part of something, and (ii) it itself has no subjective parts. This definition seems to capture what Aristotle takes to be an individual in the *Categories*.

Two things strike me as worthy of note here. First, the negative character of this definition is surprising. Aristotle seems to proceed as if, quite independent of the distinction between individuals and non-individuals, it were clear what is to count as an entity, and the only problem was to make a cut within this given set of entities. And this cut is not made by using a positive condition for what is to count as an individual so that everything that fails to meet this condition is a genus or a species; rather, a condition is given for being a species or a genus—having subjective parts—and everything that fails to meet this condition counts as an individual. I shall return to this point briefly later.

Second, it is worth noting that this definition, together with the assumption that there are things besides substances, implies that not all individuals are substances. If, for example, there are properties or qualities, then, on this definition of individuals, there must also be individual qualities. For, suppose Q is a quality; either Q is itself an individual or it has subjective parts. If Q has subjective parts, these are either substances or non-substances. They cannot be substances, since substances are not qualities; at best, they have qualities. So, either Q is itself an individual or it has only subjective parts that are not substances. If Q has only subjective parts that are not substances, then it has parts that are individuals and not substances.

That this should be a consequence of a definition of individuals is by no means obvious, for we can easily imagine either a definition of individuals according to which only objects or substances are individuals or a definition which leaves the matter open. The definition implicit in the traditional definition of the universal is of this sort: according to *De int.* 7, the universal is that which is by its very nature predicable of a plurality of subjects. Since there is no requirement here that the subjects be of such a kind that the universal can be said of them as their subject, there can be properties without there being individual properties, since all the subjects of the properties could be substances.

The assumption that there should be, in addition to individual substance, individuals in other categories is difficult to get a grip on for a very simple reason. What makes the concept of an individual so readily available to us is the simple fact that the nouns for kinds, which objects fall under, can also be used in the plural, and that, when they are used in the plural, they apply not to kinds but to individuals: 'man' designates a kind, under which certain objects fall, and it forms the plural 'men'; when we speak of men, we are not speaking of kinds but of individuals. Moreover, we can use the plural with number-words. What we count in that case are again individuals not kinds. In counting, we have the problem of how to ensure that we count only those objects we mean to count, that we distinguish between the objects and not mistake two for one, and, finally, that we not count anything twice, having overlooked that we have already counted it. Thus, from the mere fact that we can count, we have access to a very rich notion of individuals when we are dealing with objects. By way of contrast, the definition of individuals arrived at above seems virtually contentless.

When we turn to non-substances, we do not quite know what to make of the notion of an individual. Let us, for example, consider qualities, to which I shall restrict myself in the following discussion. Terms for qualities, *nomina abstracta*, do not readily assume the plural. We do not speak of healths or courages, we form no plurals for 'warmth', 'anger', or 'paleness'. And even in those cases where there are plurals of terms for qualities, they do not seem to refer to individuals in the category of quality; rather, they seem to refer either

to kinds of the quality, which, while they are qualities, are still general, or to examples of (having) the quality, which, while they may be individuals, are not qualities but only instances of (having) them. Thus, illnesses are kinds of illness, ways in which one can be ill; colors are general ways in which something can be colored. Beauties, on the other hand, are individual instances of beauty and, fortunately, not qualities but, say, persons like Helen or Alcibiades. Stupidities are instances of behavior that shows stupidity, not properties. Similarly, treacheries are not properties, but examples, instances of treachery or treacherousness; there are no treacherousnesses. These relatively simple facts about language seem to make it so difficult to understand what individual properties or qualities are supposed to be.

Given this state of affairs, there are at least two options. Either we can give up speaking of individual properties and turn, rather, to developing an adequate concept of individuals for objects, or we can insist that our difficulties with non-substantial individuals are just the result of, on the one hand, myopically focusing on the individuality of objects, and, on the other, giving excessive weight to these linguistic phenomena, which, as a matter of fact, are themselves subject to considerable variation. For if there had not suddenly been so terribly many abstract nouns in Greek, one could have continued with the attractive custom of referring to properties by neuter adjectives; in that case, all terms for properties would have had plurals. We could then, following Eudoxus, consider properties, in a manner analogous to homoiomerous things like gold, either as a single individual, scattered throughout the world, or we could say that the plural of the adjective actually refers to the scattered parts, and thus that it is these scattered parts which correspond to individual objects.

It would hardly be appropriate to ascribe the second position to Aristotle in the *Categories*. The explanation for Aristotle's position in the *Categories* seems, rather, to be that here he is taking a first step in making the distinction between objects and properties central for ontology. This distinction played virtually no role in Plato, and it was, in any case, completely overshadowed by the distinction between general and particular. It is the attempt to maintain this Platonic distinction between general and particular in addition to the new distinction between objects and properties that leads to our difficulties.

That Aristotle's schema of genera, species, and individuals amounts to Plato's distinction between particular and general is already suggested by the fact that, with one exception, the view in the *Categories* hardly differs from the Platonic theory of forms in the *Philebus*.<sup>3</sup> In the *Philebus*, Plato asks how forms can be both one and many. The answer is that they are at once one, many, and unlimitedly many; one, insofar as they are genus; many, insofar as the genus consists of many species; and unlimitedly many, insofar as unlimitedly many things are subsumed under the various species. Here we have not only the division into genera, species, and individuals, but also the notion that species and individuals



are parts of the genus or form; the relation between genus and species, and between species and individual, seems to correspond exactly to the relation of being said of something as a subject; the individuals are again viewed negatively as what remains after one has divided the genus as far as it can be divided into species. The idea of things being one in genus seems to derive from the *Philebus* (12E), and in the *Philebus* (15A) forms are divided in just the way required here. The only difference is that Aristotle reverses the priority relation between forms and particulars. And this reversal seems to be a simple consequence of his giving precedence to the object/property distinction over the general/particular distinction.

Yet, if this is so, i.e., if Platonic forms include individuals as parts, and if the participation relation is precisely the converse of the relation of being said of something as a subject, there must also be non-substantial individuals, since there are forms not only of objects. Thus, we can give a historical explanation for Aristotle's countenancing non-substantial individuals—despite the obvious problems these seem to bring with them—by noting that he tries to maintain the Platonic distinction between general and particular, a distinction not restricted to objects.

Some philosophers, of course, do not shy away from the difficulties non-substantial individuals seem to involve; on the contrary, they seem positively enthusiastic about this notion.<sup>4</sup> They want to maintain not only that Socrates is an individual but that his wisdom also is, that is, the wisdom with respect to which we say of Socrates that he is wise. This wisdom, they maintain, is Socrates' and not Plato's. Similarly, that which makes Socrates healthy is not Plato's health but his own. Thus, it is claimed there are individuals also in the case of properties, namely, properties individuated by their bearers: the wisdom which is precisely Socrates' wisdom is an individual. And just such a view is ascribed also to Aristotle by almost all of his more recent interpreters. The only contemporary writer who has so far opposed this interpretation, Owen, can, thus, indeed speak of a dogma here, especially since the view was already accepted in later antiquity.<sup>5</sup> The reactions to Owen's criticisms of the received view show just how appropriate his choice of the word 'dogma' was.

Looked at from another aspect, of course, 'heresy' seems like a more appropriate term. Among the theses that Bishop Tempier condemned in his notorious decree of 1277 was that God cannot create any accident or attribute without its subject. Tempier seems here to be attacking a position like St. Thomas Aquinas' according to which properties are individuated by their bearers and, hence, cannot exist independently of them. What the ecclesiastical authorities were concerned with is the apparent incompatibility of this view of the individuation of properties with the doctrine of transsubstantiation. The doctrine of transsubstantiation seems to require that an object, say, the bread, have certain visible properties which, however, are not tied to the object, since they remain wholly

unaffected by the change of the substance of the bread. But if, following transubstantiation, the bread no longer remains, but its accidents do remain, then the identity of these accidents can hardly depend on their subject.

In the years following 1277, there are a large number of attempts to individuate properties independently of their bearers, of which some proved to be quite fruitful, e.g., the suggestion that properties be individuated according to their intensity.<sup>6</sup> Temperature or warmth is a universal; in any individual instance, however, warmth always appears with a particular intensity. And it is the degree of intensity—measured in Celsius, Fahrenheit, Reaumur, or whatever—which makes any given warmth the individual warmth it is. This suggestion presupposes a notion of intensive magnitude which Aristotle, presumably, did not have; however, the view that properties could be treated as intensive magnitudes was no doubt helpful in the mathematicization of physics. My concern here, of course, is only to show, on the basis of an episode in the history of philosophy, that the view, that if there are to be individual properties these must be individuated by their bearers, is by no means as natural and obvious as our recent Aristotle interpreters would have us believe.

I also do not intend to take up in all detail the reasons why it seems clear to me that a more careful reading of the relevant passages in the *Categories* not only does not require the standard interpretation but, in fact, precludes it. The received view, according to which properties are individuated by their bearers relies on an interpretation of 1<sup>a</sup> 24–25. Here, Aristotle supposedly is giving a definition of the relation of 'x is in y as its subject'; and it is supposed that this can be rendered by something like this:

- (C) x is in y as its subject if, and only if,  
 (i) x is not a part of y, and  
 (ii) x cannot exist independently of y.

According to this definition, a property can belong to an individual thing, say, Socrates, as its subject only if it could not exist independently of this individual thing. Yet, this implies that the properties which a particular thing has are peculiar to it and are not shared by any other thing; for if a property, e.g., a particular color, were shared by several objects, it would be difficult to see why this color should cease to exist as soon as one of the objects having it ceased to exist. Thus, this definition implies that we can attribute only such properties to individual things that are peculiar to them; and so, we end up with individual properties, properties peculiar to only one individual thing. Accordingly, then, individual things would have only individual properties as properties, while general properties, strictly speaking, would only have general things, like genera and species, as their subjects. But this cannot be Aristotle's view.

At 2<sup>b</sup> 1–3, Aristotle says that one can only say that there is color in body if there is also color in a particular, individual body. A comparison with the im-

mediately preceding sentence shows that he is speaking here of color in general and body in general, and that it is the universal color that is said to have the universal body as its subject only if there is also some individual body that color has as its subject. Color in general, then, is spoken of in a way as if it could and must have an individual object as its subject. Moreover, at 2<sup>b</sup> 3ff., Aristotle says that all entities can be divided into two classes, individual objects or primary substances, on the one hand, and entities that are said of or are in these individual objects as their subjects, on the other. So, individual objects here are the subjects for everything else that there is; “everything else,” however, includes general properties; hence, general properties, too, must have individual objects as their subjects. Finally, at 2<sup>b</sup> 37ff., Aristotle explains why the genera and species of objects can also be called objects or substances. Just as the individual objects are the subjects underlying all properties, so too the species and genera underlie all properties as subjects. Since this is what makes substances, species and genera also deserve to be called substances. Again Aristotle speaks as if properties—regardless of whether they are universal or individual—have individual objects as their subjects; in addition, he also speaks here as if properties, both individual and universal, have universals as their subjects, namely, the species and genera of individual objects. After all, it is only this that justifies calling genera and species substances; they, just like the individual objects, underlie everything else. Nor can we charge Aristotle, either in this passage or in the preceding ones, with just expressing himself imprecisely. For his argument depends, in the one case, on the claim that all properties have individual objects as their subjects and, in the other case, on the claim that all properties, even the individual ones, have genera and species as their subjects.

We shall, therefore, have to find another interpretation of 1<sup>a</sup> 24–25. These lines, it seems to me, do not provide a definition of the relation “x is in y as its subject”; rather, they provide a definition of the class of entities that are in something as their subject. What is characteristic of the members of this class is that, for each of them, we can specify at least one subject of which it is true that it could not exist without that subject. With one exception (which I shall come to later), this is not the case with entities that are only said of something as their subject and not also in something as their subject. While the species man would not exist, according to Aristotle, if there were no men, it is irrelevant to the existence of the species which men actually exist—as long as some do. There is no particular person, no one subject of the species man, to whom one could point and say that the species could not exist without this person as its subject. The same is true of the genus animal. The genus requires species and individuals as subjects to exist. None of these subjects, though, is so privileged that one could say of it, without it the genus could not exist.

In the lines following the definition, Aristotle tell us how matters stand with things that are in a subject. In 1<sup>a</sup> 25–28, he explains how a particular knowledge

of grammar and a particular white are the sorts of things that are in a subject (he does not even find it worth remarking that they are not said of a subject): “. . . and the particular white is in the body as its subject. For every color is in body (hapan gar chrōma en sōmati).” The last sentence is obviously meant to provide the explanation of *how* the body, mentioned in the preceding sentence, is the relevant subject with respect to which the particular white turns out to be something that occurs in a subject. Of course, it is not clear how we are to understand this explanation. At least initially, we might suppose that the explanatory sentence says that, for every color, we can specify some body that has this color; for if there were no body of this color, this color, too, would not exist. Applying this to the case at hand would lead us to suppose that for this particular white, too, some particular body can be specified which has just this color; this body, then, would be the relevant subject with respect to which we can say, of the particular white, that it is in a subject. Of course, the very language of the sentence seems to rule out such an interpretation. Both in this chapter and in the next, Aristotle—by using a special and rather unusual idiom—takes great pains to indicate when he is speaking of individuals: a particular, individual man is referred to by *ho tis anthropos*, a particular, individual white, by *ti leukon*. Thus, if Aristotle had intended, in this passage dealing with the difference between universals and particulars, to say “. . . and the particular white is in a particular body as its subject,” he would have written: *kai to ti leukon en hypokeimenō men esti tō tini sōmati, hapan gar chrōma en tini sōmati*.

Instead, the language Aristotle uses here is exactly like what he employs only a few lines later, at 1<sup>b</sup> 1, where he is speaking of knowledge in general and soul in general, and what he employs at 2<sup>b</sup> 1–3, where he is speaking of color in general and body in general. This strongly suggests that the body spoken of in 1<sup>a</sup> 28 is not some particular, individual body but body in general, i.e., the genus body; it is thus parallel to 1<sup>b</sup> 2, where he is referring to soul in general, not to some particular soul. But how are we now to understand the explanatory sentence? It must be saying that every color is in the genus body as its subject. Whatever, in any particular case, it may be that is colored, and whatever color it may be that it has, it must always be a body that has a color. Thus, if there were no genus body, there would also be no colors. Yet, the genus body is also the subject of every color, and this in accord with the rule previously mentioned: everything that is in an individual object as its subject also is in the genera and species as its subjects. How, though, does the fact that the genus body is the subject of every color explain the fact that the genus body is the relevant subject with respect to which one can say, of the particular white, that it is *in* a subject, that it is the kind of thing that occurs in a subject? The explanation is simple: things that are in a subject were defined (in 1<sup>a</sup> 24–25) as those for which there is a subject without which they could not exist. For color in general, for any particular color and, hence, for a particular white, the relevant subject is body,

that is, body in general or the genus body. If we assume—something we will need to assume in Aristotle for various reasons anyway—that, for every property, there is a species or genus outside which the property cannot occur because of how its range of possible objects has been defined, we shall be able to specify some universal without which the property cannot occur. Only living things are healthy or ill, only certain kinds of living things are male or female, only human beings are foolish.

It is important to note that 1<sup>a</sup> 24–25 does not say that if something is in something else as its subject, it cannot exist independently of it. While it is natural and presumably also correct to assume that *tu en hō estin* in 1<sup>a</sup> 25 refers back to *en tini* in 1<sup>a</sup> 24, the reference of *en tini* is not fixed by the preceding words. As we have seen, everything that occurs in a subject must already have a plurality of subjects, at least some individual object and its species and genera. What is being claimed in 1<sup>a</sup> 24–25 is not that for each of these subjects the property could not exist without it. What is being claimed, rather, is that if something is the kind of thing that occurs in a subject, then there is at least something, at least one subject, without which it cannot exist.

But is it even true that something which occurs in a subject differs from something which is said of a subject in this regard: for the former, we can specify at least one subject without which it cannot exist? As suggested earlier, with one exception, this is true; it is the case with genera and species; *differentiae*, however, at least *differentiae* on the schema of the *Categories*, form the exception. For, from the third chapter, we can see that Aristotle maintains that a *differentia* can occur only in a single genus and not in two independent genera. If ‘rational’ were the *differentia specifica* that constitutes the species man, ‘rational’ could not also, at least not in the sense relevant to the species man, appear in another genus; but this implies that we can specify a subject for the *differentia* without which it could not exist, viz., the species it constitutes. For the *differentia* is said of this species and, hence, has it as its subject.

Now it seems as if Aristotle wishes to rule out precisely this case by requiring, in 1<sup>a</sup> 24–25, not only that there must be a subject, without which the thing in question could not exist, but also that this thing must not be a part of its subject. The *differentia specifica*, however, is a part of the species, since it constitutes it. This interpretation presupposes that Aristotle is thinking of ‘conceptual’ parts, when he is speaking of parts in 1<sup>a</sup> 24–25. As we can see from Bonitz’s *Index* (455<sup>b</sup> 32ff.), Aristotle uses ‘part’ in this sense quite frequently. And it seems as if we must ascribe this use of ‘part’ to Aristotle here also, in 1<sup>a</sup> 24–25. For there is a passage in the *Categories* where he explicitly refers back to 1<sup>a</sup> 24–25; 3<sup>a</sup> 29–32 (cf. *elegeto*, 3<sup>a</sup> 32). There he is saying that the claim that parts of substances are substances is indeed compatible with the claim that what occurs in a subject is not a substance; for parts of substances are not *in* substances, in the sense of “being in a subject,” just because they are their parts. If we were

to suppose that Aristotle is thinking of physical parts of substances in 3<sup>a</sup> 29–32, these lines would make little sense in the context either of what comes before or of what follows. For both the preceding as well as the following lines deal with genera, species, and differentiae. Thus, the continuity of the passage is preserved if we assume that, in 3<sup>a</sup> 29–32, Aristotle is thinking of conceptual parts of substances. But if that is the case, then conceptual parts are also what he was thinking of in 1<sup>a</sup> 24–25, as the line (3<sup>a</sup> 32) referring back to the passage shows. At any rate, this part of 1<sup>a</sup> 24–25 was so construed already in antiquity: cf. Plotinus, *Enn* VI 3, 5.8–9 and 25–27, and Simplicius, *In Cat.* 97, 14ff.

This interpretation of 1<sup>a</sup> 24–25 has a further advantage. We no longer need to assume that the definition is circular because of the second occurrence of ‘in’ in the definiens. The ‘in’ in the definiens does not do any work, as we can see from the fact that we can also formulate our definition thus:

- (D) x is in something as its subject, if there is a subject y such that
- (i) x is not a part of y, and
  - (ii) x cannot exist independently of y

If we adopt this interpretation of 1<sup>a</sup> 24–25, there is no longer any need, on the basis of the text, to assume that individual properties are peculiar to the individual whose properties they are. Furthermore, it is clear that individual properties also are not peculiar to the individuals whose properties they are; they are shared, at least, by the genera and species of the individuals. And nothing prevents individual properties from having a multitude of individual subjects. What is ruled out is that they should have a multitude of subjects which they are said of.

Moreover, the notion that individual properties are peculiar to their bearers seems itself an unsatisfactory one. It may be that people are struck by the thought that properties can occur in infinitely many variations so that, strictly speaking, it is never, say, the same illness that two different people have. And it may be that certain forms of empiricism rely on the idea that no schema of concept formation, however refined, can do justice to this infinite variability, rather, what is needed is experience and familiarity with individual cases. However, even if one wants to regard matters in this way, the result, at best, is that it is highly unlikely that the same property occur in two objects; but the standard interpretation requires not that it merely be highly unlikely but that it is impossible that individual properties ever occur in more than one object. Yet, the only way to ensure this is by assuming that properties are individuated by their bearers, that Socrates’ health is the particular health it is, because it is Socrates’ health and not anyone else’s.

Such a view strikes me as wholly unsatisfactory. Its plausibility derives, it seems, merely from a special use of property-terms. Without question, it is my

negligence, not someone else's, which caused the accident; no amount of philosophical argument will convince the police that negligence is something general and has nothing to do with me in particular. It is Plato's illness that causes his family concern, however much empathy they may feel toward others who have the same illness. The plausibility that the view in question derives from examples like these, however, evaporates as soon as one sees that the property-terms in these examples refer not to properties but to nominalizations of sentences in which the subject is the bearer of the property; and this creates the impression that the property-term, in these cases, is referring to some property uniquely possessed by the individual. It is the fact that I was negligent that explains why the accident occurred; it is the fact that Plato is ill in this way that causes his family concern. The assumption, then, that there are individual properties that are individuated by their bearers, is by no means as obvious or natural as its proponents would have us believe. Certainly it is not just a matter of common sense to suppose that there are such individual properties and to assume that they are what Aristotle has in mind when *he* speaks of individual properties. On the contrary, common sense, history, and the text itself seem to tell against this interpretation.

Summarizing this part of our investigation, we can say that, in the *Categories*, Aristotle wishes to maintain two distinctions, (i) that between objects and properties, which had been neglected by his predecessors and which he wishes to emphasize, and (ii) the Platonic distinction between general and particular. While it might have seemed natural to ground the notion of an individual in the notion of a thing or object, Aristotle grounds it in the notion of a particular. Thus, he ends up with non-substantial individuals and, indeed, his peculiarly weak notion of an individual; this strikes us as all the more strange, since we are inclined to ground our notion of an individual in that of an object. Individuals, in the *Categories*, are the parts into which a genus ultimately can be divided (where parts are to be construed as subjective parts.) In this sense of 'part', the individuals themselves have no parts and are indivisible and thus are called 'individuals'.

## II. Individual Substances in the *Metaphysics*

Aristotle seems to have given up using 'individual' in the sense discussed. We find the term employed systematically only in the *Categories*, the *Topics*, and in *Metaphysics*, B and I; it does not appear at all in the central books of the *Metaphysics*. We can, though, easily explain this. In the *Metaphysics*, Aristotle denies that there are genera or species, that is, he denies that universals really exist (cf. Z13). Yet, if there are no genera and species, individuals no longer can be taken to be the ultimate, indivisible parts of genera.

Though Aristotle denies the existence of universals, he does not assume that only individual objects really exist. He continues to maintain that properties exist. This has a strange consequence for the notion of an individual object which Aristotle arrives at in the *Metaphysics*. He continues to hold (cf., especially Z3) as he had in the *Categories*, that objects can be called substances because they underlie everything else that exists in such a way that everything else owes its existence to them. Illness, for example, exists only insofar as there are objects that are ill. However, while Aristotle had proceeded in the *Categories* as if the idea, that substances underlie everything else, were quite unproblematic, in the *Metaphysics*, he begins to draw out some implications of this notion for what is actually to count as an object or substance. As we can see from *Met. Z3*, he considers whether the substance that underlies everything else is the matter or the form; in the *Categories*, he had still spoken as if substances were the concrete particulars of ordinary experience: tables, horses, trees, and human beings. We must ask, why is it that Aristotle is no longer satisfied with the answer of the *Categories*?

He now sees that it cannot be the ordinary objects of experience that underlie the properties, if there are to be properties in addition to the objects; for the ordinary objects of experience are the objects together with their properties—an ordinary object has a certain size, weight, temperature, color, and other attributes of this kind. So, if we ask what is it that underlies all these properties and makes them the properties of a *single* object, we cannot answer: just the object. For the object, as ordinarily understood, already is the object together with all its qualities; what we, however, are looking for is that which underlies these qualities. Thus we can see why Aristotle now considers answers like “the form” or “the matter” when considering the question, what actually is the underlying substance.

An adequate answer to this question will need to satisfy at least these conditions: the substance must be the sort of thing that will allow us to understand why the object, whose substance it is, has the properties it has. Since an object can change its properties but still remain the same object, the substance should be the sort of thing that will enable us to see if the object, whose substance it is, is the same object despite any changes it may have undergone. Let us call the history of the changes an object has undergone, the history of the object; we shall want the substance of an object to be such that with reference to it we can explain how, despite all the changes, it is the history of *one* object. We also think an object might have had a history quite different from the one it actually had yet have been the same object; this, too, is to be explained in terms of substance. Furthermore, the substance must be an individual, since we are looking for the real individuals in the category of substance which are to explain the individuality of ordinary individual objects. Finally, there must be some sort of asymmetry between substances and properties, on the basis of which we can say of proper-



ties and everything else that exists that they depend on substances for their existence, but that substances do not, in any way, depend on properties for their existence. These are the requirements Aristotle lays down in the *Metaphysics*, when he says a substance must be a subject (hypokeimenon), “a this” (tode ti), and an independently existing entity (chōriston).

According to Aristotle, the *form* satisfies these requirements and thus is the substance. This, at least, is strongly suggested by those passages in *Met. Z* when Aristotle speaks of the form as substance and contrasts it with the derivative, composite substance (1037<sup>a</sup> 29–30; 1037<sup>a</sup> 25–26). At 1040<sup>b</sup> 23–24, he seems to distinguish between two uses of ‘substance’, one picking out the form, the other the object having this form. At 1032<sup>b</sup> 1–2, Aristotle says that, by form, he means primary substance, that is, what is substance first of all. In two passages (1037<sup>a</sup> 28; 1037<sup>ab</sup> 1), at least, he speaks as if the form were the primary substance. At 1037<sup>a</sup> 5, he says that in the case of man, the soul, i.e., the form of man, is the primary substance. At 1037<sup>b</sup> 3ff., he defines primary substance in such a way that forms satisfy the definition, but not composites of form and matter, much less ordinary objects. And at the very end of Book Z, Aristotle concludes that it is the *nature* of an object, that is, the form of a natural object, which is the substance. Aristotle, thus, does indeed seem to want to answer the question of *Met. Z.1*, 1028<sup>b4</sup> – what is substance? – by saying it is primarily the form.

How the form is going to satisfy all the conditions for substancehood laid down earlier is far from clear, though it is clear that Aristotle thinks it does satisfy these conditions. For example, it is clear that he thinks that the form is “a this” (*Met.* 1017<sup>b</sup> 25; 1042<sup>a</sup> 29; 1049<sup>a</sup> 28–29; *De gen. et corr.* 318<sup>b</sup> 32). Part of what Aristotle means when he says something is “a this” is just that it is an individual. That Aristotle really does think that the form of an object is an individual and not something general which all objects of the same kind share, we can see not only from the fact that he says the form is “a this” but also from the fact that he thinks the form’s existence is temporally limited (cf. *Met.* 1039<sup>b</sup> 24–26, 1070<sup>a</sup> 22ff.). In at least one passage, Aristotle explicitly says that different things of the same kind each have their own form (*Met.* 1071<sup>a</sup> 27–29; cf. 1071<sup>a</sup> 21ff.; 1071<sup>a</sup> 36–b1). What we are interested in, for present purposes, however, is only to understand how Aristotle could think that an individual substance really is a form. In connection with this, it will be of some use to discuss, at least briefly, Aristotle’s notion of a form.

Aristotle thinks objects have a function. We can readily understand what he means in the case of artifacts: they are constructed the way they are constructed to fulfill a certain task or to exhibit a certain kind of behavior. Fulfilling this task or exhibiting this behavior is their function; and if they do exhibit this behavior, we say they are functioning. Aristotle, like Plato before him, extends the notion

of function to natural objects, especially to living things. If a living thing is functioning, it will behave in a certain, characteristic way; to behave in this way is its function.

In addition, Aristotle thinks that the capacity of an object to behave in this characteristic way depends on its organization, structure, and disposition, indeed, he thinks that it is just this disposition or organization that enables the object to behave the way it does. Now, for Aristotle, the form is this disposition or organization, while the matter is what is thus disposed or organized.

How could the form, so construed, satisfy the requirements laid down for being a substance? An important requirement was that the substance was to explain why, despite all the changes an object had undergone, it still is the same object. How the form could satisfy this requirement, we can see from the ancient example, expanded by Hobbes, of Theseus' ships, *Theoris*, which for centuries has been sent to Delos on an annual pilgrimage and whose return Socrates, in the *Phaedo*, must await before he may drink the poison.

Over the years, the ship is repaired, plank by plank, always, however, according to the original plan. Now, let us suppose there is a shipwright who keeps the old planks. After all the old planks have been replaced in *Theoris*, he puts them together again according to the original plan and thus has a second ship. It seems obvious to me that this ship, even though it is constructed from all the old planks and according to the original plan, is not the old ship, *Theoris*, but a new ship; the ship constructed from the new planks is, in fact, the old ship. No insurance company, presented with a policy written for *Theoris*, would pay for damages suffered if the ship constructed from the old planks had been shipwrecked. Moreover, this would be so even if the planks had been changed all at once, not over many years; it would be even so if the ship constructed from the new planks were constructed according to a modified plan so that, perhaps, only the ship constructed from the old planks was constructed according to the original plan.

What makes for the identity of the repaired ship with the original ship is obviously a certain continuity. This is not the continuity of matter, or of properties, but the continuity of the organization of changing matter, an organization which enables the object to function as a ship, to exhibit the behavior of a ship. An object, then, exists as the object it is only as long as its capacity for functioning, i.e., for behaving in the way characteristic of it, has not been irretrievably lost.

This notion of the continuity of organization is even clearer if we consider living things rather than artifacts. It is presumably no accident that, in the *Metaphysics* Aristotle talks as if living things really are substances rather than artifacts. In the case of a living thing, its organization is such as to enable it to have a good chance of continuing to function for some time and so to stay in existence; such an organization will allow the living thing to change, for exam-

ple, its place, to take in food or to evade an enemy, or adjust its temperature to the temperature of the environment.

The continuity of the organization, then, is part of the very notion of the organization characteristic of living things. In the case of living things, it is also clearer that this continuity of organization or capacity for functioning constitutes the identity of the thing over time. It is when a living thing has lost this capacity that we say it is no longer alive or no longer exists. All other changes in the thing—changes of matter or changes of properties—bear on the identity of the thing only to the extent that they influence its capacity for functioning. Since this capacity, in the case of living things, is the capacity for leading a certain kind of life, Aristotle calls this capacity, organization, or form, the “soul.”

The substance is not only supposed to account for the identity of an individual object; it itself is supposed to be an individual. Against the view that the form or the organization of an object is an individual, it will be objected that, in the case of the two ships, for example, it would be much more natural to say that we have two individuals, say, *Theoris* and *Theoris II*, which have the *same* organization since they are built according to the same plan; this organization, then, is something general, since it can be realized in many objects. And there is no need to assume that in addition to this organization there also is an individual organization, peculiar to each ship. Likewise, then, with living things: we have many individuals, organized in the same way, but there is no reason to posit more than one, general form of organization common to them all. There might be any number of objects organized in the same way at the same time; and so, just as when several objects have, say, the same temperature, we feel no inclination to say that, in addition to this temperature, there are individual temperatures which each of them has (and these are completely alike), so too we should not feel inclined to suppose that, if several objects are of the same kind, in addition to one general form of being organized as this kind of thing, there are individual ways of being organized which each of them has. Looking at matters this way will lead one to the view that substantial forms, i.e., the forms of objects, are universals; that means that all living creatures of a certain kind, say, men, have one and the same soul.

Adopting this line presupposes, however, that the way in which an object has a form is relevantly similar to the way in which it has a temperature. One would need to assume that there is *one* object over some period of time that has a particular organization over this period of time just as it has a particular temperature over this period. This assumption, however, is false, if we want to hold—and this is what the example of *Theoris* suggested to us—that this *one* object, organized in a particular way over a period of time, in a certain sense, does not really exist, because, what is organized in this way, the matter, is continually changing or, at least, could be changing. We only have an individual object in

virtue of the continuity of a particular organization; it is only the identity of this organization that makes the object the individual it is. Thus, if several objects have the same temperature or size, we are able to say that it is *one* size or temperature they have, because these objects are the objects they are quite independently of whether they have this particular size or temperature. But we cannot say there is only *one* form or organization which several objects of the same kind have, since these objects only are the objects they are because each has its own, individual organization.

If forms are individuals, the question arises, in what sense are they individuals. A condition that forms will need to satisfy, if they are to be individuals, is that forms of different objects of the same kind must be distinguishable and identifiable. That seems to involve certain problems. We certainly cannot individuate forms on the basis of the objects whose forms they are; for the objects themselves are to be individuated by the forms. Putting the matter differently, Socrates' soul is not Socrates' soul because it is the soul of Socrates, rather, Socrates is Socrates because of the soul he has. What, then, distinguishes Socrates' soul from Plato's soul?

This difficulty arises for the following reason. On the one hand, forms are supposed to be things like ways of being organized, dispositions, or capacities. Yet, it seems as if dispositions or capacities quite generally are individuated in such a way that any particular disposition or capacity is the sort of thing that can be had by several things. However detailed a specification of a capacity we come up with, it always seems to be such that more than one thing could have this capacity. On the other hand, the form is supposed to be an object, a substance, and, as such, not shared by several objects. Thus, in individuating a form, we shall need to go beyond a specification of a disposition or capacity, if we are to have an individual substance.

I am not at all certain that this difficulty results merely from our line of interpretation. It seems, rather, to arise whenever we consider the question, just what is it that makes an object precisely the object it is rather than another one of the same kind. My copy of a book, for example, is this copy and not the one borrowed from the library, because it is the one I purchased so many years ago in such and such a store, and because there is a continuous history linking the book purchased then with the one I now have. This history could be traced back to before the time of my purchase, say if all copies were numbered at the printing press, and mine were copy 100. Still, it is clear that this copy would have been the very same copy even if I had not purchased it then but the library had, and I was now borrowing it. If we do not want to posit anything which this copy has that makes it the copy it is and not another one, we shall need in some sense to go beyond the object to individuate it. One needs to point to some episode

of its history or even pre-history, which, however, is not essential to its identity, since it still could have been the same copy even if its history had been quite different.

These considerations suggest that it is perhaps not problematic to go beyond the form in individuating it. Even if all the forms of a given kind were completely alike, we could distinguish between them on the basis of their histories. Now, of course, we are faced with a whole new set of difficulties. We need to ask in what sense can we speak of the history of a form. It is of no use that the history of the form is in a certain respect just the history of the object having this form, since we want to explain the identity of the object in terms of that of the form and not vice-versa. A detailed discussion of this difficulty would require, among other things, consideration of Aristotle's views in the *De Anima*. We would then see that the forms at least of ensouled things are not subject to change, at any rate, not in the sense in which Aristotle's natural philosophy approaches changeable objects, though they are principles of change and can have a very rich history, simply because the characteristic capacities of a living thing—which are what constitutes the soul, i.e., the form—can at various times be exercised or not exercised. If one sees something, it is not strictly speaking the soul which is undergoing some change but the living organism; nevertheless, the soul is a different soul, if one sees or has seen something.

For our present purposes, though, it should be sufficient to suppose that a form can have a history to the extent that it can be realized in different matter at different times. This seems clear enough in the case of living things; if it seems problematic in the case of artifacts or works of art, we can say that even in these cases the constitution of the matter is subject to at least minimal changes, induced, say, by wear.

We would thus be able to distinguish between various forms of the same kind on the basis of their histories, and between various forms of the same kind at a given moment, on the basis of the present stages of their histories—for example, we can say this form is realized in this matter, that one in that matter. This is possible only because, though Aristotelian matter can be identified only by means of the form of an object and hence be identified only with respect to a form, this form need not be the form of the matter at the time of its identification; for example, the gold of this statue can be identified as the gold of this statue but also as the gold of that crown which was melted down. Thus, we can distinguish forms on the basis of matter without getting involved in the circle that this matter, in turn, can be distinguished only on the basis of the objects and hence the forms.

This interpretation on which individual substances are primarily substantial forms of objects leads to other difficulties as well. Yet not all of these difficulties

tell against our interpretation. Aristotle himself seems to grapple with some of them. A problem, for example, is that Aristotle frequently talks as if knowledge, strictly speaking, were knowledge of the general or universal and as if knowing something were knowing its form or essence. But this seems to commit him to the view that the form of an object is something general, that the only thing that can be known, in the case of an object, is its form, because only it is universal, while the matter is what is peculiar to the object. However, *Met.* B 6, 1003<sup>a</sup> 13–14 and the relevant parallel passages show that Aristotle sees a problem here precisely because, on the one hand, he is inclined to think that the form, as the principle of substance, is individual, while, on the other, he does not want to say that there is no knowledge of that which strictly speaking is real, i.e., the form. This seems to explain why Aristotle, when he comes to *Met.* M 10, where he tries to solve this aporia, argues that knowledge is knowledge of the particular and only potentially also knowledge of the general.

This interpretation does not only lead to difficulties; it also helps shed some light on some old problems, e.g., the problem how Aristotle can claim (*Met.* E 1, 1026<sup>a</sup> 28–32) that theology also includes ontology, that *metaphysica specialis* and *metaphysica generalis* are the same discipline. Obviously, part of the explanation of this identification will involve explaining that a theory of substance will also be a theory of all being as such—however problematic that may be in all its details. But, then, the second part of the explanation will involve explaining why the theory of a certain kind of substances, namely, those studied by theology, will also be a theory of substance in general and thus also of being in general. This second part of the explanation—for which there is little direct textual support—could proceed from the fact that the predicate ‘substance’ does not have a single use either, just like the predicate ‘being.’ Though the use of ‘substance’ may seem relatively simple—especially compared to ‘being’—closer analysis shows that here, too, there are several uses. That Aristotle thinks there are several uses of ‘substance’ seems evident from *Met.* Z. He arrives at a conception of substance on which primarily natural objects are substances (1041<sup>b</sup> 28–30), while artifacts count as substances as best in some extended sense of substance. In addition, *Met.* Z 3 and *Met.* A and H quite generally seem to allow for three different uses of substance even in the case of natural substances, uses that are systematically related: for the matter, the form, and the composite can be called “substance.” However, of these uses, the one for forms is primary and the others are explained in terms of it.

In *Met.* Z there are various indications that we are dealing here with material substances, because these are known to us, but that our actual interest is in immaterial substances insofar as we want to know what substance is (cf. *Met.* 1029<sup>b</sup> 3–10, transposing with Jaeger; 1037<sup>a</sup> 10ff.; 1041<sup>a</sup> 7–9). If we consider that immaterial substances are pure forms and that they do not, for example, give rise to the problems about individuation discussed above, it seems reason-

ble to suppose that Aristotle could have thought that the idea of substance applies primarily to pure substantial forms, like God, then to substantial forms of natural objects, then to these objects and to their matter, insofar as it is potentially these objects, and only last to artifacts. Pursuing this line of thought will be the topic of another chapter.

## Substance in *Aristotle's Metaphysics*

Aristotle's ontology is very generous.<sup>1</sup> It contains objects like trees and lions. But it also contains qualities, like colors, and quantities, like sizes, and all the kinds of items Aristotle distinguishes according to his so-called categories. But, of course, Aristotle does not assume that objects, qualities, quantities, and the rest exist side by side, separately from each other. He thinks that qualities and quantities exist only as the qualities and quantities of objects, that there are qualities and quantities only insofar as there are objects that are thus qualified or quantified.

In taking this view Aristotle is making some rather substantial assumptions. He assumes that the existence of properties<sup>2</sup> does not just amount to the existence of objects that have these properties, but, rather, that the existence of objects that have properties presupposes the existence both of objects and of properties. Moreover, Aristotle makes a clear distinction between objects and properties, and he regards this distinction as basic, i.e., he regards objects and the different kinds of properties as basic ingredients of the world that cannot be reduced to each other. His predecessors had had a tendency to blur the distinction, e.g., by treating qualities as somehow substantial and as thus constituting objects, or by treating objects as insubstantial and as constituted, in some way or another, by qualities. Furthermore, Aristotle assumes that, though both objects and properties are basic and irreducible to each other, there, nevertheless, is an ontological dependence between them, that the existence of properties has to be understood in terms of the existence of objects, rather than the other way round. All these assumptions would need a good deal of discussion. In particular, it would be important to discuss the question whether it was not Aristotle who first took the notion of an object sufficiently seriously and who, as a result of this, was able to make the clear distinction between objects and properties, which now seems so trivial to us that we have difficulty understanding how some of the Presocratics and some of the Hippocratic doctors, but also even later many



Hellenistic philosophers and physicians, could try to reconstruct the world from properties like, e.g., warmth and cold, dryness and wetness. What the following remarks will be concerned with, though, are not these assumptions, but the way Aristotle tries to work them out in his theory. In particular, I shall try to show how Aristotle's notion of a substance underwent a considerable change when Aristotle, in the *Metaphysics*, tried to get clearer about the way in which properties ontologically depend on objects.

The first time, at least in the extant corpus, that Aristotle approaches this problem is in the *Categories*. There Aristotle distinguishes between objects and properties and explains how properties depend for their being on particular objects as their ultimate subjects. He calls objects "ousiai", i.e., by the term Plato had used to refer to the forms, because only they truly exist or because they exist in their own right and everything else that exists depends for its existence on them. In calling objects "ousiai," Aristotle claims for objects the central place in ontology that Plato had claimed for forms. Moreover, he can refer to them this way because he takes the view that objects exist in their own right and that all other things, i.e., the properties, depend for their being on these objects. Traditionally "ousia" has been rendered by "substance." The reason for this is that, on the view Aristotle puts forth in the *Categories*, properties depend for their being on objects in that objects are their ultimate subjects, they are what ultimately underlies everything else. Indeed, objects in the *Categories* are characterized by the very fact that they are the ultimate subjects which underlie everything, whereas there is nothing that underlies them as their subject. It is because of this characterization that the rendering "substance" seems appropriate.

The *Categories* are also very specific about the sense in which substances are the underlying subjects (hypokeimena). According to the *Categories*, something has something as its subject if it is predicated of it. It can be predicated of it as its subject in either of two ways: if it is in it, or inheres in it, as its subject, or if it is predicated of it as its subject in a narrow technical sense of "predication." The two ways roughly correspond to essential and accidental predication. Thus, something has something as its underlying subject if it is truly predicated of it. Now the argument of the *Categories* is that for any item in our ontology we can ask what its subject is. If it does not have a subject in either of the two ways, it itself is a particular object. If it does have a subject, either this subject is a particular object or it is not. If it is not, we can in turn ask of that subject what its subject is; and either this further subject is a particular object, or it is not. And so on, until ultimately we arrive at a subject that in turn has no further subject and thus is a particular object. So it is argued that any series of subjects, from whichever item in the ontology we start, ends with a particular object. It is in this sense that particular objects are the ultimate underlying subjects in the *Categories*.

The fact that particular objects invariably are the ultimate subjects seems to

give them their status as *ousiai* in the following way. They must be assumed to exist in their own right, but everything else exists because it is involved in some truth about a particular object or because it is involved in some truth about something that is involved in some truth about a particular object, etc. It is in this way that properties depend on objects for their being.

When in the *Metaphysics* Aristotle tries to get clearer about the notion of substance, he starts his detailed discussion by first considering the suggestion he had followed in the *Categories*, namely, that substances are the ultimate subjects underlying everything else. But whereas in the *Categories* he had assumed that concrete particular objects play the role of ultimate subjects and hence of substances, Aristotle now clearly thinks that the assumption that substances are the ultimate subjects does not yet settle the question of what is going to count as a substance. For he now lists as candidates for substancehood that could play the role of ultimate subjects matter, form, and the composite of both (Z 3, 1029<sup>a</sup> 2ff.).

The fact that Aristotle in *Met.* Z 3 is considering the suggestion he had followed in the *Categories*, namely, that substances are the ultimate subjects, is somewhat obscured by the fact that translations of the *Metaphysics* tend to render "hypokeimenon" by "substrate," rather than by "subject." But it should be clear from the characterization of the hypokeimenon in 1028<sup>b</sup> 36ff. that Aristotle is talking here about subjects of predication, and it should be clear from 1029<sup>a</sup> 8ff. that Aristotle is considering the notion of the *Categories* of substances as the ultimate subjects of predications.

Given that, we have to wonder why Aristotle now is considering matter, form, and the composite of both as possible ultimate subjects of predication. For none of these is identical with the particular objects of the *Categories*. This goes without saying for matter and form. But it also seems to be true for the composite of matter and form. It is true that traditionally the composite has been identified with the concrete, particular object. But the concrete, particular object, as we are familiar with it, actually is a composite not just of matter and form, but also of a large number of accidents; it is an object of a certain size, weight, color, and the like, i.e., a complex of entities. Hence, one should not assume without further argument that the composite of matter and form is to be identified without qualification with the concrete particular.

The reason why Aristotle now is considering matter, form, and the composite, rather than the concrete, particular object, as possible ultimate subjects of predication seems to be the following. Aristotle had assumed in the *Categories*, and still does assume in the *Metaphysics*, that a statement like "Socrates is healthy" introduces two entities, Socrates and health. But he now asks the question that he had not faced in the *Categories*: what is the subject of health, if health is an entity distinct from its subject, what in the bundle or cluster of entities that constitutes Socrates is the thing itself as opposed to the properties like

health which it underlies? That this is what Aristotle has in mind is borne out by the way he argues in 1029<sup>a</sup> 10ff. that matter is the most straightforward candidate for the title of the ultimate subject. For he argues that if we strip a particular object of all of its properties, nothing but matter will be left. So obviously he is looking for that element in a concrete particular object which underlies its properties, rather than for the concrete particular object itself.

Given this approach, it is easy to see why the composite of matter and form would be an ideal candidate for the title of the ultimate subject of all non-substantial entities. It is just that part in a bundle of entities which is a concrete object which is opposed to the non-substantial properties of the object, and since all non-substantial entities are predicated (or introduced by predicates) of objects, the composites will be the ultimate subjects of everything else in the ontology.

It is somewhat more difficult to see how matter could be the ultimate subject. 1029<sup>a</sup> 20–23 suggests that all predicates can be construed as being directly predicates of some matter. But we have to keep in mind that the notion of a primary or ultimate subject (1029<sup>a</sup> 1ff.) does not imply as such that the ultimate subjects are themselves directly the subjects of everything else. And, in fact, 1029<sup>a</sup> 23–24 suggests that matter is the ultimate subject by being the subject of the substance in question which, in turn, is the subject of the non-substantial entities. All this raises considerable problems which I shall leave aside, though, since Aristotle himself here does not pursue the issue further because he thinks that matter for certain other reasons is not a good candidate for substancehood anyway.

Most puzzling, in any case, is his suggestion that there is a way in which substantial forms might be construed as the ultimate subjects and, hence, as the real things as opposed to mere properties of things. Bonitz thought that this suggestion was a mere slip on Aristotle's part, but it is clear from the introductory chapter of H (H 1042 1<sup>a</sup> 28ff.) that it is Aristotle's considered view that in some way the form is the ultimate subject and hence substance. The view is puzzling in various ways. To start with, Aristotle does not tell us how statements are to be construed in such a way that it is forms that turn out to be the ultimate subjects.

Perhaps he thinks that statements about objects can be regarded as statements about forms insofar as they are either statements primarily about the form and only secondarily, derivatively, about the object, anyway, or insofar as they are statements about the form as it is embodied in matter. Thus, the truth that Socrates is an animal would be a truth about the form straightforwardly, whereas the truth that Socrates is healthy would be a truth about the form to the effect that the form constitutes a composite that is healthy.

But such a construal seems to be highly artificial, and, hence, we must assume either that Aristotle was driven to it because he had other reasons to think that forms are substances, but nevertheless wanted to retain the *Categories'* no-

tion of a substance as an ultimate subject, or that there is a way of looking at the matter which makes it intuitively plausible to regard forms as the ultimate subjects. The following seems to me to be such a way of looking at things.

It is characteristic of ZHΘ that Aristotle tends to, or in fact does, restrict substances to natural objects (Z 7, 1032<sup>a</sup> 19; Z 8, 1034<sup>a</sup> 4; Z 17, 1041<sup>b</sup> 28–30; H 3, 1043<sup>b</sup> 21–22). It is not entirely clear whether this is supposed to restrict substances to animate things, but these certainly are paradigms of natural objects. So let us first consider them. In their case the form is the soul. Let us regard this soul as the organization of an object, or its disposition to behave or to lead the kind of life characteristic of that kind of object. The organization of the object is such as to have a good chance to survive changes in the environment, or such that the object has a good chance to keep functioning for some time and so to stay in existence. This will involve the thing's changing, e.g., its place to take in food or to evade an enemy, or its temperature in case of an inflammation. It also involves exchange of the matter so disposed.

So what has to stay the same as long as a particular animate object exists is just that organization or disposition to behave in a way characteristic of the kind. There always has also to be some matter that is thus organized, but it does not have to be the same matter. Similarly, there always have to be all sorts of properties, a certain temperature, weight, size, shape. In fact, the properties will ordinarily come within rather narrow ranges. For if we heat up an animate object, there will be a point at which it can no longer adjust to the change and the characteristic disposition will be destroyed. But though the object must always have a certain weight, size, temperature, and though it has to have these within certain narrow limits, there is no weight, size, temperature, etc. which it has to have all the time. If we, then, analyze an ordinary physical object into matter, form, and properties, the only item in the case of animate objects that has to stay the same as long as we can talk about the same thing is, on this account, the form. And this may give some plausibility to the assumption that it is really the form which is the thing we are talking about when we at different times say different things about an object.

As an example of an artifact let us consider Theseus' ship—let us call it *Theoris*—which is repaired again and again until all the original planks have been replaced by new ones. But a craftsman has kept the old planks. He now fits them together according to the original plan so that we have a second ship built according to the same specifications as the other ship. Still, it is clear that it is the ship with the new planks which is the old ship, i.e., *Theoris I*, and that it is the ship with the old planks which is the new ship, i.e., *Theoris II*, though its planks and its plan are identical with the planks and the plan of the original ship, whereas the other ship has new planks.

Our theory will try to explain this in the following way: *Theoris I*, the ship with the new planks, is identical with the original ship because there was one

disposition which was first the disposition of the original planks, then the disposition of a slightly different set of planks, and, finally, in a history that could be traced back step by step, the disposition of the set of new planks. The disposition of *Theoris II*, on the other hand, though it is a disposition of the original set of planks, and though the ship is built according to the same specifications, does not have that history and hence is not the disposition of the original ship.

It will be objected that, if the two ships are faithfully built according to the same specifications, they will have just one and the same disposition. There will be over a period of time some one thing, namely the *Theoris I*, which has that disposition and there will be, for an overlapping period of time, another thing, namely *Theoris II*, which has the very same disposition. But according to our theory, though it is true that as long as each ship is in existence there is always something which is thus disposed, namely the material, it is *not* necessary that that which is thus disposed be the same throughout the time of the ship's existence. Hence, the identity of what is thus disposed is not a sufficient condition for the identity of the ship; neither is it a necessary condition, as we can see from the case of the old ship with the new planks. And since we want to analyze the ship into a disposition and what is thus disposed, and since one of the two factors is to account for the identity of the ship, it has to be the disposition. And, hence, we have to distinguish the disposition of the two ships, though their specification may be exactly the same.

If we look at objects in this way, it is natural to look at the form as the centerpiece of the cluster of entities that constitute the concrete object. And so it is no longer counterintuitive to regard all truths about an object as ultimately truths about its form. They in some sense just reveal the particular way a form is realized.

But the claim that forms are the ultimate subjects is puzzling in yet another way. Traditionally it has been assumed that forms are universal. But it is of the very nature of ultimate subjects that they cannot be predicated and, hence, cannot be universal. Therefore, if substantial forms are the ultimate subjects, they must be particular. A moment's reflection, though, shows that this is a view that Aristotle is committed to anyway. For in *Z* 13 he argues at length that no universal can be a substance. But since he also wants forms to be substances, he has to deny that forms are universal. And, in fact, we do find him claiming that the form of a particular object is peculiar to that object, just as its matter is; Socrates' form, i.e., his soul, is different from Plato's form, i.e., Plato's soul (*Met.*  $\Delta$  1, 1071<sup>a</sup> 24–29). We even find Aristotle claiming that the form is a particular this (a tode ti; 8, 1017<sup>b</sup> 25; *H I*, 1042<sup>a</sup> 29;  $\Delta$  7, 1049<sup>a</sup> 28–29; *De gen. et corr.* 318<sup>b</sup> 32). And, of course, he has to claim that a form is a particular this, if he wants forms to be substances, since he assumes that a substance has to be a particular this. It was for this reason that Aristotle rejected the claim of matter to be substance; matter is only potentially a particular this.

But though Aristotle clearly is committed to the view that forms are particular and no less clearly actually espouses the view that they are particular, we have to ask how he can assume that they are particular. For it would seem that all things of the same kind have the same form or are the same in form. But the answer to this is that things of the same kind have the same form only in the sense that for things of the same kind the specification of their form is exactly the same (1071<sup>a</sup> 29). It is a basic nontrivial fact about the world that things come with forms that are exactly alike, and not just sufficiently similar to class them together in one kind. The reality of kinds amounts to no more than this: that the specification of the form of particular objects turns out to be exactly the same for a variety of objects. But for this to be true, there is no need for a universal form or a universal kind, either a species or a genus. And, in fact, the import of Z 13 seems to be that there are no substantial genera or species in the ontology of the *Metaphysics*. As universals they cannot be substances, and since they do not fall under any of the other categories either, they do not have any status in the ontology. Sometimes it seems to be thought that substantial genera and species could be regarded as qualities. But this cannot be Aristotle's view. For on Aristotle's view qualities are those things we refer to when we say what something is like. But even in the *Metaphysics* Aristotle takes the view that in referring to the species or the genus of something we say what it is, rather than what it is like.

Substantial forms, then, as ultimate subjects and as substances are particular. But we may still ask how they manage to be particular, given that their specification, down to the smallest detail, is exactly the same for all things of the same kind. To answer this question, though, we have to get clearer about what it is that is asked. If the question is how do we manage to distinguish particular forms at one time, the answer is simple: they differ from each other by being realized in different matter (cf. 1034<sup>a</sup> 6–8; 1016<sup>b</sup> 33) and by being the ultimate subjects of different properties. If the question is how do we reidentify a particular form at a later point in time, the answer is: it can be identified through time by its continuous history of being realized now in this and now in that matter, of now being the subject of these and then being the subject of those properties. But if it should be demanded that there be something about the form in and by itself which distinguishes it from other forms of the same kind, the answer is that there is no such distinguishing mark and that there is no need for one. It just is not the case that individuals are the individuals they are by virtue of some intrinsic essential distinguishing mark.

It turns out, then, that Aristotle in the search for what it is that is underlying the non-substantial properties of objects considers the form of an object as a serious candidate.

But it also seems to be the candidate he actually settles on. And so we have to see why he gives form preference over the two other candidates, matter and

the composite. As we have already seen, Aristotle thinks that matter does not satisfy certain other conditions substances have to fulfill; it is, e.g., not actually, but only potentially a particular thing, and thus only potentially a substance. The composite, on the other hand, cannot be ruled out on the same grounds. And, in fact, Aristotle accepts its claim to be substance, but insists that it is substance only derivatively, that forms are the primary substances (1032<sup>b</sup> 1ff.; cf. 1037<sup>a</sup> 5; 1037<sup>a</sup> 28; 1037<sup>b</sup> 1).

It is easy to see why Aristotle thinks that forms are prior to composites (1029<sup>a</sup> 5ff.; 1037<sup>b</sup> 3): they are presupposed by the composites. But this in itself is not yet sufficient to think that they are prior as substances. The reason for this would seem to be that Aristotle thinks that substances are not as such composite. There are substances that are pure forms as, e.g., the unmoved mover. And it is clear from Z 3, 1029<sup>b</sup> 3ff. and Z 11, 1037<sup>a</sup> 10ff. (cf. also Z 17, 1041<sup>a</sup> 7ff.) that Aristotle thinks that the discussion of composite substances in Z H is only preliminary to the discussion of separate substances. We start by considering composite substances because they are better known to us, we are familiar with them, and they are generally agreed to be substances. But what is better known by nature are the pure forms. Aristotle's remarks suggest that we shall have a full understanding of what substances are only if we understand the way in which pure forms are substances. This, in turn, suggests that he thinks that there is a primary use of "substance" in which "substance" applies to forms. Particularly clear cases of substance in this first use of "substance" are pure forms or separate substances. It is for this reason that composite substances are substances only secondarily.

It would seem, then, that there are two main reasons why the concrete, particular substances of the *Categories* in the *Metaphysics* get replaced by substantial forms as the primary substances: (i) Aristotle now is concerned with the question what is the real subject in itself as opposed to its properties; (ii) Aristotle now not only has developed his own theory of forms, but also has come to assume separate substantial forms which, on his view, are paradigms of substances, but which are not substances in the same way as the composites or the concrete particular objects are.

That substantial forms in the *Metaphysics* play the role of primary substances which in the *Categories* has been played by particular objects is obscured by a line of interpretation that one finds, e.g., in Ross (Aristotle, p. 166; 172) and S. Mansion (Melanges Merlan, p. 76). According to this interpretation, the question what is to count as a substance is already settled at the beginning of *Met. Z*; what, on this interpretation, Aristotle is concerned with is Z 3ff., rather, is the further question "what is the essence or substance of substances?", and "the substantial form" is supposed to be an answer to this further question. But this way of looking at what Aristotle says in the *Metaphysics* cannot be right. For in Z 3 Aristotle seems to set out to answer the very question raised in Z 1, "what is substance?". There is no suggestion that this question has already been an-

swered in favor of particular objects, and that we are now considering the further question "what is the substance of particular substances?" It, rather, seems that Aristotle throughout *Z* is considering one and the same question "What do we mean by 'substance' when we distinguish substances from items in other categories?", and he seems to be considering various candidates for that one title. If, then, Aristotle in the last chapter of *Z* (1041<sup>b</sup> 30), where he makes a fresh start at answering this question, again suggests that it is the nature or form of a thing which is the substance we are looking for, we have to assume that this is supposed to be his answer to the question of *Z*1: "What is substance?". When in *H* 1 he again outlines the problem, he clearly puts the matter in such a way that physical objects and the essences of objects, universals and ultimate subjects, were parallel candidates for the one title of substance (1042<sup>a</sup> 3-15). Therefore, it should be clear that Aristotle now does mean to say that substantial forms, rather than particular objects, are substances in the primary sense.

On the theory of *Metaphysics*, then, substantial forms rather than concrete objects are the basic entities. Everything else that is depends on these substantial forms for its being and for its explanation. Hence substantial forms, being basic in this way, have a better claim to be called "ousiai" or "substances" than anything else does. Some of them are such that they are realized in objects with properties. But this is not true of substantial forms as such. For there are immaterial forms. Properties, on the other hand, cannot exist without a form that constitutes an object. Moreover, though certain kinds of forms do need properties for their realization, they do not need the particular properties they have. The form of a human being needs a body of a weight within certain limits, but it does not need that particular weight. No form needs that particular weight to be realized. But this particular weight depends for its existence on some form as its subject. In fact, it looks as if Aristotle in the *Metaphysics* thought that the properties, or accidental forms, of objects depended for their existence on the very objects they are the accidental forms of, as if Socrates' color depended on Socrates for its existence. However this may be, on the new theory it is forms that exist in their own right, whereas properties merely constitute the way forms of a certain kind are realized at some point of time in their existence.

Thus, a closer consideration of the way in which objects underlie the properties that depend on them for their being has led Aristotle in the *Metaphysics* to a revision of his doctrine of substance.



## The Unity of General and Special Metaphysics: Aristotle's Conception of Metaphysics

If one tries to get clearer about Aristotle's conception of metaphysics, one naturally turns to the treatise that by its very title promises to give us an account of Aristotle's metaphysics. Unfortunately, the title itself does not provide us with any clue. "Metaphysics" is not an Aristotelian term. It only gains some currency in late antiquity. Thus, the commentary on Isaiah attributed to St. Basil (164) speaks of those things, higher than the objects of the theory of nature, "which some call metaphysical." The earliest catalog of Aristotle's writings, the one preserved in Diogenes Laertius, does not yet contain the title "Metaphysics." Hence, it is clear that our title is the title later editors gave to the treatise. It is first attested in Nicolaus of Damascus' compendium of Aristotle's philosophy, i.e., in the first century B.C. But even these editors presumably did not mean to suggest any particular conception of the discipline by choosing this title. Probably, they were at a loss regarding a proper title for the treatise and just named it after its position in the corpus of Aristotelian writings, namely, as coming after the physical writings. It would also be a mistake to assume that the title indirectly expresses a certain conception of the discipline metaphysics by referring to its "natural" place in the order of Aristotelian writings. The place is anything but "natural." The order of the corpus follows the Academic, and then Stoic, division of philosophy into logic, physics, and ethics. And though there were subdivisions of this scheme in Hellenistic times, none made provision for a discipline metaphysics, whether called by that or another name. Not as if Hellenistic philosophers did not do any metaphysics, but they did not regard it as a separate discipline. Sometimes physics was divided into physics, more properly speaking, and theology. And since there is no natural place for the *Metaphysics* in Aristotle's corpus, a position after the physical writings must have seemed least disturbing, especially since Aristotle himself in the *Metaphysics* at times had identified the subject of the treatise as theology. Moreover, the treatise clearly belonged with the theoretical treatises, rather than with