

11 Accidental unities

GARETH B. MATTHEWS

For if not the philosopher, who will it be who investigates whether Socrates and
Socrates seated are the same? (*Metaph.* iv 2, 1004b1-3)

I

In chapter 11 of his *de Interpretation* Aristotle tries to explain why certain features of a thing go together to make up a unity, whereas others do not. 'For example,' he says, 'a man is perhaps an animal and two-footed and tame, and from these there does come to be some one thing' (20b16-8). But 'from white and man and walking,' he adds, 'there is not one thing' (20b18-19).

The reasoning in this chapter is intricate; but without tracing out the intricacies we can perhaps say that the unity Aristotle is seeking here is the oneness of an individual substance. In this passage he is unwilling to count as a unity the parasitic oneness that is enjoyed by features only accidentally compresent in a single substance. Though it may be true to say, he remarks later on in the chapter, 'The white is musical' (that is, presumably, 'The white *person* is musical'), still, he warns, *musical white* and *white musical* (contrast: *two-footed animal*) are not one thing (21a7—14).

Aristotle later softens his position. He allows, in *Metaphysics* v 6, for example, that there is such a thing as an accidental unity (*hen kata sumbebekos*).¹ *The musical* and *the just*, he says, make up an accidental unity because musicality and justice are accidents of one substance (1015b21—2). Other examples of accidental unities that Aristotle mentions in this chapter are

Coriscus and the musical,
musical Coriscus, and
musical Coriscus and just Coriscus.

I Better: unity in the accidental sense of 'unity'.

It is hard for modern readers to take Aristotle's accidental unities seriously. Yet anyone who would take Aristotle seriously must make the effort.

To be sure, Aristotle himself often ridicules those who concern themselves with such entities.² Thus at *Metaphysics* vi 2 he remarks, derisively, that 'the arguments of the sophists deal . . . above all with the accidental, e.g., with the question whether the musical [*mousikon*] and the literate [*grammatikon*] are different or the same and whether musical Coriscus and Coriscus are the same' (1026b15-18). Yet it isn't only the arguments of the sophists that deal with the accidental; so do the arguments of Aristotle.

Aristotle's picture of an accidental unity is that of an ephemeral object — an object whose very existence rests on the accidental presence, or compresence, of some feature, or features, in a substance. Accidental unities exist, he supposes, but not in their own right; indeed it is, Aristotle says, only in an accidental sense of the verb 'to be' that they can be said to be (*Metaph.* vi 2).

So far it may seem that accidental unities are only the harmless inventions of an idle metaphysics. But the commitment to accidental unities becomes a serious affair when Aristotle appeals to these very objects - 'kooky objects', I shall call them — to give a semantics for ordinary language.

Perhaps it isn't so alarming when Aristotle supposes that expressions like 'musical Coriscus' and 'Socrates seated' pick out kooky objects. Those expressions are odd anyway. Apart from Homeric epithets, one associates phrases of their syntactic ilk with breezy journalism ('Hollow-cheeked Jimmy Carter flashed a forced smile') and cheap novels. It is when Aristotle suggests that standard definite descriptions like 'the musical man' and 'the man in the corner' pick out kooky objects that we have trouble taking him with appropriate seriousness. For ourselves, we suppose that, in a suitable context, the expression 'the musical man' might simply pick out Coriscus, and that the expression 'the man in the corner' might simply pick out Socrates. Aristotle doesn't.

That Aristotle sees things quite differently from us comes out very clearly in, for example, *Physics* i 7. He is there considering the change that takes place when a man becomes musical; he says:

This survives but that doesn't . . . the man survives . . . but the

² Or better: with entities in such a sense of 'entity'.

not-musical, or unmusical, doesn't survive, nor does the compound of the two, viz., the unmusical man (190a17—21).

In this context 'the not-musical' is the not-musical *person* (rather than nonmusicality) and 'the unmusical' is the unmusical person. What Aristotle is telling us is that, when the man becomes musical, the man survives but each of these kooky objects perishes:

the not-musical (one)
the unmusical (one)
the unmusical man.

The implications of this doctrine are staggering. When the man rises, the seated man ceases to be; when the woman awakens, the sleeping woman passes away; when the baby cries, the silent baby perishes.

Before we go any further I should admit that there is one passage in which Aristotle does seem to suggest that an accidental description might simply pick out a 'straight', rather than a kooky, object. In the first book of the *Topics* he says this:

That what I have just said is true may be best seen where one form of appellation is substituted for another. For often when we give the order to call one of the people who are sitting down, indicating him by name, we change our description, whenever the person to whom we give the order happens not to understand us; he will, we think, understand better from some accidental feature; so we bid him call to us 'the man who is sitting' or 'Who is conversing over there' — clearly supposing ourselves to be indicating the same object by its name and by its accident (*Top.* I 7, 103a32-9).

At first glance it seems that Aristotle is here treating 'the man who is sitting' (*ton kathemenon*) and 'the man who is talking over there' (*ton dialegomenon*) as alternative descriptions for, say, Coriscus. After all, Aristotle says we suppose 'ourselves to be indicating the same object (*hos tauton* . . . *semainein*) by its name and by its accident'.

In fact a closer examination of this passage tells against the idea that, even here, Aristotle supposes 'the man who is sitting' or 'the musical man' might simply pick out Socrates. Aristotle has announced earlier in the chapter that he will canvass the ways in which 'same' is said or used. He has discussed 'same' meaning 'same in species' and 'same' meaning 'same in genus' and he has now come to 'same' meaning 'same in number'. Under this heading he makes three further distinctions, as follows:

It is generally supposed that the term 'the same' is most used in a sense agreed on by every one when applied to what is numerically one. But even so, it is apt to be rendered in more than one sense (*apodidosthai pleonachos*); its most literal and primary use (*kuriotata men kai protos*) is found whenever the sameness is rendered in reference to an alternative name or definition, as when a cloak is said to be the same as a covering, or an animal that walks on two feet is said to be the same as a man: a second sense is when it is rendered in reference to a *proprium*, as when the one that can acquire knowledge is said to be the same as the man, and the thing that naturally travels upward is said to be the same as the fire: while a third use is found when it is rendered in reference to some term drawn from accident, as when the creature who is sitting, or who is musical, is called the same as Socrates (103a23-31).

Anyone who thinks that, according to Aristotle, 'the man who is sitting' and 'the musical one' simply pick out Socrates must explain why Aristotle distinguishes the sense of 'same' in which one says 'The man who is sitting and Socrates are the same' from the sense of 'same' (that of 'its most literal and primary use') in which one says, 'The man and the animal that walks on two feet are the same'. One who takes Aristotle to suppose here, as elsewhere, that accidental descriptions pick out kooky objects will have no difficulty understanding why Aristotle wants to distinguish as less favoured the sense of 'same' in which the man who is sitting may be said to be the same as Socrates. After all, the man who is sitting will perish when Socrates stands, even though Socrates will not. Although Socrates and the man who is sitting are the same (person or thing), even numerically the same (person or thing), it is only in an accidental sense that they can be said to be the same (person or thing).

So Socrates and Socrates seated (to pick up the epigram with which this paper begins) are only in a sense the same (people). Yet they are not two people, nor, indeed, two of anything else. There is not even, according to Aristotle, a univocal sense of the verb 'to be' in which they can both be said to be.

By now it may seem even more clear that talk of kooky objects is only a rather silly metaphysical parlour game. Is there any serious purpose behind such talk, anything more consequential than a simple-minded effort to find the referent of accidental descriptions like 'musical Coriscus' and 'the seated (one)'?

There is at least one use to which Aristotle puts the distinction between kooky objects and 'straight' ones (that is, substances) that

will strike modern readers as certainly important. It is illustrated in Aristotle's treatment of the famous puzzle of the Masked Man (*SE* 179ab). Simplifying matters somewhat, we can perhaps say that Aristotle asks how it can be that this is true:

(1) Coriscus has the attribute of being known by Socrates to be Coriscus

and also this:

(2) Coriscus and the masked man are the same (man), even though this is false:

(3) The masked man has the attribute of being known by Socrates to be Coriscus.

Readers of contemporary philosophy may be disconcerted by this way of stating the problem. They will be accustomed to distinguishing between (3) and

(4) Socrates knows that the masked man is Coriscus in such a way that (3) can be true even though (4) is false. For they will be used to understanding (3) in such a way that it is hospitable to the commentary in this expanded version:

(3*) The masked man (who is, after all, Coriscus, even though Socrates doesn't realise this) has the attribute of being known by Socrates to be Coriscus.

It will be useful for my purposes, however, to understand (3) in such a way as to make the commentary in (3*) quite inappropriate; I shall take (3) as a rough equivalent of (4). Such a reading of (3), even if it does violence to a familiar philosophical convention, does none, I think, to ordinary, pedantic English.

Puzzles like the Masked Man are familiar to us today as problems about opaque contexts - contexts in which we are not guaranteed to be able to substitute co-referential expressions *salva veritate*. For Aristotle, of course, the point must be something rather different. For him, after all, 'Coriscus' and 'the masked man' are not really co-referential expressions at all. The one picks out a kooky object that perishes when Coriscus takes off his mask; the other doesn't. To be sure, the masked man is accidentally the same³ as Coriscus. But accidental sameness is not identity and accidental sameness does not guarantee that every attribute of

3 For stylistic reasons I shall use 'accidentally the same' to mean 'the same in the accidental sense of "same"' and 'accidental sameness' to mean 'sameness in the accidental sense of "same"'. For warnings against such looseness, see my 'Senses and Kinds', *Journal of Philosophy*, 69 (1972), 149-57.

Coriscus is an attribute of the masked man. Only identity could give that guarantee. And so the inference from (i) and (2) to (3) fails.

I have mentioned the Masked-Man passage to illustrate the importance for Aristotle of the doctrine of kooky objects. That doctrine explains how it can be that, though Coriscus is the masked man, Coriscus and the masked man are not identical. But, of course, this will not be a point we can suppose Aristotle to be making unless we think he has, as I have already suggested that he does have, not only the concept of accidental sameness, but also the concept of identity. Recently doubt has been cast on the assumption that Aristotle has either of these concepts.

II

One person who has cast doubt on the view that Aristotle has what I have identified as the concept of accidental sameness is Jonathan Barnes. In a review of Edwin Hartman's book, *Substance, Body and Soul*, Barnes writes as follows:

Hartman's gloss on accidental identity is puzzling. 'The man sitting over there is Socrates' expresses an accidental identity, according to Aristotle; for it is at best an accident - a contingent truth - that Socrates is sitting (cf. *Top.* 103a29ff.) But the relation in question is ordinary identity, not 'a weak sort of identity'; and it is said of Socrates and the seated man, not of (j)Ha-Socrates and some *qua-man*. I am not sure why Hartman ascribes a bizarre view to Aristotle; but the point is of little consequence: what matters is that the identities . . . are contingent, not necessary (*Philosophical Books*, 20 (1979), 59).

The interpretation of Aristotle that Barnes is criticising in this passage includes a doctrine considerably broader than what I call the 'doctrine of kooky objects'. I shall not discuss the broader doctrine here. But it is an implication of the broader doctrine that Socrates and the man sitting over there are not strictly identical. In this respect Hartman's interpretation agrees with the one I have been trying to set out here.

By contrast, Barnes's interpretation of Aristotle makes accidental sameness simply non-necessary identity. Thus, on his interpretation of Aristotle,

(5) Socrates is accidentally the same as musical Socrates amounts to this:

(6) (Socrates = musical Socrates) and \sim D (Socrates = musical Socrates)

Barnes cites *Topics* I 7, 103a29ff. (which I have already discussed) to substantiate his interpretation. But neither that passage, nor any other passage I know of, glosses 'accidental sameness' as 'non-necessary identity.'

There is perhaps a further objection to Barnes's interpretation. The *Topics* passage by implication, and other passages by explicit assertion, tell us that if *A* is accidentally the same as *B*, then *A* and *B* are in a way (*pas*), or in a sense, the same, and in a way, or in a sense, different - though not absolutely (*haplos*) different. This is the implication of the *Topics* passage because, in it, the accidental sense of 'same' is distinguished from that most strict and primary sense of 'same' in which a cloak is said to be the same as a covering, or a man the same as a two-footed animal. (One takes Aristotle to be supposing here that 'two-footed animal' is at least a stand-in definition of 'man'.) It is quite explicit in other passages, for example in these:

A thing and the thing modified are in a way (*pos*) the same, for example, Socrates and musical Socrates (*Metaph.* v 29, 1024b30-1). . . . you should say that the subject of an accident is not absolutely (*haplos*) different from the accident taken along with its subject [for example, the man and the white man] (*Top.* v 4, 133b31—6).

If Barnes were right in thinking that, for Aristotle, accidental sameness is merely contingent identity, then Aristotle would have no reason to say of things he tells us are accidentally the same that, while they are in a way, or in a sense, the same, they are in a way, or sense, different - though not absolutely different. Things that are contingently identical are not in a way the same and in a way different. Being identical they are absolutely the same, even if it is only a contingent fact that they are absolutely the same.

It is important to note that Aristotle's concept of accidental sameness has little to do with what has been discussed in the recent philosophical literature as 'relative identity'. The Doctrine of Relative Identity comes in at least two forms. In its weaker form, it is the claim that every assertion that something, *x*, is identical with something, *y*, must be understood as a claim that could be put in this form: *x* is the same *F* as *y*. For example, the claim that Dr Jekyll is identical with Mr Hyde might be understood as the claim that Dr Jekyll is the same *man*, or the same *person*, as Mr

Hyde. (This is what David Wiggins calls 'D' or 'Sortal Dependency' in his *Sameness and Substance* (Cambridge, Mass. 1980, 15ff.).)

In its strong form the Doctrine of Relative Identity adds to the above claim that a conjunction of this form might conceivably be true:

x is the same *F* as *y*;

x is a *G* and yet

x is not the same *G* as *y*.

(This is what Wiggins in *Sameness and Substance* calls 'R' or 'the Relativity of Identity'.)

Locke, for example, might be thought to hold views that commit him to supposing that, although Dr Jekyll is the same *man* as Mr Hyde and Dr Jekyll is a person, still Dr Jekyll is perhaps not the same *person* as Mr Hyde. The reason would presumably have to do with the fact that, whereas for Locke some sort of memory criterion is both necessary and sufficient for sameness of person, that criterion is neither necessary nor sufficient for sameness of man. (Cf. John Locke, *Essay Concerning Human Understanding* n 27, 'Of Ideas of Identity and Diversity'.)

I agree with Nicholas White when he says, in a seminal article on these issues, that, although Aristotle 'maintains that the word "same" carries many senses, he does not offer to resolve its ambiguity by coupling it with general terms'. ('Aristotle on Sameness and Oneness', *Philosophical Review*, 80(1971), 178). Even if one succeeded in extracting the weaker form of the Doctrine of Relative Identity from Aristotle's writings (perhaps by paying special attention to the opening chapters of *Metaphysics* x), that doctrine would have little direct bearing on the claim that it is only accidentally that Coriscus and the masked man are the same. One would simply have to add (what it is a good idea to add anyway, namely) that it is only accidentally that they are the same *man*.

III

Let's suppose, then, that Aristotle really does have the concept of accidental sameness. Does he also have the concept of identity?

In 'Aristotle on Sameness and Oneness' Nicholas White claims that Aristotle begins, in the *Topics*, with a 'relatively firm grasp of something like the notion of identity', but that Aristotle's grasp

soon slips - already, in fact, in his *Sophistical Refutations*. It is puzzling to think that someone might go, indeed go rather quickly, from having a relatively good grasp of something like the notion of identity to having a poor grasp of that notion. It is especially puzzling if that someone is Aristotle.

White has an explanation to offer. It has to do with (i) a connection between 'same' ('*tauton*') and 'one' ('*hen*'), (ii) an apparent ambiguity in expressions of the form, '*x* and *y* are one', and (iii) a philosophical legacy that, White says, Aristotle takes from Plato. These three points are interesting and important in themselves and can be discussed on their own. I shall not discuss them here. (For a discussion of (i) and (ii) see Fred D. Miller, Jr, 'Did Aristotle Have the Concept of Identity?' *Philosophical Review*, 82 (1973), 483-90.)

Is there really anything to explain? What is the evidence that Aristotle loses his relatively firm grasp on something like the notion of identity? What is the evidence he ever had such a grasp?

First, let's consider the evidence White offers for saying that Aristotle has, in the *Topics* anyway, a 'relatively good grasp of something like the notion of identity'. The evidence seems to consist in the fact that Aristotle offers a statement that looks to us very much like the Principle of the Indiscernibility of Identicals. Following modern practice, White calls the principle 'Leibniz's Law' (or 'LL' for short) and formulates it this way:

(7) If *A* and *B* are identical, then whatever is true of the one is true of the other (178-9).

White tells us that Aristotle states (7) at *Topics* VII 1, 152b25-9, after first having produced these two restricted versions of it:

(8a) If *A* and *B* are the same, then any accident of *A* is an accident of *B* and vice versa (178).

(8b) If *A* and *B* are the same, then whatever is a 'property' (*proprium*, *idion*) of the one is a 'property of the other' (179).

White finds (8a) stated at 152a31-2 and (8b) stated already at *Topics* v 4, 133a32-4.

It is worth noting that (7) contains the word 'identical' whereas (8a) and (8b) use only the vaguer word 'same' to translate Aristotle's '*tauton*'. Since the point at issue is whether Aristotle gives evidence here of having the concept of identity, it would be well to have this formulation in play as well:

(7*) If *A* and *B* are the same, then whatever is true of the one is true of the other.

Now the question is whether Aristotle affirms (7) at I52b25-9, or only (7*) instead.

White is, of course, well aware that '*tauton*' is more elastic than 'identical'. He warns us in his very first sentence that '*tauton*' 'cannot by any means be uniformly translated by the word, "identical"' (177). Why then should he, or we, suppose that it can and should be so translated in the relevant part of *Topics* VII 1?

I can think of only two reasons. The first is that the general form of what Aristotle says at I52b25—9 reminds us of LL. That, of course, is not a very good reason. The second is that, unless 'same' in (7*) is taken to mean 'identical', the statement will be open to countless counter-examples. For example, though this Barbie doll and that Barbie doll are the same — indeed, as the salesperson rightly assures me, they are *exactly* the same - it is true of one, but not of the other, that I am holding it in my right hand. Is this last reason a good reason to read (7*) at I52b25-9 as (7)? It is not, I think, a very good reason unless we can find Aristotle confidently turning aside what would be counter-examples to (7*) on its looser reading. If, instead, we find him amending (7*), or qualifying it, so as to be able to cope with counter-examples to it, we have, I think, reason for supposing that '*tauton*' in this passage means something looser than 'identical'.

In fact White cites two passages (*SE* 24, 1793, and *Ph.* III 3, 202b14-16) in which Aristotle tries to cope with apparent counter-examples to (7*) by producing a more restricted principle. The first is the Masked-Man passage, which we have already discussed. The second passage is one in which Aristotle points out that, though the road from Thebes to Athens and the road from Athens to Thebes are the same (road), it is true of one that it is uphill and the other that it is downhill. What Aristotle does in each of these cases is to produce a tighter and more restricted principle than (7*). At 179a37-9 he offers this:

(9) If *A* and *B* are without difference and one in being (*ousia*), then whatever belongs to one belongs to the other.

At 202b14-16 he offers this:

(10) If *A* and *B* are the same, not just in 3 way (*pos*), but such that their being (*to einai*) is the same, then whatever belongs to one belongs to the other.

These two passages seem to show Aristotle coping with counter-examples to (7*) by amending and tightening up that principle.

Thus they count against our saying that what Aristotle means at I52b25~9 is already (7), and not just something as vague and loose as (7*).

On the other hand, these two passages seem to show that when Aristotle wrote them he was indeed working towards something like our notion of identity. Indeed the progression from (7*) to (9) and (10) seems to show a movement towards, rather than away from, the concept of identity. For ourselves, we might want to say that Coriscus is identical with the masked man, and that the road from Thebes to Athens is identical with the road from Athens to Thebes. But we would have to admit that if Coriscus has an attribute that the masked man lacks (such as the attribute of being known by Socrates to be Coriscus), he is not identical with the masked man. Similarly, if the road from Thebes to Athens has an attribute that the road from Athens to Thebes lacks (say, the attribute of being downhill), then the road from Thebes to Athens is not identical with the road from Athens to Thebes. It is very natural to understand Aristotle as getting at just this point with his clumsy expressions, 'without difference and one in being (*ousia*)' and 'not just the same in a way, but such that their being (*to einai*) is the same'.

Perversely, the very evidence I have offered for saying that Aristotle does not display a good grasp of the notion of identity at I52b25-9, but begins to do so at 179a37-9 and 202b14-16, is offered by White as evidence that Aristotle loses his grip on the notion of identity. How can this be?

The first thing to note is that White supposes the substitution of (9) for (7*) 'clearly retracts some of what has been said at I52b25—9'. What does it retract? White speaks of 'this new restriction' embodied in (9) in a way that suggests that, according to him, Aristotle means to be limiting the force or application of LL.

There are, I take it, two general ways in which one might try to limit the force or application of LL. One would be by limiting the range of identicals to which it applies; thus some identicals would be guaranteed to be indiscernible, others not. The other way to restrict LL would be to restrict the indiscernibility it guarantees; thus identicals would be guaranteed to be indiscernible with respect to attributes of one class, but not another.

Let's consider the second approach first. A natural suggestion for limiting the force of LL is this:

(ya) If A and B are identical, then whatever non-intentional attribute belongs to the one belongs to the other.

One could then allow that, although Coriscus and the masked man are identical, and though Coriscus has the attribute of being known by Socrates to be Coriscus, yet the masked man does not have that attribute. That situation would not flout (73), since the attribute of being known by Socrates to be Coriscus is an intentional one.

Whatever Aristotle's 'restriction' is at 179a37-9, it is not this one. In fact it is not a restriction on kinds of indiscernibility at all. If anything, (9) offers a restriction on the identicals guaranteed to be indiscernible (the other possible approach mentioned above). Perhaps it amounts to this:

(93) If A and B are identical and if they are also without difference and one in being, then whatever belongs to one belongs to the other.

But now how is 'identical' to be understood in (93)? Either what it means guarantees indiscernibility or it doesn't. Suppose it does. Then it guarantees that A and B are without difference. It also guarantees that A and B are one in being. For surely A is one in being with A and B is one in being with B . If A is not one in being with B , or B one in being with A , then A has an attribute (being one in being with A) that B lacks and B has an attribute (being one in being with B) that A lacks and so A and B are not indiscernible. Thus if 'identical' in (93) is understood in such a way that it guarantees indiscernibility, the rest of the antecedent is otiose and constitutes no restriction whatsoever.

Suppose, on the other hand, that 'identical' in (93) is not understood in such a way that what it means guarantees indiscernibility. Then there is no reason to think that it is Leibniz's Law that is being restricted by the second clause of the antecedent. In fact, as I have already suggested, there is reason to think that (9), and hence (93), are simply cumbersome ways of stating LL.

People sometimes say that the force or application of LL needs to be restricted when what they have in mind restricting is not (7) but rather a second-order analogue of LL, such as this:

(7b) If α and β are co-referential singular terms, they may be substituted, one for the other, in all contexts, *salva veritate*.

Aristotle's Masked-Man example might be thought to show us that we don't want to allow the substitution of the expression 'the masked man' for, say, the first occurrence of 'Coriscus' in

Socrates knows that Coriscus is Coriscus

even if 'Coriscus' and 'the masked man' are co-referential singular terms. So we might try amending (7b) to this:

(7c) If α and β are co-referential singular terms, they may be substituted, one for the other, in all purely extensional contexts, *salva veritate*.

But Aristotle doesn't move in that direction either. So far as I know, he never formulates anything like either (7b) or (7c).

So the situation is this. Aristotle seems to have come to suppose that something more than mere sameness is required to guarantee indiscernibility. Should we understand him as supposing that something more than *identity* is required? I think not, for two reasons. First, the main reason for thinking he demands something more than identity rests on reading 'same' in (7*) to mean 'identical' and we have seen that there is inadequate reason for doing that. Second, it is hard to see how anyone could suppose that identity plus some other condition would succeed in guaranteeing indiscernibility where 'mere' identity had failed; the thought seems incoherent.

I can think of only one, other reason for taking 179a37-9 and 202b14-16 to constitute evidence that Aristotle was losing whatever grasp he might have had on something like the concept of identity. One might think it so obvious that Coriscus and the masked man are identical and also so obvious that the road from Thebes to Athens is identical with the road from Athens to Thebes that one would view any hesitation to agree with these judgments as evidence that the hesitator lacks a good grasp of the concept of identity.

We can't attribute this reasoning to White, however. It is a great merit of his discussion that he takes seriously Aristotle's doctrine of kooky objects. Unless White supposes that the notion of an accidental unity is incoherent, and he seems not to suppose that, then he would understand the view that Coriscus is not identical with the masked man, even if he doesn't agree with it.

IV

What is one to make of the doctrine of kooky objects? perhaps the best way to conceive it is to think of it as a way of trying to understand how it is we are justified in rejecting certain unwarranted arguments.

To facilitate conceiving the doctrine in this way one could construct a formal, or linguistic, model of the doctrine of kooky objects. Premises to the effect that x is the same person or thing as y would be reconstrued as premises to the effect that a and β are (as we, *but not Aristotle*, would want to say) co-referential. For example, 'Coriscus and the masked man are the same person' would go over into "'Coriscus" and "the masked man" are co-referential.' Then one could distinguish between 'hard' singular terms and 'soft' ones. The hard ones would be either proper names or expressions made up of a definite article or demonstrative plus the proper term for a real species or genus, or its logical equivalent (e.g., 'the man', 'this two-legged animal'). The substitution rule would limit guaranteed substitutivity, *salva veritate*, to co-referential singular terms that are both hard. The idea would be that all and only arguments that could be validated with such a restrictive substitution rule would have material analogues that the doctrine of kooky objects allows to be valid.

On this formal model the Masked-Man example might be reconstrued as the problem about how 'Socrates knows that Coriscus is Coriscus' can be true and 'Socrates knows that the masked man is Coriscus' false when 'Socrates' and 'the masked man' are co-referential singular terms. The solution would be that 'the masked man' is a soft singular term and thus fails to fall under the substitution rule.

Of course the Masked Man is not the only sort of argument Aristotle hopes to use the doctrine of kooky objects to extricate himself from; he has other epistemic and doxastic arguments in mind as well. Moreover, Aristotle is perhaps even more interested in arguments concerning time and change than in those that concern knowledge, belief and intention.

In a resourceful and thoughtful paper, 'Aristotle's Response to Quine's Objections to Modal Logic' (*Journal of Philosophical Logic*, 5 (1976), 159-86), Alan Code has called our attention to an argument that Aristotle mentions at *Metaphysics* vi 2, iO26b 18-20. We can render the argument, somewhat loosely, this way:
Argument A

(11) The musical (one) has become the literate (one).

So: (12) The musical (one) and the literate (one) are the same (person).

So: (13) The literate (one) has become the musical (one).

Quite obviously (13) is an unwanted conclusion. Moreover, the same means we use to get (13) we can also use to get these further unwanted conclusions:

(14) The musical (one) has become the musical (one).

(15) The literate (one) has become the literate (one).

We aren't going to be very clear about metaphysical problems of change unless we know how to deal with such arguments as these. Aristotle's solvent is, again, the doctrine of kooky objects, according to which (12) should be read as a claim of merely accidental sameness. So understood, it fails to support (13), (14) or (15).

Incidentally, Code, like White before him, suggests that a kooky object might be thought of as a segment of a four-dimensional object (a 'space-time worm', as it is sometimes called); but this can't be right. White concedes that Aristotle 'does not . . . have the notion of four-dimensional spatiotemporal objects' (195). And Code supplies no evidence to show otherwise. Without the concept of a space-time worm Aristotle can hardly be thought to have the concept of a segment of a space—time worm.

Code is perhaps attracted to the space-time worm idea by concentrating on puzzles of time and change in Aristotle. When one notes, however, that the doctrine of kooky objects is meant to deal with epistemic puzzles as well as temporal ones, the attractiveness fades. After all, there is no reason why a kooky object could not have the same temporal boundaries as the substance it rides on. Thus suppose that Coriscus is, from birth, the favourite son of Electra. Then the favourite son of Electra could lack the attribute of being known by Socrates to be Coriscus even though Coriscus has it and is accidentally the same person as he.

I have already suggested that the impulse to fault the doctrine of kooky objects for ontological extravagance is not obviously justified. Aristotle's doctrine that 'to be' is said in many ways seems to save him from the charge that kooky objects bloat being (certainly they do not bloat being in the sense of 'being' in which substances may be said to be).

Perhaps the doctrine could be challenged on the ground that it flouts the ideal of simplicity in theory construction. Certainly it does have about it what is, to us, an unwelcome complexity. But I don't know how to make that charge stick.

More obviously to the point, one might ask what pernicious 'sameness' arguments the doctrine of kooky objects fails to save us from and what benign 'sameness' arguments it forces us to discard. One pernicious argument it fails to save us from is this one:

Argument B

(16) Cicero has the attribute of being known by *S* to be Cicero.

(17) Cicero and Tully are the same (person).

So: (18) Tully has the attribute of being known by *S* to be Cicero.

(17) cannot plausibly be treated as a statement of accidental sameness and yet, on one important reading of these statements,⁴

(18) should not follow from (16) and (17).

Though Argument *B* is not dissolved by the doctrine of kooky objects, it would be unfair to make very much of this inadequacy. The reason it would be unfair is that, so far as I know, no very good way of handling this argument has ever been proposed.⁵

On the other side, one might say that the doctrine of kooky objects is much too restrictive; it leads us to exclude as unsound many perfectly benign arguments, such as this one:

Argument C

(19) Walter Cronkite has the attribute of being a millionaire.

(20) Walter Cronkite and America's favourite newscaster are the same person.

So: (21) America's favourite newscaster has the attribute of being a millionaire.

Aristotle might reply that eliminating this argument is no serious loss, since one can easily preserve what is worth preserving in it by recasting it this way:

*Argument C**

(19) Walter Cronkite has the attribute of being a millionaire.

⁴ It is, of course, the reading that makes (18) roughly equivalent to 'S knows that Tully is Cicero.'

⁵ That is, so far as I know, no very good way of handling this argument has ever been proposed:

(18*) *S* knows that Cicero is Cicero.

(19) Cicero and Tully are the same (person).

So:

(20*) *S* knows that Tully is Cicero.

(20*) Walter Cronkite has the attribute of being America's favourite newscaster.

So: (21*) There is someone who has both the attribute of being America's favourite newscaster and also the attribute of being a millionaire.

To show Argument *C** valid one would need only a principle of conjunction and a principle of existential generalisation.

Why, one might ask, won't a similar manoeuvre work for the paradox of the Masked Man? The similar manoeuvre would yield this:

Argument D

(22) Coriscus has the attribute of being known by Socrates to be Coriscus.

(23) Coriscus has the attribute of being the masked man.

So: (24) There is someone who has both the attribute of being known by Socrates to be Coriscus and also the attribute of being the masked man.

More simply, one might just conclude this:

(25) Coriscus has both the attribute of being known by Socrates to be Coriscus and also the attribute of being the masked man.

Both (24) and (25) are benign. Neither amounts to

(26) Socrates knows that Coriscus is the masked man.

Nor could one get (26) from (22) and (23) by other, legitimate, means. To see that (25) does not amount to (26) we need only note that (25) is compatible with this:

(27) Coriscus has both the attribute of being known by Socrates to be Coriscus and also, *unknown to Socrates*, the attribute of being the masked man.

To evaluate fully Aristotle's doctrine of kooky objects one would need to do much more than I have been able to do in this chapter. For one thing, one would need to assess Aristotle's claim that sameness in the accidental sense of 'same' is a variety of numerical sameness. To accomplish that task one would need to say a great deal about how we count persons and things - a daunting task.

Even if it should turn out, on fuller examination, that the doctrine of kooky objects is a defective or excessively costly or

cumbersome way of weeding out pernicious 'sameness' arguments, still it stands as an ingenious way of trying to cope with philosophical perplexities that vex us yet. That, in itself, is a significant accomplishment.⁶

⁶ The long passages I quote from *Topics I 7* follow, quite faithfully, the Pickard—Cambridge translation; otherwise the translations I use are of rather mixed parentage.

I first began to worry about the matters discussed here when, some ten years ago, Anthony Willing began writing, under my direction, his PhD dissertation, *Aristotle on the Paradoxes of Accident* (University of Massachusetts, 1974). I think my own conclusions are compatible with Willing's, but reading my paper is certainly no substitute for working through his careful study. Willing and I both profited enormously from reading, and trying to come to terms with, Nicholas White's 'Aristotle on Sameness and Oneness', and also his 'Origins of Aristotle's Essentialism' (*Review of Metaphysics*, 26(1972), 57-85).

Richard Bidgood made several suggestions for improving this chapter; I thank him.

My debt to Gwil Owen is fundamental. Without the stunning example of his teaching and scholarship, I should never have tried to read Aristotle freshly for myself.