

## Aristotelian Categories

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That which is there to be spoken of and thought of, must be.  
 Parmenides, Fragment 6 (McKirahan trans.)

The short treatise entitled *Categories* enjoys pride of place in Aristotle's writings. It is the very first work in the standard edition of Aristotle's texts. Each line of the thirty columns that make up this treatise has been pored over by commentators, from the first century BCE down to the present. Moreover, its gnomic sentences still retain their fascination for both philosophers and scholars, even today.

In the tradition of Aristotelian commentary, the first works of Aristotle are said to make up the *Organon*, which begins with the logic of terms (the *Categories*), then moves on to the logic of propositions (the *De Interpretatione*) and then to the logic of syllogistic argumentation (the *Prior Analytics*). But to say that the *Categories* presents the logic of terms may leave the misleading impression that it is about words rather than about things. That is not the case. This little treatise is certainly about words. But it is no less about things. It is about terms and the ways in which they can be combined; but this "logic" of terms is also meant to be a guide to what there is, that is, to ontology, and more generally, to metaphysics.

The *Categories* text was not given its title by Aristotle himself. Indeed, there has long been a controversy over whether the work was even written by Aristotle. Michael Frede's discussion of this issue in "The Title, Unity, and Authenticity of Aristotle's *Categories*" (Frede 1987: 11–28) is as close to being definitive on this issue as is possible. Frede concludes that the *Categories* can only be the work of Aristotle himself or one of his students.

The question of authenticity is often connected with the issue of whether the last part of the *Categories*, chapters 10–15, traditionally called the "*Postpraedicamenta*," and the earlier chapters really belong to the same work. We shall have very little to say about the *Postpraedicamenta* here.

### The Fourfold Classification

We learn in chapter 4 of the *Categories* that there are ten categories of entities: substance, quantity, quality, relative, place, time, being-in-a-position, action, and passion.

But before we get this Tenfold Classification, we come, in chapter 2, to a Fourfold Classification. It is laid out in the following way:

T1. Among things that are, (a) some are *said of* a subject but are *not in* any subject. For example man is said of a subject, the individual man, but is not in any subject; (b) Some are *in* a subject but are *not said of* any subject . . . For example, the individual knowledge-of-grammar is in a subject, the soul, but is not said of any subject; and the individual white is in a subject, the body (for all color is in a body), but is not said of any subject. (c) Some are *both said of* a subject and *in* a subject. For example, knowledge is in a subject, the soul, and is also said of a subject, knowledge-of-grammar. (d) Some are *neither in* a subject *nor said of* a subject, for example, the individual man or individual horse – for nothing of this sort is either in a subject or said of a subject. Things that are individual and numerically one are, without exception, not said of any subject, but there is nothing to prevent some of them from being in a subject – the individual knowledge-of-grammar is one of the things in a subject (1a20–21b9).<sup>1</sup>

The fourfold classification Aristotle gives us in T1 yields the table shown.

	Not in a subject	In a subject
Said of a subject	man horse	knowledge
Not said of a subject	the individual man the individual horse	the individual knowledge of grammar the individual white

We can see right away that Aristotle recognizes two sorts of things that are individual and numerically one – some that are not in a subject, and some that are in a subject. An individual thing that is not in a subject is a basic, or independent, thing. The examples Aristotle gives here are the individual man, say, Socrates, and the individual horse, say, the famous horse of Alexander the Great, Bucephalus.

What Aristotle understands to be an individual thing in a subject is highly controversial. I shall take up the controversy later on. Aristotle's first example of such a thing is the individual knowledge of grammar. His second example is the individual white. He must also suppose that there is such a thing as the individual wisdom, the individual bravery, and so on. The subject that the individual knowledge of grammar is in, Aristotle says, is the soul. This knowledge might be in, for example, the soul of Socrates. We cannot tell here whether Aristotle thinks of the soul of Socrates as something distinct from Socrates. What seems clear is that, if the individual knowledge of grammar is in the soul of Socrates, then Socrates himself has a certain knowledge of grammar.

What does Aristotle mean by “things said of a subject”? For Aristotle in this work, but not necessarily in his later writings, the phrase, “said of something as a subject” [*kath' hupokeimenou tinos legetai*], is best thought of as expressing a basic classification relation. *Man* (that is, human being, *anthrôpos*) is said of the individual man, say, Socrates. And what that means is that Socrates is classified basically and fundamentally as *a man*. Put the other way around, *man* is said of Socrates means that *man* classifies Socrates in a fundamental way. Analogously, *knowledge* is said of the individual

knowledge of grammar. That is to say, *knowledge* classifies the individual knowledge of grammar. The individual knowledge of grammar is an example of knowledge.

Not being in a subject makes something a substance (*ousia*). Not being in a subject conjoined with not even being said of a subject makes something a *primary* substance. As we shall see in a moment, primary substances, according to Aristotle, are subjects for everything else. That includes, first of all, things that, while they are not in primary substances, are said of primary substances. Man and horse are examples of that group. Thus, although man is not in Socrates, man is said of Socrates. Similarly, horse is not in Bucephalus, but horse is said of Bucephalus. Because man and horse are not in any subject, they, too, count as substances, along with Socrates and Bucephalus. But because man and horse are said of subjects, that is, classify them, they are only secondary substances.

Here one might wonder why we shouldn't say that *Socrates* is said of Socrates, and *Bucephalus* is said of Bucephalus. The reason seems to be that *Socrates* does not classify Socrates; it names him, just as *Bucephalus* names Bucephalus. And being said of, we need to remember, is a classifying relation.

So things on the left side of the box are substances, either primary (on the bottom) or secondary (on top). What now about things in the right-hand column, things that are in a subject? What are they? I shall call them "properties." I use "property" here in the modern sense in which each quality or feature or characteristic of a thing counts as a property of that thing.<sup>2</sup> A philosopher today might most naturally think of properties as being the properties *of* substances. But Aristotle thinks of them as being *in* substances. Following him in this use of "in," we can think of substances as being, metaphorically, jewel boxes. We can say that the jewels in a given jewel box are that particular box's properties. An individual jewel box will be a primary substance. And a basic kind of jewel box will be a secondary substance.

The Greek word we transliterate as "categories," namely, *katêgoriai*, comes from a verb Aristotle uses to mean "to predicate." What the editor or commentator who first named this treatise *Categories* had in mind with the title he gave it is presumably that Aristotle, in this work, makes distinctions among statements or predications that, as we might want to put the matter today, reveal the "deep structure" of very simple and basic predications. Revealing this deep structure in turn illuminates the metaphysical status of what gets predicated and what it gets predicated of.

Consider now the simplest subject-predicate predications of the schematic form, "S is F." There are, according to T1, two ways in which it will be correct to state of S that it is F. We might correctly state of S that it is F if

- (1) S is [fundamentally classified as an] F.

Alternatively, we might correctly state of S that it is F if

- (2) There is something, x, such that x is in S and x is [fundamentally classified as an] F.

Now compare these examples:

- (a) Bucephalus is a horse.
- (b) Bucephalus is brown.

If (a) is true, it will be true, according to Aristotle, because, in line with (1) above,

(a\*) Bucephalus is fundamentally classified as a horse.

That is, *horse* is said of Bucephalus. By contrast, if (b) is true, it will be so because, in line with (2) above,

(b\*) There is something, x, such that x is in Bucephalus and x is [fundamentally classified as a] brown.

The distinction between primary and secondary substances – substances said of a subject and those not said of a subject – is relatively straightforward. It is a distinction between concrete individuals – paradigmatically, for Aristotle, living organisms – and their species and genera. We could also adopt the “primary”–“secondary” terminology to distinguish ground-level properties from their species and genera, although Aristotle himself does not do this. The “primary properties” would then be the things in a subject that are not said of a subject; that is, they would be properties that are not themselves the species or genera of properties. “Secondary properties” would be properties that are the species and genera of primary properties.

Now we need to ask what exactly it is that counts as being a “primary,” that is, individual property. What exactly are, to use Aristotle’s own examples, this individual knowledge-of-grammar and this individual white?

## Tropes

How to answer that question has been much debated among commentators. For the time being I am going to make use of my own interpretation of what primary properties are. Later on I shall consider an alternative account.

On my interpretation, a “primary” or individual property is what is called by metaphysicians today a “trope.” A trope in this modern usage<sup>3</sup> is not, as one might have thought, a figure of speech; rather, it is an abstract particular. It is a non-repeatable instance of some property – what Bertrand Russell called a “unit quality.” Thus, if two roses have exactly the same shade of pink, it will still be true that the pink in this rose is distinct from the pink in that rose. Each rose will have its own individual color property, its own individual pink, even if the two properties are of the very same shade and hue. One individual pink will be in a subject (say, an individual rose), and in no other subject. Its being individual means that it is not said of anything else; in particular, it is not said of, that is, does not classify, any other instance of color, even one of the same shade and hue.

If we accept this understanding of what it is to be an individual quality, something “in a subject, but not said of a subject,” we have the materials for a very interesting solution to “the problem of the one and the many,” a problem that Aristotle inherited from Plato. Thus Plato has his character, Socrates, wonder in the dialogue, *Philebus*, whether one ought to suppose there is some one thing, man (that is human being), some one thing, ox, some one thing, the beautiful, and so on. He asks, “how we are to

conceive that each of them, being always one and the same and subject neither to generation nor destruction, nevertheless is, to begin with, most assuredly this single unity and yet subsequently comes to be in the infinite number of things that come into being – an identical unity being thus found simultaneously in unity and in plurality. (*Philebus* 15b, Hackforth trans.)

According to the solution to the one-over-many problem I am drawing from Aristotle's *Categories*, there can be no property, and hence no individual property either, that is not a property of some kind or other. To be an individual color, for example, is to be a color of some shade and hue. But it is also to be in some individual subject, say this rose, and in no other. If this rose is destroyed, so is the individual pink that was in it. Of course, there might be another rose of exactly the same shade and hue as the rose that was destroyed. But the individual color in the other rose, though qualitatively identical with the old one, would be distinct from it. Pink gets to be in distinct things, say, this rose and that, by there being in each thing some trope that is classified as a pink.

Somewhat surprisingly, Plato also seems to have conceived the idea of tropes. In his dialogue, *Phaedo*, Plato has his character, Phaedo, speak, not just of Tallness and Shortness, but also of the individual tallness, or shortness, in Simmias. (102b–103a) Daniel Devereux notes the parallel. He comments that “in the *Phaedo* we see, if not the origin of, at least a close parallel to Aristotle's conception of individuals in non-substance categories” (Devereux 1992: 117).

The difference between the Aristotle of the *Categories* and the Plato of the *Phaedo* on the tallness in Simmias is that Tallness itself is, according to Plato, a thing apart from the tallness in x and y and z, whereas according to the Aristotle, it is not. We shall have more to say about this very shortly.

Although there is admittedly no passage in the *Categories* that requires us to understand individual qualities as tropes, the last part of T1 seems clearly to invite this understanding, where the individual property under discussion is the individual knowledge of grammar, rather than the individual pink:

T1a. Things that are individual and numerically one are, without exception, not said of any subject, but there is nothing to prevent some of them from being in a subject – the individual knowledge-of-grammar is one of the things in a subject. (1b6–9)

Thus both Socrates and his individual wisdom are numerically one and therefore not said of any subject; but whereas Socrates is not in any subject either, his individual wisdom is; in fact it is in him and him alone.

### **Aristotle's Principle**

Everything that exists, according to Aristotle, has a basic classification. We can put this point by saying that everything that exists is *a* something or other. Aristotle couldn't express himself that way, since Greek has no indefinite article. But that was his idea. J. L. Austin is reported to have made the point dramatically in his lectures

at Oxford by saying that, when God called out to Moses from the burning bush, “I am,” Moses should have shot back, “You are *a* what?” Let’s call this “Aristotle’s principle,” or “AP.”

AP: Everything that exists is *a* something or other.

According to AP, there are no bare particulars. There is no Socrates apart from there being a certain man, who is, at the same time, a certain animal and a certain living thing. According to *Categories*, the relationship between Socrates and man (that is, “human-ness”) is not correctly thought of as a relationship between two quite separate things; rather, Socrates, in being the individual he is, is (already) an individual man. And, in general:

AP\*: Every existing individual is an individual something or other.

AP\* applies, not only to substances, but also to properties. For there to be an individual property, say, the wisdom of Socrates, is for there to be an individual of a certain kind – in this case, of the kind or species, wisdom. Thus every individual – whether individual substance or individual property – is an individual something or other. There is for Aristotle no deep problem about how there can be the one and the many because to be many is to be many somethings – many Fs, or many Gs.

So far, then, we have this fourfold classification of “the things that there are”:

- 1 *Individual substances*, such as this man (say, Socrates) and this tree: these are *not in a subject* and *not said of a subject*, and they are called by Aristotle “primary substances.”
- 2 *Species and genera of substances*, such as man, horse, animal, oak, and tree: these are *not in a subject* but *said of a subject* (man is said of Socrates and animal is both said of Socrates and also said of man). Items in this grouping are called by Aristotle “secondary substances.”
- 3 *Individual properties*, such as the very paleness of Socrates and his particular wisdom, and other *non-substance individuals*. These are *in a subject* but *not said of a subject*.
- 4 *Species and genera of properties*, such as wisdom and virtue. These are *in a subject* and also *said of a subject*.

### In a Subject

The interpretation I have been suggesting, according to which individual, or primary, properties are tropes, faces challenges on more than one front. But the most obvious challenge arises from a sentence I left out of T1. In J.L. Ackrill’s translation it reads this way:

T2. By “in a subject” I mean what is in something, not as a part, and cannot exist separately from that which it is in. (1a24–5)

In 1965 G.E.L. Owen published an influential paper, “Inherence,” in which he rejected John Ackrill’s reading (in Ackrill 1963: 74–5) of T2. Ackrill had understood the last clause of T2 to mean this:

(A) . . . cannot exist apart from whatever it is in.

But according to T2, on Ackrill’s reading of it, we could infer from the statement

1 Color is in this ball

together with

2 What is in a subject cannot exist apart from whatever it is in

that

3 Color cannot exist apart from this ball.

which is absurd. Surprisingly, Ackrill simply agrees that (3) would follow from (1) and (2) and, rather than have Aristotle reject (2), has him reject (1). On his reading of Aristotle, the only thing color can be in is body, not this particular body or that.

Something, however, has gone terribly wrong here. Surely, on the picture Aristotle gives us in the *Categories*, color can be, not just in body in general, but in this body, say, in this ball. Indeed, Aristotle gives us explicit reasoning for the conclusion that color is in individual bodies:

T3. Again, color is in body and *therefore* also in an individual body. (2b1–2)

Akrill has to write off T3 as “compressed and careless” (Ackrill 1963: 83). But that is implausible. If, as Ackrill supposes, the inseparability requirement, i.e., (A) above, requires a “monogamous” (this is my term, not Ackrill’s) relationship between a given quality and what it can be truly said to be in, then surely Aristotle would not say, “Color is in body and therefore (!) in an individual body.” But that is, in fact, what he does say.

### Owen’s Reading

Rejecting (A) as an interpretation of the last clause of T2, Owen proposed instead that that clause be read this way:

(O) . . . cannot exist apart from being in something or other

What the Greek says is more literally this:

(R) . . . cannot exist apart from that which it is in [*adunaton chôris einai tou en hô estin*].

It is natural to read (R) in Ackrill's way, that is, as claiming that that each thing that is in a subject is such that it cannot exist apart from *whatever* it is in. By contrast, reading (R) Owen's way is a stretch. Owen has to motivate his reading by pointing out the unwelcome consequences of Ackrill's reading, especially the one I have just mentioned.

By contrast, Owen's reading has the welcome consequence that color can be in both body and this body, as Aristotle explicitly claims to be the case. For Owen the inseparability requirement amounts only to the insistence that color, and indeed anything whatsoever that is in a subject, must have some host or other. Thus there is no color unless something is colored. Indeed, there is no color red, or color crimson, unless there is something it is in. Such a consequence would, of course, be rejected by any Platonist. For the Platonist the existence of color is logically and metaphysically prior to there being any instances of color whatsoever. But it certainly seems to be at least part of the point of the *Categories* to find an alternative to Platonist metaphysics.

What is an individual quality, according to Owen? It is, for example, a particular shade of pink, which Owen suggests calling "vink." What makes vink individual and, as Aristotle adds, "one in number" is only, according to Owen, that it is not said of any more determinate shade. That is, there are no two even slightly different shades of pink that both count as being vink.

We should note that, on Owen's reading of T2, Aristotle's idea of individual properties does not address the issue of the one and the many, as I have been supposing it does. Even though vink is a maximally determinate shade of pink, it is still a *shade* of pink, and not a trope. Many balloons can have the very same color, vink. And so there is no analogy, as I have been suggesting there is, between a primary substance, such as Socrates, who is at the same time an individual and, by AP\*, an individual something or other, and a particular, non-repeatable quality – there being no such thing as a non-repeatable quality on Owen's reading.

### Frede's Reading

Ackrill's and Owen's suggestions do not exhaust the alternatives for reading the last clause of T2. Michael Frede (in Frede 1987: 49–71) has suggested that we read the last clause of (T2) this way:

(F) . . . there is something it cannot exist apart from.

Frede's idea is that, according to Aristotle, there is, for each item in a subject, something that we might call its "primary host." Perhaps for color the primary host is body. Then color cannot exist apart from body. If all bodies were destroyed, there would be no color. Still, color can be in this body, say, this particular ball, even though it can exist after the total extinction of this particular ball.

Whereas Ackrill's reading of T2 is, in my judgment, the most natural reading of the sentence, (R), and Owen's reading of (R) is a real stretch, Frede's reading is only a very small stretch. Here is a paraphrase that may suggest how Frede gets his reading:



(T2\*) By “[thing] in a subject” I mean what is in something, *x*, not as a part, and cannot exist separately from *x* (although, for all we have said, it may also be in something else, *y*, and be able to exist apart from *y*).

Unlike the other interpretations, which take Aristotle to be defining a two-place predicate, “*x* is in *y*,” Frede takes him to be defining a one place predicate, “*x* is in a subject.” Put another way, Frede takes Aristotle to be defining “*x* is an accident” rather than “*x* inheres in *y*.”

So here we have three interpretations of the final clause of T2. I call the Ackrill reading the “Monogamous Parasite” interpretation, Owen’s reading, the “Promiscuous Parasite” reading, and Frede’s the “Primary Host” interpretation. Owen thought, quite correctly, that Ackrill’s reading, which restricts each thing in a subject to one and only one subject, leads to the conclusion that there are unit qualities, or tropes. Owen himself thought the doctrine of tropes to be an incoherent doctrine. He wanted to save Aristotle from incoherence. (See Wedin 1993 for good responses to Owen’s claim of incoherence.) He also wanted to take Aristotle’s claim in T3 seriously. So he proposed that we can fend off incoherence by reading the last phrase of T2 to mean (O).

One might, however, reject Ackrill’s reading of T2 and still suppose, on quite other grounds, that Aristotle has tropes in mind when he speaks of properties that are in a subject but not said of any subject. Thus one might understand Aristotle to be proposing, as I have been suggesting, a general solution to the one-over-many problem by insisting that there are particular, non-repeatable qualities, in analogy to primary substances, and that each of them is a particular of some kind. (See Matthews and Cohen 1968.)

## Differentiae

Frede sets his reading of T2 in a more general discussion of what it is to be an individual in Aristotle’s *Categories*. That discussion supports several other enlightening suggestions, one of which I single out now for special mention.

From 3a7 to 3a21 Aristotle argues that no substance is in a subject. We are not surprised to learn that neither this man nor this horse is in a subject. However, we might think that humanity and animality are in a subject, in fact, in Socrates. A first thing to note is that such things as humanity and animality are not explicitly under discussion in the *Categories*. It is man (or human being, *anthrôpos*) and animal that Aristotle talks about. But what about rationality? Shouldn’t Aristotle agree that rationality is in Socrates?

In the very first chapter of the *Categories* Aristotle introduces us to the idea of “paronymy,” which he illustrates as the relation between, for example, the terms, “brave” and “bravery” (1a14–15). His idea is that, when a person is brave, it is bravery that is in that person. So if Socrates is a rational animal and therefore rational, why shouldn’t we say that rationality is in Socrates? At 3a21 Aristotle says that, not only is no substance in a subject, no differentia is in a subject either. Why should that be the case?

Frede’s answer is that Aristotle understands “part” in T2 differently from what we might well have expected. He writes:

from the third chapter [of the *Categories*], 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 1a24–25, 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 1a24–25. As we can see from Bonitz’s *Index* (455b32ff.), Aristotle uses “part” in this sense quite frequently. (Frede 1987: 61)

If we follow Frede in the way he takes “part” in T2, then all things that are in a subject will be accidents, what we would today call “accidental properties” of some substance. The *differentia* of a given species, say rationality, which is perhaps the *differentia* of man, will not be in a subject and so not either in man in general or in Socrates in particular, because it is a conceptual part of the species, man.

### Options for “In a Subject”

So where do we stand on the vexed issue of how to understand Aristotle’s expression, “in a subject”? I have discussed three options: (i) Ackrill’s, (ii) Owen’s, and (iii) Frede’s. I have said that Ackrill’s reading of T2 is the most natural, whereas Owen’s is the least natural. But Ackrill’s reading clashes immediately with Aristotle’s claim,

T3. Color is in body and therefore also in an individual body; for where it not in some individual body it would not be in body at all. (2b1–3)

Moreover, and this is a highly significant point, Aristotle goes on immediately to add:

T4. Thus all the other things are either said of the primary substances as subjects or in them as subjects. (2b3–5; previously stated at 2a34–5)

I’m going to call this the “Reduction Thesis” and emphasize its importance for the metaphysics of the *Categories*. The Reduction Thesis is, of course, false if we read T2 in Ackrill’s way. It is false because color is one of the things there are and, on Ackrill’s reading of “in a subject,” color, though it is something that is in a subject, is not in any primary substance; indeed it could not be in any primary substance unless color ceased to exist upon the demise of that primary substance, which is absurd. On Ackrill’s reading of “in a subject,” color can only be in body, without being in any particular body.

If we eliminate Ackrill’s reading of “in a subject,” we have two possibilities left, Owen’s reading and Frede’s reading. I myself don’t really see how to get Owen’s reading

out of the Greek. By contrast, Frede's reading, though it requires some stage setting, seems to me to rest on a defensible translation of the text. So I opt for Frede's reading.

Ironically, Frede himself supposes that the things in a subject but not said of a subject are, as Owen maintains, fully determinate properties, such as a shade of color, but not tropes, that is, not non-repeatable unit qualities. His main reason for agreeing with Owen that individual qualities are not tropes is that, if we read T2 in the way he suggests, we are *not forced* to draw the conclusion that they are tropes. "The assumption, then, that there are individual properties that are individuated by their bearers," Frede writes, "is by no means as obvious or natural as its proponents would have us believe" (Frede 1987: 63). Perhaps that is right. But I have argued that there are still good and interesting reasons for supposing that individual properties in the *Categories* are tropes.

In any case, I suggest we accept Frede's reading of T2, including his suggestion about what "part" means here. But I suggest we also take seriously the idea that Aristotle may have a general response in the *Categories* to the infamous problem of the one and the many.

### **The Tenfold Classification**

One of the main puzzles that Aristotle's *Categories* presents is the puzzle about why Aristotle wants a Tenfold Classification of the things there are, as well as the Fourfold Classification we have been discussing. We assume, I think, that living organisms will be Aristotle's main examples of substances – "things not in a subject," whether primary substances or their species and genera, that is, secondary substances. Yet, even though there are many, many living organisms in the world, as well as many, many basic classifications of these organisms (tree, oak, animal, dog, and so on) the vast majority of "things that there are" will not be substances at all, but rather qualities, amounts, relations, places, times, and so on. The only place for these hoards of non-substances in the Fourfold Classification scheme will be as "things in a subject." If we take "in a subject" to mean "accidental feature of some substance," and if we suppose, as I think Aristotle does in the *Categories*, that everything else besides substances is an accidental feature of some substance, then we can call everything else "in a subject." But, given the important differences between, say, qualities and quantities, or between places and times, it will also be important to recognize those differences through the Tenfold Classification scheme.

So that is my explanation of why Aristotle wants both a Fourfold Classification scheme and a Tenfold Classification scheme. He wants the former as part of his "reduction project," that is, he attempt to show how everything there is, is either a primary substance, or the basic classification (or conceptual part of the classification) of a primary substance, or something in a primary substance, or the classification of something in a primary substance.

With his Reduction Thesis Aristotle turns Plato upside down. Instead of the eternal and unchanging Forms being the primary substances, it is, he says in the *Categories*, concrete individual things, especially living organisms, that are the primary substances.

Still, despite the central importance of the Fourfold Classification scheme to the metaphysics of Aristotle's *Categories*, Aristotle also thinks it important to outline the categorical differences between the ways in which non-substances can be features of primary substances. Being six feet tall is a very different sort of property from being blue-eyed, or being the teacher of someone, or being sitting rather than standing. The Tenfold Classification scheme brings out these categorical differences.

So how does Aristotle arrive at his list of just ten categories? In fact, he does not always list ten, sometimes he gives just seven (for example, in *Metaphysics* K.12 1068a8) and sometimes even fewer. Here is his list, with examples, from the *Categories*:

Of things said without any combination, each signifies either substance or quantity or qualification or a relative or where or when or being-in-a-position or having or doing or being-affected. To give a rough idea, examples of substance are man, horse; of quality: four-foot, five-foot; of qualification: white, grammatical; of a relative: double, half, larger; of where: in the Lyceum, in the market-place; of when: yesterday, last-year; of being-in-a-position: is-lying, is-sitting; of having: has-shoes-on, has-armour-on; of doing: cutting, burning; of being-affected: being-cut, being-burned. (1b25–2a4)

It is significant that Aristotle often uses an interrogative pronoun to name a category. Not here, but elsewhere, he refers to secondary substance as “the what.” Quantity is “the how much.” Quality is “the how qualified.” Place is “the where,” and so on. No doubt one reason Aristotle uses interrogative pronouns to name the categories is that, in most cases, he doesn't have abstract terms readily available in the Greek of his time. But a more interesting reasoning fits his Reduction Thesis. Consider place. What kind of thing is a place? To answer that it is a “where” doesn't help much, until we realize that, on Aristotle's reductionist view, any given place is going to have to be an accident of one or more primary substances.

The container metaphor for accidents (that is, there being said to be “in a subject”) is especially counterintuitive for place. Thus suppose that Coriscus is in the Lyceum. Following the Fourfold Classification we shall have to say that in-the-Lyceum is in Coriscus. Here the interrogative pronoun is helpful. In-the-Lyceum is “a where” by being where Coriscus or Callias, or whoever, is or was or will be.

## Substance

Aristotle devotes chapter 5 of the *Categories* to substance. His idea of what it is to be a substance is important for all later philosophy.

One characteristic of substance he considers here, and takes up later in the *Metaphysics* (see ch. 12, “Substances”) is being a certain “this.” He writes:

T5. As regards the primary substances, it is indisputably true that each of them signifies a certain “this”; for the thing revealed is individual and numerically one. But as regards the secondary substances, though it appears from the form of the name – when one speaks of man or animal – that a secondary substance likewise signifies a certain “this,” this is not really true; rather, it signifies a certain qualification, for the subject is not, as the primary substance is, one, but man and animal are said of many things. (3b10–18)

Aristotle considers whether it is peculiar to substance to have nothing contrary to it. He rejects that criterion, on the ground that there is nothing contrary to a definite quantity either, such as four-foot, or ten (3b29–30).

A peculiarity of substance he does accept is that substance is not called more or less:

T6. For one man is not more of a man than another, as one pale thing is more pale than another and one beautiful thing more beautiful than another . . . Thus substance does not admit of a more and a less. (3b37–4a9)

Finally he hits on his most important criterion:

T7. It seems most distinctive of substance that what is numerically one and the same is able to receive contraries. In no other case could one bring forward anything, numerically one, which is able to receive contraries. For example, a color which is numerically one and the same will not be black and white, nor will numerically one and the same action be bad and good; and similarly with everything else that is not a substance. A substance, however, numerically one and the same is able to receive contraries. For example, an individual man – one and the same – becomes pale at one time and dark at another, and hot and cold, and bad and good. Nothing like this is to be seen in any other case. (4a10–22)

This criterion of substance is not preserved in Aristotle's later metaphysics. (See ch. 12, "Substances.")

## Relatives

It is important to realize that there is, for Aristotle, no category of relations. Instead there is a category of *relatives*, such as double, half, mother, child, master, slave, etc. In fact, it was not really until the logic of relations was developed in the nineteenth century that philosophers and logicians developed a clear conception of relations. Aristotle did, however, seek to establish some principles about relatives. He says things like "when there is a double there is a half, and when there is a slave there a master." But there cannot be a full-fledged logic of relatives in the way that there is a logic of relations. And so Aristotle has none.

Although Aristotle in the *Categories* does not use the notion of an "accidental unity," what I have elsewhere called a "kooky object" (Matthews 1982) or the idea of (merely) accidental sameness, it is clear that the relatives of the *Categories* are what Aristotle will later in his career call accidental unities. Thus, he will also want to say that if Corsicus is a father, the father that is Corsicus will not be identical with Corsicus, but only accidentally the same as Corsicus.

While relatives are themselves accidental unities, items in other categories, when combined with primary substances, also constitute accidental unities. Thus musical Corsicus is made up of the primary substance, Corsicus, plus the quality of musicality, and seated Socrates is the primary substance, Socrates, plus being in the position, namely, the position of being seated.

## The Place of the Categories in Aristotle's Thought

Central to Aristotle's mature metaphysics is the idea of hylomorphism, that is, the idea that concrete substances are composed of form and matter. One might want to say that the idea of form is present as species in the *Categories*, since species is there recognized as secondary substance. But that would be wrong, or at the very least, misleading. The characteristically Aristotelian idea of form is not present until it is coupled with the idea of matter. And the idea of matter does not make an appearance in Aristotle's writings until we get to Book I of the *Physics*.

What leads Aristotle to introduce the idea of matter is the idea of substantial change, that is, the idea of a concrete substance coming to be or passing away. Each concrete substance comes to be out of matter and passes away into matter. Moreover, during the time that a concrete substance exists, its matter underlies its form.

Is the world of the *Categories* simply a static world? No, not at all. Aristotle does allow in this work for alteration, that is, for a primary substance to take on and lose properties. In fact, as we have seen, he tells us that what is most characteristic of substance is that it admits of opposites, now light and now dark, or now short and now tall. The kind of change that the *Categories* has nothing to say about is substantial change, a primary substance either coming into being or passing out of being.

We have no good way of knowing whether Aristotle developed his concept of matter after he wrote, or perhaps dictated, the *Categories*, or whether Aristotle simply ignored matter in the *Categories* so as to be able to focus more clearly on other issues. In any case, we can say that the concept of matter Aristotle develops in the *Physics* does not force Aristotle to take back anything he says in the *Categories*. At most it requires him to reject the implicit suggestion that the Fourfold Classification and the Tenfold Classification are each exhaustive of what there is.

Things are rather different with respect to the question of what substance should count as primary. As we have seen, concrete individuals, especially living organisms, count as primary substances in the *Categories*. By contrast, what seems to count primarily as substance in *Metaphysics*, Book Z, is form. Here we seem to have a change in metaphysical doctrine. Michael Frede sums up the development this way:

The idea of the *Categories* that substances are that which underlies everything else is retained [in Aristotle's *Metaphysics*], as we see in Z.1 and Z.3. However, the answer to the question what is it that underlies everything else has changed: now it is the substantial form [rather than concrete individuals]. Aristotle also adds two new conditions for substancehood quite generally, conditions which, in the *Categories*, applied only to primary substances. They must be *tode ti* [a certain this], and they must exist independently, i.e., not depend for their existence on any other entities. (Frede 1987: 26)

## Being Said in Many Ways

A hallmark of Aristotelian philosophy is the claim concerning many of the most contentious terms in philosophy that they are "said in many ways." Thus, for example, Aristotle tries to show us that we can make significant progress in philosophy when

we recognize that his word for “cause” or “explanation” (*aitia*) is said in at least four ways, that is, for the material cause, the formal cause, the final cause and the efficient cause.

Especially important for later Aristotle is the claim that “to be” is said in many ways (Owen 1960). Sometimes when Aristotle makes that claim he unpacks it by saying that “to be” is said in as many ways as there are categories. When Aristotle makes that claim about “to be,” he goes on to say that it is substance that is, or exists, in the primary sense of “is.” We can easily combine that claim with the Reduction Thesis of the *Categories* in the following way. For Socrates to exist is for him to be a substance. However, for wisdom to exist is for it to be a “how qualified” (*poion*), in particular, to be how some substance is qualified. For three cubits to exist for it to be a “how much” (*poson*), in particular, to be how much or how tall some substance is, and so on.

In fact, the idea of a term being said in many ways – being, that is, a *pollachôs legomenon* – does not appear in the first nine chapters of the *Categories*. However, chapter 10, the beginning of the last part, the *Postpraedicamenta*, itself begins with the claim that “is the opposite of “ is said in four ways. This fact, among others, suggests that the last six chapters were probably written later than the first nine and then added to the earlier part. On the other hand, the distinction between the ten different categories in chapter 4 and Aristotle’s idea throughout the early chapters of the *Categories* that non-substances are dependent entities, indeed, dependent in the ways that the categorical distinctions bring out, prepares the ground for the later assertions that “to be” is said in as many ways as there are categories.

## Two Systems?

In 1987 Daniel Graham published a book, *Aristotle’s Two Systems*, in which he argued for these two theses:

- (1) There are two incompatible philosophic systems in Aristotle, namely those expressed in the *Organon* and the physical-metaphysical treatises, respectively.
- (2) These systems stand in a genetic relationship to one another: the latter is posterior in time and results from a transformation of the former. (Graham 1987: 15)

Graham characterizes the ontology of the first system, that of the *Categories*, this way:

According to this ontology, the realities of which the world is composed are atomic objects which are to be identified with biological individuals; these are organized under universals which are to be identified with natural kinds. In general, natural kinds are analyzable into differentiae and genera which uniquely define them and constitute their essence. In the first place the atomic objects and in the second place the kinds they fall under are called substances. Attributes are instantiated primarily in individual substances and secondarily in universal substances. These attributes, called accidents, characterize substances without belonging to them necessarily. (Graham 1987: 54)

Graham characterizes the second system – that of the *Physics* but especially of *Metaphysics Zeta* – this way:

The ontologically simple entities of  $S_1$  [i.e., the system of the *Categories*] that Aristotle calls primary substances in  $S_1$  have no counterpart in  $S_2$  [i.e., the system of, say, *Metaphysics Z*]. The simple substances, which serve as paradigm cases of primary substances in  $S_1$ , are found to be ontological complexes in  $S_2$ . Decomposed into form and matter, the compound substance holds no intrinsic interest in  $S_2$ , but rather forfeits its ontological primacy to its components. Aristotle considers both form and matter for the role of primary substance and settles on form, although the argument is not clear. Other theses of  $S_2$  seem similar to  $S_1$ , *mutatis mutandis*. However, a new dimension in Aristotelian metaphysics is created by the addition of a theory of actuality which correlates degree of completeness of an object with its degree of actuality. (Graham 1987: 81)

Michael Wedin, in his book, *Aristotle's Theory of Substance: The Categories and Metaphysics Zeta*, has tried to argue for a single metaphysical system in Aristotle. He tries to do this by distinguishing between the one-place predicate, "is a substance," and the two-place predicate, "is the substance of." His idea is that what counts as a substance in the *Categories* still counts as a substance in *Metaphysics Z*, but, according to the later work, form is the substance of, say, this man or this horse.

Wedin concedes that the honorific qualifier, "primary," shifts in Aristotle from the concrete individual substance to its form. He seeks to domesticate that shift in the following way:

Compatibilists still need to explain why Aristotle should appear to withdraw *primacy* from c-substances [i.e., the primary substances of the *Categories*] and attach it to their forms . . . Resolution is achieved by seeing that the primacy of *Categories* primary substances . . . is a kind of ontological primacy, whereas the primacy of form is a kind of structural or explanatory primacy. (Wedin 2000: 452–3)

An ingenious and illuminating way of understanding the relationship between the metaphysics of the *Categories* and that of *Metaphysics Zeta* can be found in this volume, ch. 12, "Substances."

### The Afterlife of the Doctrine of Categories

The idea that entities belong to different categories and especially the question of how many categories there are were much discussed and debated in late antiquity, in medieval philosophy, and in early modern philosophy. Among the many difficulties discussed is the question of whether Socrates will have to count as an accident of place, since he cannot exist apart from being in a place. Ammonius, a Neoplatonic commentator of the late fifth and early sixth centuries CE, responds this way:

We reply then that Socrates can exist apart from what he is in. For if we suppose him to have left behind the place where he was earlier and gone to another place, he is no less Socrates, whereas the accident separated from its subject has been destroyed. (Sorabji 2004: 110)

Among other problems the ancient commentators posed for Aristotle's *Categories* is one about how to understand the fact that the fragrance of an apple be can both in the



apple and also in the air surrounding the apple. For a discussion of what they had to say about this problem see Ellis 1990. And for other interesting problems with the *Categories* that these commentators identified see Sorabji 2004.

Kant, in his *Critique of Pure Reason*, develops a “Table of Categories” (A80/B105), which he says has the same purpose as Aristotle’s account of the categories. In fact, Kant’s theory is so different from Aristotle’s that one must work hard to find the points of similarity between the two theories.

Closer in spirit to Aristotle is the use Gilbert Ryle makes of the idea of categories with his conception of a “category mistake.” Notoriously, Ryle ridicules Descartes’ mind–body dualism as the theory of “the Ghost in the Machine” and analyzes the mistake it embodies as a category mistake – the mistake of thinking that minds and bodies belong to the same category, namely, the category of substance. In Ryle’s view minds are not “things,” i.e., substances, additional to the bodies that have them. Rather they are, to put the matter rather crudely, complex and at least partially learned dispositions of certain bodies to behave in purposive ways that count as being intelligent.

Ryle couples his diagnosis of mind-body dualism as a category mistake with the idea from later Aristotle that “is,” or “exists,” has as many different senses as there are categories:

It is perfectly proper to say, in one logical tone of voice, that there exist minds and to say, in another logical tone of voice, that there exist bodies. But these expressions do not indicate two different species of existence, for “existence” is not a generic word like “coloured” or “sexed.” They indicate two different senses of “exist,” somewhat as “rising” has different senses in “the tide is rising,” “hope are rising,” and “the average age of death is rising.” A man would be thought to be making a poor joke who said that three things are now rising, namely the tide, hopes and the average age of death. (Ryle 1949: 23)

Other philosophers have taken over Ryle’s idea of a category mistake without accepting Ryle’s critique of Cartesian dualism, let alone accepting the specific details of Aristotle’s original doctrine of the categories. Thus the Aristotelian idea of categories, at least in a generalized form, lives on in philosophy today, even though there is no agreement about exactly what a category is, how many categories there are, or what makes it the case that two given candidates for being categories are, or are not, distinct categories.<sup>4</sup>

## Notes

<sup>1</sup> All translations from the *Categories* will be taken from Ackrill 1963, with occasional modifications.

<sup>2</sup> In an older and more traditional sense of “property,” a property is a *proprium* (Latin) or an *idion* (Greek), that is, a feature of a thing that necessarily belongs to it, even though it does not belong to the essence of the thing. The idea of there being such a thing as a property in this traditional sense requires that one understand “essence” in rather different ways from what is often called “Aristotelian essentialism” today. See Matthews 1990.

<sup>3</sup> We owe this modern use of “trope” to my old teacher, Donald Carey Williams, in Williams 1953.

<sup>4</sup>I owe thanks to Marc Cohen for suggesting several improvements over an earlier version of this chapter.

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