# The Texture of Aristotle's Ontology

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Forthcoming in *Apeiron*.

This secondary world, bursting as it were through the background of the play, is Gogol's true kingdom. (Nabokov, *Nikolai Gogol*, 52.)

Socrates has many features, as Aristotle saw. Not only does Socrates happen to be seated, he is also wise, married, tanned, a father, a former soldier, and many other things besides. But the ease with which this fact can be stated hides an interpretive morass, for the clustering of numerous truths around Socrates invites a cluster of questions regarding what exists when Socrates happens to be each of these things at once, how Socrates relates to them, and how we should talk about all of this. One need look no further than the different ways in which Aristotle's concept of an accidental unity is elaborated to see that the answers he gives to these questions are scattered and dark. Some take Aristotle to hold that Socrates, when seated, is nevertheless numerically distinct from the accidental unity seated Socrates because, for Aristotle, the former can exist without the latter. Others, finding this commitment untoward, offer Aristotle a retreat to the formal mode. They claim that one and the same thing is referred to by 'Socrates' and 'seated Socrates' because Aristotle has it that seated Socrates is identical with Socrates. In order to supplement their accounts, readers both have given to Aristotle, and withheld from him, our concepts of definite descriptions, referential opacity, and even four-dimensional space-time worms — all stemming from Socrates' motley characteristics.

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<sup>&</sup>lt;sup>1</sup> See Cohen (2008), Hennig (2017), Lewis (1982, 1991), Matthews (1982), White (1986), and perhaps Bowin (2008).

<sup>&</sup>lt;sup>2</sup> See Code (1976), Dancy (1975), Miller (1973), Pelletier (1979), Peterson (1985), Rosen (2012), Shields (1999, 2012), Sorabji (1980), Spellman (1990), Weiner (2012), and Williams (1985).

My purpose in this paper is to explain the relation between substances and accidental unities in a new way. At its core, the dispute concerns how many entities Aristotle takes there to be when a substance enjoys an accident, with camps usually staked out in terms of the identity relation. That is, one party to the dispute plumps for Socrates' failing to be identical with seated Socrates, while the other plumps for Socrates' being identical with seated Socrates. But this way of proceeding is fraught and liable to mislead, for Aristotle himself describes how Socrates stands to seated Socrates in terms of a different relation altogether, saying that Socrates and seated Socrates are, in some respect, the same (ταὐτὸν).<sup>3</sup> As we will see, Aristotle takes predications of sameness to tolerate an argument place, the values of which might be any manner of property, e.g. color, temperature, shape, and so on. For instance, Socrates and Plato might be the same color, Plato and Callias the same temperature, and Callias and Socrates the same shape. Now, these examples show that there being some F according to which Socrates and Plato are the same F does not imply that there is no G according to which they are different Gs: they may, after all, be the same color but different sizes. And this too Aristotle appreciates explicitly, for he says, in Metaphysics 5.6 [1016a31-32], that while an isosceles triangle and an equilateral triangle are the same F, for some value of F, they are at the very least different triangles, and so different Gs.

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<sup>&</sup>lt;sup>3</sup> See LSJ s.v. "αὐτός." Of course, the fact that my interpretation dispenses with talk of identity and use of '=' invites a number of questions related to that concept: does Aristotle elsewhere manifest an understanding of identity along contemporary, Leibnizian lines? If so, did he have a different word for it, or do his uses of ταὐτὸ (etc.) need to be translated now as 'same', now as 'identical', depending on context? And so on. Such questions, significant though they are, are orthogonal to my arguments throughout. Moreover, it is hard to envision satisfactory answers. It may be that Aristotle understood what identity is — he seems to manifest an appreciation for what McTaggart calls the Dissimilarity of the Diverse in *Topics* 7.1 [152b25-29], for example — but it is difficult to say anything definitive on the matter: there is no smoking gun passage. And so, it is correspondingly difficult to say what Greek word or construction Aristotle uses for expressing an identity claim.

Once we take Aristotle at his word, we see that there is a middle course between the two camps. On the one hand, Socrates and seated Socrates are different compounds. The texts evince, more likely than not, the claim that anyone who counts only substances and accidents will have an incomplete inventory of Aristotle's world. On the other hand, Socrates and seated Socrates are the same substance; or, what I take to be equivalent, 'Socrates' and 'seated Socrates' are names of one and the same substance. For Aristotle holds that Socrates and seated Socrates are the same man, and it follows that they are the same substance. The core tenet of each camp is, then, preserved: accidental unity theorists take accidental unities to be different from substances; those opposed to accidental unities take them to be substances. Where the camps go wrong is in drawing out the implications of their tenets: that seated Socrates is different from Socrates does not preclude seated Socrates from being a substance; and neither does seated Socrates' being the same substance as Socrates preclude seated Socrates from being different, in some respect, from Socrates. The fact that Socrates and seated Socrates are the same substance and different compounds is simply a case of being the same F and different Gs, just as the isosceles and the equilateral might be the same figure and different triangles. Moreover, the fact that Socrates and seated Socrates are the same substance shows that Aristotle's commitment to accidental unities being compounds distinct from substances does not have the bizarre consequences sometimes thought to follow from it. He is not saddled with entities so strange that they couldn't sensibly be incorporated into anyone's ontology.<sup>4</sup> Nor is he committed to an outlandish semantics — 'Dr. Jekyll' and 'Mr. Hyde' are names of one biological organism, and one that brought about Carew's death at that; and Jekyll's insistence that he is a compound different from Hyde cuts no ice when Hyde's crimes send

<sup>&</sup>lt;sup>4</sup> With the notable exception of the Megarics, on which see Bailey (2012) and Denyer (1991).

him to jail. Rather, the texture of Aristotle's ontology, when outlined using overlapping sameness and difference relations, is an intelligible one.

The paper is laid out as follows. I begin with an elaboration and defense of my approach (§1). I subsequently use that approach to explain how several key texts fit together (§2). I then turn to the typical arguments for and against accidental unities, in an effort to show that the ease with which my approach reconciles the two camps is yet more evidence of its correctness (§§3-4). I conclude by considering some of the philosophical implications of accidental unities being compounds distinct from substances (§5). I show that the resulting ontology is a coherent one, despite some objections voiced by those who seek to eliminate accidental unities from Aristotle's thought.

# §1: Identity and Sameness

Aristotle's Greek for 'accidental unity' is εν κατὰ συμβεβηκός; alternatively, one might translate this with 'an accidental one' or 'accidentally one.' He uses several different types of construction to talk about accidental unities, sometimes deploying a proper name with a modifying adjective, as in 'seated Socrates' (Σωκράτης καθήμενος); sometimes a common

<sup>&</sup>lt;sup>5</sup> Some translators render κατὰ συμβεβηκὸς variously as 'coincidental,' incidental,' and 'accidental' — I use 'accidental' throughout, and this is not meant to rule out some subtlety implied by the variable terminology of others.

One reason given for preferring 'incidental' or 'coincidental' is that Aristotle makes use of, in all seriousness, the concept of τὰ καθ' αὐτὰ συμβεβηκότα (Posterior Analytics 1.7 [75b1]). If we take the contrast class of the accidental to be the essential, we ought to render this expression as 'essential accidentals', a phrase constituted out of incompatible terms; so 'incidental' and 'coincidental' are to be preferred. (See Barnes (1993) and Tierney (2001).) But we can just as easily resolve this issue in our rendering of the contrast class: 'intrinsic accidentals' doesn't comprise incomptabile terms. I therefore use 'accidental' and 'intrinsic' throughout.

noun with a modifying adjective, as in '[a] pale man' (λευκὸς ἄνθρωπος); and sometimes a definite article with an adjective, as in 'the cultured [one]' (τὸ μουσικὸν). This last kind of construction is, as we are about to see, ambiguous, so it will always be reasonable to wonder what sort of entity Aristotle means to designate when using it. For now, we need only note that, because Aristotle uses all three of these constructions, we will find claims about the relation between Socrates and seated Socrates, between a man and a masked man, and between one who happens to be cultured and the cultured one throughout discussions of the ontological status of accidental unities.

A basic characterization of accidental unities is found in *Metaphysics* 5.6 [1015b16-23], where Aristotle says that

Things are called unity either accidentally or intrinsically: accidentally as for instance Coriscus and the cultured (τὸ μουσικόν) and cultured Coriscus (for it is the same thing to say 'Coriscus and the cultured' and 'cultured Coriscus'), and the cultured and the just (τὸ δίκαιον) and cultured and just Coriscus. For all these are called an accidental unity, the just and the cultured because they are accidental to one substance, the cultured and Coriscus because one is accidental to the other. (Translation Kirwan, modified.)<sup>7</sup>

Immediately apparent is a difficulty in the way Aristotle expresses himself here: 'the cultured' (τὸ μουσικόν) and 'the just' (τὸ δίκαιον) are both expressions that can denote accidental unities, but they can also denote other kinds of entities. As Aristotle says in *Metaphysics* 7.6 [1031b22-28], constructions consisting in a definite article and a neuter adjective, in addition

<sup>&</sup>lt;sup>6</sup> Most agree that the above are expressions of accidental unities, and Lewis (1991, 95) gives a convincing argument for this being the case.

<sup>&</sup>lt;sup>7</sup> Έν λέγεται τὸ μὲν κατὰ συμβεβηκὸς τὸ δὲ καθ' αὐτό, κατὰ συμβεβηκὸς μὲν οἶον Κορίσκος καὶ τὸ μουσικόν, καὶ Κορίσκος μουσικός (ταὐτὸ γὰρ εἰπεῖν Κορίσκος καὶ τὸ μουσικόν, καὶ Κορίσκος μουσικός), καὶ τὸ μουσικὸν καὶ τὸ δίκαιον, καὶ μουσικὸς <Κορίσκος> καὶ δίκαιος Κορίσκος· πάντα γὰρ ταῦτα ε̈ν λέγεται κατὰ συμβεβηκός, τὸ μὲν δίκαιον καὶ τὸ μουσικὸν ὅτι μιᾳ οὐσίᾳ συμβέβηκεν, τὸ δὲ μουσικὸν καὶ Κορίσκος ὅτι θάτερον θατέρῳ συμβέβηκεν·

to referring to accidental unities, can refer to substances or accidents. Now, the first example of an accidental unity in [T1] is the unity of Coriscus and the cultured. Since the latter is here a constituent of the accidental unity at hand, I do not think that the expression 'the cultured' denotes an accidental unity in this passage. The expression still might denote either a substance or an accident, but in the second half of [T1], both 'the cultured' and 'the just' are said to be accidents of one substance. This settles that those expressions denote accidents there, and I take it to be more likely than not that Aristotle's uses of these constructions have the same reference throughout this passage. The result is that in the first half of [T1], cultured Coriscus is an accidental unity comprising the substance Coriscus and the accident denoted by 'the cultured.'9 It will be good have a convention for distinguishing between when Aristotle uses such constructions to denote accidental unities as opposed to accidents. Where Aristotle uses 'tò F' to denote an accidental unity, I will use 'the F one' in exposition; where he uses 'tò F' to denote an accident, I will use the italicized expression 'F.'<sup>10</sup>

A partisan reading of [T1] is that some items form an accidental unity when they are related as a substance is related to, either one or several of, its accidents. Items that are related

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<sup>&</sup>lt;sup>8</sup> See Bostock (2003, 111-112) and Irwin (1988, 561).

<sup>&</sup>lt;sup>9</sup> Throughout, I assume that the referent of a proper name, with or without the definite article, is, for Aristotle, a substance. It is not always obvious that he takes this to be the case, but [T1], at least, provides good evidence for it.

<sup>&</sup>lt;sup>10</sup> There is some debate as to whether Aristotle holds accidents to be universals or particulars, on which Frede's discussion is marvelous (Frede (1987)). For example, one might reasonably wonder if Socrates' pallor is a universal property, shareable with other substances; or if Socrates' pallor is a particular property, something we might call a trope, that cannot be enjoyed by anyone else. I do not take a stance on this issue in the main text: my use of 'Socrates' pallor' is intended only to pick out some quality, among many, that Socrates might enjoy, and not to endorse the reading that qualities are tropes. Nor is my talk of pallor on its own intended to pick out some universal. Nor still does my talk of pallor presuppose a position on the question of how accidents relate to simple kooky objects (see Hennig (2017)). My arguments only require that some quality (etc.) be accidental to Socrates, regardless of that quality's being a universal or particular.

as such are tied to each other in a way that any two (or more) arbitrarily chosen items might not be, and so, substances and their accidents form a sort of unity, namely an accidental unity. Cultured Coriscus, e.g., is an accidental unity comprising a parent substance, Coriscus, and an accident, *cultured*. Cultured Coriscus is not merely a substance, nor is it merely an accident; rather, cultured Coriscus is, to use Aristotle's phrase from *Topics* 5.4 [133b18-19], "an accident taken together with that which it is an accident of [i.e. some substance]." Hence Matthews, who claims that this understanding of accidental unities "explains how it can be that, though Coriscus is the masked man, Coriscus and the masked man are not identical." Lewis too falls into this group, arguing that "Cultured Mikkalus and Mikkalus exist at different times [...] this fact shows that the two are not identical."

This, in any event, is how some read [T1]. Others take seriously the various uses of 'call' (λέγειν) which dot Aristotle's text. As they would have it, [T1] is about the way we talk. We use expressions such as 'cultured Coriscus' in our discourse, and we sometimes go so far as to say that cultured Coriscus is an accidental unity. But talking in this way doesn't entail that cultured Coriscus is anything other than, distinct from, Coriscus: for the only items required for making sense of our discourse are a substance and an accident. There need not be some third class of items having as constituents a substance and an accident, as Shields argues when

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<sup>&</sup>lt;sup>11</sup> συμβεβηκότι λαμβανομένω μετὰ τοῦ ὧ συμβέβηκεν. That this expression is germane to [T1] is shown by Aristotle's immediate example in which features of a man are contrasted with those of a pale man. One might tarry over the use of 'taken together' (λαμβανομένω) — are we to understand accidental unities as mind-dependent, only arising when substances and accidents are grasped together? — but I think its use is merely an heuristic: neither [T1] nor the *Topics* example suggests that accidental unities require, for their existence, anything beyond an accident's inhering in a substance.

<sup>&</sup>lt;sup>12</sup> Matthews (1982), 288.

<sup>&</sup>lt;sup>13</sup> Lewis (1982), 5.

he says that "merely referring to Coriscus variously as 'the cultured thing' and the 'seated thing' in no way requires us to treat the things as other than identical." <sup>14</sup>

The various mentions of the masked man, cultured Mikkalus, and the seated thing mark a merely terminological difference: each of these scholars is making a point about accidental unities, and each is doing so using the concept of identity. This practice reflects the standard way in which the relation between accidental unities and substances is characterized. Either one attributes to Aristotle that Socrates ≠ seated Socrates, even when Socrates happens to be seated, and holds that generally accidental unities are distinct from the substances that partly comprise them; or one attributes to Aristotle that, when Socrates happens to be seated, Socrates = seated Socrates, and holds generally that accidental unities are not distinct from the substances that partly comprise them.<sup>15</sup>

Let me outline my own interpretation now, so as to situate it relative to the standard ones. I will turn to the textual evidence for my reading in a moment, where we will see that Aristotle holds the relation between substances and accidental unities to be one of *sameness*. He holds, for instance, that Socrates and seated Socrates are the same, and also that Socrates and seated Socrates are not the same. And his doing so explains the appeal of each of the standard camps: Socrates and seated Socrates' being one and the same invites the thought that Socrates = seated Socrates; whereas Socrates' being different from seated Socrates invites thinking that Socrates ≠ seated Socrates. But where it would be inconsistent to say both that Socrates = seated Socrates and Socrates ≠ seated Socrates, no inconsistency results from the

<sup>&</sup>lt;sup>14</sup> Shields (1999), 160.

<sup>&</sup>lt;sup>15</sup> In addition to Lewis, Matthews, and Shields, see: Bowin (2008, 87), Code (1976, 176ff.), Cohen (2008, 4), Hennig (2017, 1998), Peterson (1985, 250), Rosen (2012, 68), Spellman (1990, 22-23), White (1986, 475-479), and Williams (1985, 64).

two items' being the same and not the same, as long as we specify the respect of each predication of sameness.

For Aristotle, predications of sameness tolerate an argument place: a and b might be both the same F and different Gs. His most concise statement of this is in Metaphysics 5.6 [1016a31-32], which reads "the isosceles and the equilateral are one and the same figure because both are triangles, but they are not the same triangles." As we will see below, the context of this passage is significant: in *Topics* 1.7, Aristotle distinguishes between generic, specific, and numerical sameness; and when Aristotle says the isosceles and the equilateral are the same figure, he likely means that they are generically the same figure. 17 It will turn out that Aristotle describes the relation between an accidental unity and its underlying substance in terms of numerical sameness, so there is something of a mismatch between how Aristotle explains the relations between triangles and how I propose to explain the relation between accidental unities and substances. Ultimately, my reliance on this line amounts to showing that Aristotle tolerates a and b being the same F and different Gs, for some variety of sameness. He has this concept available, and ultimately extending its use to predications of numerical sameness sheds light on a difficult issue in his ontology. Moreover, the usual interpretation of this line from *Metaphysics* 5.6 is not problem-free, making my extension better supported. Aristotle is surely aware that the equilaterals are within the bigger set of isosceles triangles; and the scalene ones are entirely disjoint from the iscosceles. So the scalenes are not the same kind of triangle as either the equilaterals or the iscosceles. If this is all talk of a kind of discrimination between kinds, and not between individuals, what — for Aristotle — does this further kind

 $<sup>^{16}</sup>$  τὸ ἰσοσκελὲς καὶ τὸ ἰσόπλευρον ταὐτὸ καὶ εν σχῆμα ὅτι ἄμφω τρίγωνα· τρίγωνα δ' οὐ ταὐτά.

<sup>&</sup>lt;sup>17</sup> See, e.g., Ross (1924), 303.

of difference consist in? It is easy to answer this for such individuals as human beings: Socrates and Plato are one in species, but Socrates' matter is not the same determinate flesh and bones as Plato's. But it is difficult to say what accounts for any further numerical distinctness among triangles, and so, this line evinces a case of *a* and a *b* being numerically the same F and different Gs.

In any event, Aristotle's depiction of the relation between the isosceles and the equilateral is one where two things are the same F and different Gs, a thought that is similar to Geach's doctrine of relative identity. However, while I draw on Geach's account, I do not take Aristotle to be committed to every part of it. For instance, Geach has it that, for *a* and *b* to be the same F, F must be a substantival term. His thought is that only such terms provide criteria for identity, provide the means of counting Fs and therefore of settling whether "the F we are now counting is the same F as we counted before." So, for example, he has it that 'entity' cannot fill the argument place in 'same F' because it supplies no criterion of identity; and non-substantival terms such as 'red' or 'red thing' cannot fill the argument place in 'same F' for the same reason. Neither does 'compound' supply a criterion of identity, and therefore the term seems ill-suited for Geach's purposes.

All the same, Geach's purposes are not Aristotle's, and the patterns of language we find in Aristotle diverge from Geach's doctrine at various points. For instance, Aristotle is perfectly fine letting an adjective fill the argument place: he says, in *On Ideas* 81.13-15, that someone might truly deny of a brown horse, tanned human, and so on, "the same white of all

<sup>&</sup>lt;sup>18</sup> Geach (1967). Some deny that a and b might be the same F and different Gs, e.g. Wiggins (1967, 5ff.), who holds that when a and b are the same F, it follows that a = b. It is clear enough, however, that Aristotle's framework allows for a is the same F as b without a = b.

<sup>19</sup> Geach (1980), 63.

<sup>&</sup>lt;sup>20</sup> *Ibid.*, 64.

<sup>&</sup>lt;sup>21</sup> *Ibid.*, 63.

of them" (translation Fine). And while 'entity' doesn't do the job for Geach because, according to him, it supplies no criterion of identity, Aristotle still is perfectly fine saying that a and b are the same — not different — in compound (Metaphysics 10.3 [1054b5]). Generally, it seems adequate, to Aristotle, for a to be the same F as b if we can say where Fs differ; so as long as we can say where compounds differ, it is fine to say that a is the same compound as b (or not). And it's plausible to give Aristotle the idea that we can say where compounds differ. The thought is in a work he was surely familiar with: at *Theaetetus* at 147a, we are told that when it comes to clay, there is potters' clay, brick-makers' clay and oven-makers' clay. They are all the same in being compounds of earth and water; but they are different compounds of that substance combination. And generally, Aristotle appreciates that not everything is a compound — that there's more to being a compound than just being a pair of entities, since it isn't the case that any two pair of entities form a compound — when he warns against inferring from there being a to a being an element (and not a compound) in Metaphysics 12.4 [1070b5] (see also Metaphysics 9.8 [1051b15-20]). Minimally, then, Aristotle has it that we can say where compounds differ, and therefore where a and b are the same compound or different compounds.

The way I propose to engage with the debate over accidental unities is not uncontroversial. White considers the approach I'm suggesting and ultimately denies it, saying that

Aristotle, so far as I can find, never says any such thing [i.e. that we should make use of expressions of the form 'the same F', where 'F' represents a general term], and although he does say a number of things which would seem to suggest, even perhaps to imply, such a view, and although he maintains that the word "same" carries many senses, he does not offer to resolve its ambiguity by coupling it with general terms.<sup>22</sup>

<sup>&</sup>lt;sup>22</sup> White (1971), 178. Matthews (1982, 229-230) also considers and rejects my proposal, for White's reasons.

White is right that Aristotle does not say that predications of sameness require general terms — as we will see below, Aristotle sometimes uses 'same' without such a term — but the force of this absence cannot be decisive against my proposal. After all, White also concedes that Aristotle "does say a number of things which would seem to suggest, even perhaps to imply, such a view," i.e. the view I am offering. As we will see, while Aristotle does not take predications of sameness to require specifications, he holds that such predications at least tolerate specifications.

Ultimately, I take much of the plausibility of my proposal to lie in its results. In the next section, I'll show that a coherence among texts thought to express opposing characterizations of accidental unities is revealed by my approach, lending support to considering accidental unities in the manner I suggest. And when we consider, in the two subsequent sections (§§3-4), how these texts are understood by other scholars, we will see that understanding accidental unities terms of sameness is preferable to the approach normally taken.

# §2: Sameness Specified

I'm presenting an interpretation of the relationship between Socrates and seated Socrates, the masked man and the man, etc., in terms of sameness and difference claims that are specified by two predicates. The specifications I have in mind are 'compound' (συγκείμενον) and 'man' (ἄνθρωπος): I'll argue that the evidence we have in Aristotle's corpus supports a commitment to (i) Socrates and seated Socrates being different *compounds*, but (ii) being the same *man*.<sup>23</sup> This

<sup>&</sup>lt;sup>23</sup> Lewis (1982, 5) notes that accidental unities are compounds, though he does not say that they are in some respect the same as the substances that partly comprise them.

settles the debate in favor of those who take accidental unities to be distinct from substances, for it cannot be that Socrates = seated Socrates when Socrates and seated Socrates are two compounds. And yet, as we will see below, taking Socrates and seated Socrates to be the same man makes sense of several texts that are generally puzzling to those very same accidental unity theorists. Socrates and seated Socrates are different compounds and yet the same man, just as it might be that Socrates is a shape different from Plato and yet the same weight as Plato. The resolution to the debate that follows from this approach is, then, one that should be satisfying to both sides.

#### Differing Compounds

I begin with the evidence that Socrates and seated Socrates are different compounds. The following lines, from *Physics* 1.7 [190a17-21], are familiar to those familiar with the debate:

Being a man is not the same as being uncultured. For the one remains while the other does not. That which is not contrary [to cultured] remains [in a change] — i.e. the man remains — but the not cultured and the uncultured do not remain, and neither does the compound of the two things (ἐξ ἀμφοῖν συγκείμενον), the uncultured man. (Trans. Charlton, modified.)<sup>24</sup>

This passage is typically brought forward as evidence that accidental unities are distinct from substances on account of modal considerations: [T2] ends with Aristotle claiming that the compound of *uncultured* and the man does not remain when the man becomes cultured. However, as we will see in the next section, that argument is not conclusive evidence that accidental unities are distinct from substances. My reason for examining this passage is not,

<sup>&</sup>lt;sup>24</sup> οὐ γὰρ ταὐτὸν τὸ ἀνθρώπῳ καὶ τὸ ἀμούσῳ εἶναι. καὶ τὸ μὲν ὑπομένει, τὸ δ' οὐχ ὑπομένει· τὸ μὰ καὶ τὸ ἀνθρωπος ὑπομένει), τὸ μὴ μουσικὸν δὲ καὶ τὸ ἄμουσον οὐχ ὑπομένει, οὐδὲ τὸ ἐξ ἀμφοῖν συγκείμενον, οἷον ὁ ἄμουσος ἄνθρωπος.

then, concerned with that modal argument; rather, my reason has to do with the passage's identification of the uncultured man (ὁ ἄμουσος ἄνθρωπος) as a compound.

The compound Aristotle mentions at the end of [T2] is an accidental unity. As noted already, one of his expressions for accidental unities is a common noun with a modifying adjective, e.g. 'a pale man'. In [T2], we have another example of this type of construction in 'the uncultured man'. To use Aristotle's phrase from *Topics* 5.4, just as the pale man is an accident, *pale*, taken together with a substance, the man, so too the uncultured man is an accident, *uncultured*, taken together with a substance, the man. Now, one might hesitate over the uncultured man's being an accidental unity because the modifying adjective in [T2] is a privation, 'uncultured', whereas in other cases the modifier is apparently non-privative — 'pale', 'seated', and so on. Nevertheless, the passage begins with Aristotle distinguishing between being a man and being uncultured, and he clearly holds that the compound in this passage is composed 'out of two things' ( $\dot{\epsilon}\xi$   $\dot{\alpha}\mu\phi\sigma\tilde{\nu}$ ). It is difficult to imagine a scenario in which the two things that make up the compound are *not* the man and *uncultured*. Aristotle even says that the compound of the two things is the uncultured man, so it is perfectly reasonable for the uncultured man, just as the pale man, to be an accidental unity.

[T2] identifies an accidental unity as a compound of two things, an accident and a substance. And generally, I take it that accidental unities are compounds of substances and accidents. This is crucial to my interpretation for two reasons. First, 'compound' is a predicate according to which 'is the same as' can be specified non-trivially. We might truly and properly say "Seated Socrates and the one seated in the agora are the same compound", or "the cultured man and cultured Coriscus are the same compound." Second, Aristotle also holds that *substances* are compounds. Several times in the *Topics*, he says that living things are compounds

(συγκείμενα) of body and soul.<sup>25</sup> And famously, he begins *De anima* 2.1 [412a16] with the following motto, which outlines his hylomorphism: "every natural body having life is a substance in the sense of a compound (ὡς συνθέτη)." Living things such as human beings are, therefore, compounds just as much as accidental unities are: both are a type of συγκείμενον.

Socrates and seated Socrates are both compounds, but they are not the same compound, and this thought is foundational to those who read Aristotle as holding Socrates to differ from seated Socrates in some way. 26 Because I'm arguing that Socrates and seated Socrates are two compounds, I'm in agreement that there is some respect F in which Socrates and seated Socrates are two Fs. But squaring this thought with texts in which Aristotle seems to affirm that Socrates and seated Socrates are numerically the same has always been a difficulty for this camp. So I now turn to these texts, and I argue that when we avoid using 'identity' and 'identical' to understand them, because they don't match the Greek or the concepts that need teasing out as well as 'same F' does, the consistency between these texts is more easily appreciated.

#### The Same Man

Aristotle begins his discussion of sameness in *Metaphysics* 5.9 with an elaboration of what he calls accidental sameness:

<sup>&</sup>lt;sup>25</sup> Topics 5.1 [128b39-129a5], 5.3 [131a8-11], and 5.7 [137b11-13]. Although it isn't clear that Aristotle speaks *in propria persona* in these passages, they are entirely coherent with his remarks in *De anima* concerning living things being compounds, so I take them to be illustrative of Aristotle's own thought.

<sup>&</sup>lt;sup>26</sup> Aristotle reiterates the claim of [T2], that what it takes for an uncultured man to continue existing is different from what it takes for a man to continue existing, in *On Generation and Corruption* 1.4 [319b25-32] and *Prior Analytics* 1.33 [47b29-37]. I consider the arguments that this claim entails the distinctness of Socrates and seated Socrates in §3.

[T3] Some things are called 'the same' (ταὐτὰ) accidentally, as for instance the pale one and the cultured one are the same because they are accidents of the same thing, [A] and a man and the cultured one because one is an accident of the other; [B] and the cultured one [is] a man because it is an accident of the man. (*Metaphysics* 5.9 [1017b27-30]; trans. Kirwan.)<sup>27</sup>

At [B], the cultured one is said to be a man, and straightaway this is puzzling to those who hold that accidental unities are sharply distinguished from substances. For the cultured one is an accidental unity, whereas a man like Socrates is a substance. How could an accidental unity be a substance? In particular, my account of the relation between Socrates and seated Socrates rests partially on seated Socrates being a man — it is hard to imagine Socrates and seated Socrates being the same man if seated Socrates is not even a man. But how can it be true that seated Socrates is a man if seated Socrates is an accidental unity but men are substances?

The concern is a reasonable one, but it quickly dissolves in light of Aristotle's commitment to the possibility of saying something both true and ontologically imperspicuous. Aristotle allows that, when *pale* is accidental to a log, the predication "the pale one (τὸ λευκὸν) is a log" is true, though misleading if one takes the grammatical subject to signify a substance. Similarly, when *cultured* is accidental to a man, "the cultured one is a man" is true, though potentially misleading. Here, the question that concerns us is, rather, how Socrates and seated Socrates can be the *same* man. After all, the fact that Socrates and Plato are both men does not entail that they are the same man.

A clue as to why Socrates and seated Socrates are the same man is the respect in which sameness is asserted throughout [T3]. Aristotle begins the passage by affirming that the pale one and the cultured one are the same because they are accidents of the same thing; that is,

<sup>&</sup>lt;sup>27</sup> Ταὐτὰ λέγεται τὰ μὲν κατὰ συμβεβηκός, οἶον τὸ λευκὸν καὶ τὸ μουσικὸν τὸ αὐτὸ ὅτι τῷ αὐτῷ συμβέβηκε, καὶ ἄνθρωπος καὶ μουσικὸν ὅτι θάτερον θατέρῳ συμβέβηκεν, τὸ δὲ μουσικὸν ἄνθρωπος ὅτι τῷ ἀνθρώπω συμβέβηκεν·

<sup>&</sup>lt;sup>28</sup> Posterior Analytics 1.22 [83a1-35].

the pale one and the cultured one are the same in what they are accidents of, the same in coincidence. Aristotle also says, at [A], that the cultured one and the man are the same, because the cultured one coincides with the man. Indeed, Aristotle has it that the latter fact entails that 'man' is applicable to 'the cultured one'. So he takes the cultured one's coinciding with the man to yield (i) that 'man' holds of the cultured one and (ii) that the man and the cultured one are the same in some respect. The respect in which the man and the cultured one are the same is, then, humanity: the cultured one and the man are the same *man*. Then the claim at [B] follows trivially: 'man' applies to the cultured one, for the man and the cultured one are the same man.

Still, the fact that the cultured one and seated Socrates are not substances may put the following concern in mind: even if Aristotle allows that we can utter truths that are not metaphysically perspicuous, he must have it that *a* and *b's* being the same F implies they are both F in the same sense. But might it be that 'man' is used equivocally in the predication "seated Socrates is a man"? I take it that Socrates and seated Socrates are both men in the same sense, for the following reason. Experts form a certain class of accidental unity, namely those accidental unities part of which is an art or skill. A doctor, for instance, is such an accidental unity, because it is a compound of a human being and the art of medicine. Now, it is not uncommon for Aristotle to hold that experts have some sort of knowledge; the doctor, for example, knows certain medical facts. (See *Posterior Analytics* 1.13 [79a10ff.]; *Physics* 2.2 [194a22ff.]; and *Nicomachean Ethics* 1.6 [1096b27-1097a4].) But if the doctor knows anything at all, then the doctor is rational; so in this case at least, both the accidental unity and the human substance that happens to be the same man as the doctor — Hippocrates, say — are rational. Being a rational animal suffices for being a man, and so, both the accidental unity and the human substance are a man in one and the same sense. I take it that this kind of argument

generalizes for accidental unities that partly comprise a human substance: just as Socrates is rational, so too is seated Socrates; the two are men, then, in the same sense. Both are rational animals, and therefore both are substances. I take it that this kind of argument generalizes for accidental unities that partly comprise a human substance: just as Socrates is rational, so too is seated Socrates; Socrates is a man, then, in the same sense that seated Socrates is a man, and Socrates and seated Socrates are one substance.

That being said, I do not take the fact that the doctor and seated Socrates are substances to entail that the doctor and seated Socrates have all the features that Hippocrates and Socrates have, e.g. being an intrinsic unity. One reason for this is that the substance Socrates is intrinsically a rational animal, whereas seated Socrates is accidentally a rational animal; and generally, where the substance that partly comprises an accidental unity is intrinsically F, the accidental unity will be accidentally F, and the two will be the same F. Another reason has to do with the logical consequences of a being the same F as b: generally, a's being the same F as b does not entail that a enjoys all the properties b enjoys, and it is perfectly consistent for Aristotle to hold that Socrates and seated Socrates are the same substance and that seated Socrates does not enjoy all the properties Socrates enjoys (being an intrinsic unity, for instance).<sup>29</sup>

In addition to those reasons for taking Socrates and seated Socrates to be the same substance, there is the fact that such an interpretation coheres with Aristotle's commitments elsewhere to one member of these pairs being the same in number as the other member. In *Topics* 1.7, for instance, Aristotle introduces a tripartite distinction among kinds of sameness:

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<sup>&</sup>lt;sup>29</sup> See, for instance, Huismann (2016), where it is argued that the fact that Polyclitus and the sculptor are the same man is compatible with the sculptor having certain causal properties that Polyclitus lacks.

generic sameness, specific sameness, and 'sameness in number' (τὸ ταὐτὸν ἀριθμῷ). Aristotle's analysis of being the same in number turns on exactly the sort of example we have been considering:

[T4] What is one in number is most uncontroversially called the same (ταὐτὸν) in everyone's judgement. But even this is customarily indicated in several ways. The strictest case, [where it is indicated in] the primary way, is when that which is the same is indicated by means of a word or a definition, e.g. a coat is the same as a cloak or a two-footed terrestrial animal as a human. The second way is when it is indicated by means of a unique property, e.g. what is receptive of knowledge is the same as a human or what is carried upwards by nature the same as fire. The third way is when it is [indicated] with an accident, e.g. the seated one (or the cultured one) is the same as Socrates. For all these are intended to signify what is one in number. (*Topics* 1.7 [103a23-31]; trans. Smith.)<sup>30</sup>

The case that is most relevant for our purposes is at the end of the passage, and there, at least, it seems most natural to take Aristotle to be saying that the seated one is the same in number as Socrates. As a result, [T4] has been offered as evidence that accidental unities are not distinct from substances — the seated one is not distinct from Socrates, for the seated one is the same in number as Socrates. Now, straightaway, I think we should be wary of taking the fact that the seated one and Socrates are one in number to imply their being identical: the evens and the odds are the same in number but are not identical. But on my reading, the claim at the end of [T4] is perfectly compatible with the conclusions of the previous section: the seated one and Socrates are one and the same man, just as the isosceles and the equilateral are one and the same figure; the seated one and Socrates are yet different compounds, just as the isosceles

 $<sup>^{30}</sup>$  μάλιστα δ' ὁμολογουμένως τὸ εν ἀριθμῷ ταὐτὸν παρὰ πᾶσι δοκεῖ λέγεσθαι. εἴωθε δὲ καὶ τοῦτο ἀποδίδοσθαι πλεοναχῶς· κυριώτατα μὲν καὶ πρώτως ὅταν ὀνόματι ἢ ὅρῳ τὸ ταὐτὸν ἀποδοθῇ, καθάπερ ἱμάτιον λωπίῳ καὶ ζῷον πεζὸν δίπουν ἀνθρώπῳ· δεύτερον δ' ὅταν τῷ ἰδίῳ, καθάπερ τὸ ἐπιστήμης δεκτικὸν ἀνθρώπῳ καὶ τὸ τῇ φύσει ἄνω φερόμενον πυρί· τρίτον δ' ὅταν ἀπὸ τοῦ συμβεβηκότος, οἶον τὸ καθήμενον ἢ τὸ μουσικὸν Σωκράτει· πάντα γὰρ ταῦτα τὸ εν ἀριθμῷ βούλεται σημαίνειν.

<sup>&</sup>lt;sup>31</sup> See Dancy (1975, 367) and Hennig (2017, 2002). Matthews (1982, 225-226) notes the importance of [T4] as well, though he ultimately denies that we can distill from this passage that Socrates = the seated one.

and the equilateral are different triangles. Of course, the consensus interpretation of the case of the isosceles and equilateral is that they are generically the same; but we now see that there is reason to extend being the same F and different Gs to sameness in number. For in [T4], we see that Socrates and the seated one, two different compounds, are also the same in number.

[T3] and [T4] are foundational texts to those who read Aristotle as holding Socrates to be identical with seated Socrates. Because I'm arguing that Socrates and seated Socrates are one and the same man, I'm in agreement that there is some respect in which Socrates and seated Socrates are the same in number, some respect in which they are one and the same. And when we rely on numerical sameness of the sort outlined in [T4] to count the entities in Aristotle's ontology, the numbers fall out in the way that opponents of accidental unities say they do: when Socrates is seated, Socrates and seated Socrates are one and the same man, one and the same substance; and if Socrates happens to be seated, pale, and cultured, there still is only one man, Socrates, who is the same substance as the seated one, the pale one, and the cultured one. But it does not follow from this fact that there is no respect in which Socrates and seated Socrates are different and therefore more than one, just as it does not follow from the isosceles' and the equilateral's being one and the same figure that there is no respect in which they are different. The result is that, by focusing on the respects in which accidental unities and substances are the same and different, the tension in the relevant texts dissolves. In the next two sections, I explain the advantages this approach has over the ones normally taken.

# §3: Arguments in Favor of Accidental Unities

In the past two sections, I have given my interpretation and explained how coheres with the texts that are usually brought forward in this debate. In this section and the next, I will consider the arguments that others have put forward, based on those same texts, in order to situate my reading with respect theirs. I begin with arguments put forward by those in favor of accidental unities, arguments designed to show that Socrates and seated Socrates differ in some respect. The case for this camp begins with Aristotle's solution to the paradox of change. His principal example in *Physics* 1.7 is a change in which someone previously crude becomes cultured. The man is the underlying subject; *cultured* the form that he takes on; and *uncultured* the privation he gives up. Aristotle gives the example some additional detail on the basis of the contrariety of form and privation in [T2]. What makes [T2] of interest to those in favor of distinguishing accidental unities from substances is not its characterization of the uncultured man as a compound; rather, [T2] shows that, for Aristotle, the uncultured man has different persistence conditions than the man, for the man remains at the conclusion of the change from uncultured to cultured, but the uncultured man does not.

Aristotle reiterates in *On Generation and Corruption* 1.4 [319b25-32] and *Prior Analytics* 1.33 [47b29-37] that what it takes for an uncultured man to continue existing is different from what it takes for a man to continue existing. According to those in favor of accidental unities, this difference is sufficient for understanding Aristotle as holding that uncultured Coriscus and Coriscus differ in some respect. When Coriscus is uncultured, then, there must be uncultured Coriscus, in addition to Coriscus and *uncultured*. Matthews' explication of [T2], for instance, employs this sort of reasoning:

It is when Aristotle suggests that standard definite descriptions like 'the musical man' and 'the man in the corner' pick out kooky objects [i.e. accidental unities] 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. [...] In this context [i.e. in [T2]] '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.<sup>32</sup> (Original emphasis.)

Given that what comes after the ellipsis is supposed to explain what comes before it, Matthews takes the modal difference between the uncultured man and the man himself to suffice for their being distinct in some respect. Lewis too finds support for the modal approach based on persistence:

We find a clear reason for taking [Socrates and the generous one] to be distinct in the fact that Aristotle notes at GC I.4, 319b25-32: they come into existence and go out of existence at different times. For Socrates, the change of becoming ungenerous is mere alteration; but for the generous one it is sheer extinction.<sup>33</sup>

Again, the fact that a substance, Socrates, can exist for a period of time different from the period for which an accidental unity, the generous one, exists is supposed to yield the desired conclusion: the generous one is distinct from Socrates.<sup>34</sup>

In short, these arguments start with the fact that Socrates and seated Socrates have different persistence conditions, and conclude that Socrates is not identical with seated Socrates. Such arguments are the primary ones put forward by those in favor of accidental unities, but they are not the only arguments available for that task. There is another type of argument for Socrates' differing from seated Socrates, based on ontological priority. The argument is based on *Metaphyisics* 7.1, where Aristotle speaks of the differences between *seated*, a substance that enjoys that accident, and the seated one. The most sustained treatment of that text, for the purposes of explaining the status of accidental unities, is Cohen's:

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<sup>&</sup>lt;sup>32</sup> Matthews (1982), 224-225.

<sup>&</sup>lt;sup>33</sup> Lewis (1991), 93.

<sup>&</sup>lt;sup>34</sup> In addition to Lewis and Matthews, Cohen (2008, 4) and White (1986, 476-478) argue, based on considerations of persistence, that accidental unities are distinct from their parent substances.

The entities that Aristotle here claims to be ontologically prior (literally, "more real," *mallon onta*) are the walker, the sitter, and the healthy one, and these are not substances. What makes them more real, says Aristotle, is that "there is something definite which underlies them; and this is the individual substance" (1028a26–7). So there are three different entities mentioned here, which should be listed in the following order of priority — (1) the underlying substance, (2) the kooky object [i.e. the accidental unity] that coincides with the substance, and (3) the quality or position that the substance has by virtue of coinciding with the kooky object.<sup>35</sup>

In short, what is gleaned from *Metaphysics* 7.1 is that, when Socrates is seated, there are at least three distinct entities: a substance, an accident, and an accidental unity. The text is difficult, of course; interpreters in the other camp likely read the passage as merely explaining what 'substance,' 'accident,' and 'accidental unity' hold of, and of course it may be that each of those expressions hold of the same object. But even if Cohen's argument, or the modal argument from Lewis and Matthews, turns out to support the conclusion that Socrates differs from seated Socrates, it's unclear what ramifications this would have. We might concede to the accidental unity theorists that Socrates and seated Socrates are distinct entities, and indeed, this is the level of specificity at which the debate is pitched. But 'entity' is just an English word for a variable, like 'thing'. When the accidental unity theorist offers us the idea that Socrates and seated Socrates are not identical and therefore are two entities, this is hardly informative: what are they two of? The significance of this question is shown when trying to square the interpretation of *Physics* 1.7 and *Metaphysics* 7.1 that accidental unity theorists put forward with [T4]. The crux of [T4] is that Socrates and seated Socrates are the same in number, which is to say Socrates and seated Socrates are one thing; but how can Aristotle say there that Socrates and seated Socrates are one thing if Socrates and seated Socrates are two things? Now, it isn't as if accidental unity theorists have nothing to say about [T4]: typically, they take that text as evidence that sameness in number is not our notion of identity, for Aristotle there seems to

<sup>&</sup>lt;sup>35</sup> Cohen (2008), 16.

distinguish between three varieties of sameness in number.<sup>36</sup> But this attempt at turning the table does not answer the question at stake as satisfyingly as my approach. On my reading, the question has a direct answer: can be the same in number and also two things because, for Aristotle, being the same F is compatible with being different Gs. In the particular case outlined in [T4], Socrates and seated Socrates are one and the same man, the same substance — and so, they are one in number — and they are two compounds. In the next section, I try to show that the typical arguments against accidental unities are also inadequate, further supporting my approach.

# §4: Arguments in Opposition to Accidental Unities

The arguments designed to show that Socrates and seated Socrates differ in no respect, and generally that accidental unities differ in no way from substances and therefore are not additional entities in Aristotle's ontology, stem from [T3] and [T4]. In this section, I'll try to show that these arguments, while providing a consistent account of the texts we have considered, are nevertheless lacking: compared to analyzing these texts in terms of sameness in F and difference in G, the account given by opponents of accidental unities is less philosophically satisfying.

Let's start with [T4], which concludes with Aristotle stating "The third way [in which something is one in number] is when it is [indicated] with an accident, e.g. the seated one (or the cultured one) is the same as Socrates [...] all these are intended to signify what is one in number." Some argue that sameness in number, as outlined by Aristotle, is our concept of

<sup>&</sup>lt;sup>36</sup> See, e.g., Lewis (1991, 116-117).

identity. They argue that because Socrates and the seated one are the same in number, Socrates and the seated one are one entity, and therefore the seated one does not count as an addition to our ontology (beyond Socrates).<sup>37</sup> This line of thought is also supported by the other primary text for accidental unity opponents, [T3]. That passage contains the claim that the cultured one and the man are accidentally the same, and a number of scholars in fact subsume accidental sameness under numerical sameness, with an eye to concluding that an accidental unity and its underlying substance are one entity. Code first suggested this line of reasoning, saying that "we are not bloating our ontology with new and strange objects such as the President, the pale, the musical [i.e. the cultured one], etc., since each of these allegedly new entities coincides in some man at any time at which one of them exists."<sup>38</sup> Hennig follows this line of argument when, after elaborating [T3] in some detail, he claims that "Aristotle emphasizes that (particular) substances and their accidents are numerically the same. We do not count educated Coriscus as two things: (1) educated and (2) Coriscus. [...] there is no second object to be counted. The reason is that kooky objects and accidental compounds cannot exist separately from substances" (original emphasis). <sup>39</sup>

Opponents of accidental unities might be right in their readings of [T3] and [T4]: Socrates and seated Socrates are the same in number, and therefore are not two entities (or things, etc.). But again, just as it was difficult to envision the ramifications of accidental unity theorists' being right about [T2] and *Metaphysics* 7.1, so too is it difficult to envision what follows from accidental unity opponents' being right about [T3] and [T4]. Even if we concede that Socrates and seated Socrates are not two things, not two entities, etc., it is nevertheless

<sup>&</sup>lt;sup>37</sup> Code (1976, 176), Dancy (1975, 367), Hennig (2017, 2002), Williams (1985, 72).

<sup>&</sup>lt;sup>38</sup> Code (1976), 178.

<sup>&</sup>lt;sup>39</sup> Hennig (2017), 2001.

reasonable to ask: what are Socrates and seated Socrates not two of? The significance of this question is revealed when when trying to square the interpretation of [T3] and [T4] put forward by opponents of accidental unities with the crux of [T2]. [T2] is, recall, the *Physics* 1.7 passage where an accidental unity is said to be a different compound from some substance; how can it be, then, that Socrates and seated Socrates are one thing if they are two things? But just as accidental unity theorists have interpretations of potentially problematic texts close at hand, so too do accidental unity opponents have interpretations of [T2] ready; Shields, for instance, says the following of [T2]:

The unmusical thing does not survive when the musical thing comes to be. So, too, the non-musical man perishes when the musical man comes to be. According to one contemporary interpreter [i.e. Matthews], 'The implications of this doctrine are staggering.' Why are they staggering? It is hardly problematical that we can secure reference to entities described in complex ways. If I refer to 'the puzzled redhead in the corner', I may pick some individual for discussion, perhaps the same individual you refer to as 'the stout little worrier'. In these cases we demonstrate the same entity under different descriptions and present it under different perceptual modes of presentation.<sup>40</sup>

This reading is representative: those opposed to accidental unities emphasize that taking 'Socrates' and 'seated Socrates' to be co-referential is consistent with Aristotle's theory of change. But such a response does not answer the question of how Socrates and seated Socrates can be one entity if they are two entities as satisfyingly as my approach. On my reading, the question has a direct answer: Socrates and seated Socrates can be one F and two Gs; in our particular example, Socrates and seated Socrates' being one substance is compatible with their being two compounds.<sup>41</sup>

<sup>&</sup>lt;sup>40</sup> Shields (1999), 158.

<sup>&</sup>lt;sup>41</sup> Again, I am not saying that the opponents of accidental unities has no resources here: they might read [T2] Aristotle saying that it is the descriptions that are two in number, yet there is only one entity; or as saying something about the type of context introduced by 'comes to be.' What I am saying that my approach is a better resource to use in squaring the various texts both those for accidental unities and those against them rely on: retreating to the formal mode

One additional style of argument, adopted by those against accidental unities, is to concede that Socrates differs in some way from seated Socrates while still holding that the numerical sameness of Socrates and the seated one is enough to eliminate accidental unities from Aristotle's ontology. Hennig, for instance, grants that accidental unities differ in some respect from their parent substances while simultaneously affirming that they are numerically the same:

Therefore, things and their accidents differ in being, which implies that when Coriscus is educated, Coriscus and the educated one [i.e., the cultured one] are not strictly identical in our modern sense of identity. This, however, does not imply that they are numerically distinct. For Aristotle emphasizes that (particular) substances and their accidents are numerically the same.<sup>42</sup>

As Hennig sees it, it might be the case both that a differs from b in some way and that a is numerically the same as b, for he holds that the cultured one and Coriscus are numerically the same and that Coriscus and the cultured one differ in some respect. This much is consistent with [T4]. The difficulty with this line of thought is that Hennig takes numerical sameness to be the pleonasm for '=' we take it to be today when he says that "as far as the number of things is concerned, there are ultimately only as many things in the world as there are substances. Therefore, when 'two' accidents are accidents of the same substance, they are not actually two in number." Hennig holds that substances and their accidents are numerically the same, and when an accident, or several accidents, inhere in a substance, Hennig has it that there are as many items as there would be if the accident (or accidents) were not present. That is, the sameness in number of Coriscus and the cultured one entails that 'Coriscus' and 'the

is harder to justify in the context of Cohen's passage from *Metaphysics* 7.1, where the substance that underlies the seated one is "more real" than the seated one. It is not impossible, of course, for opponents of accidental unities to explain such a claim; but my approach explains it more directly, which I count as an advantage. (I thank an anonymous referee for pressing this point.) <sup>42</sup> Hennig (2017), 2002.

<sup>&</sup>lt;sup>43</sup> *Ibid.*, 15.

cultured one' are two names for one and the same item, that Coriscus = the cultured one. But we've already been told that Coriscus and the cultured one differ in some respect. We cannot have it both ways.

Spellman provides another attempt to eliminate accidental unities without attributing to Aristotle that Socrates and seated Socrates differ in no way whatsoever. She deploys 'qua' in order to shed light on the status of accidental unities, using 'Socrates qua seated' where we have used 'seated Socrates'. Here she gives one reason for preferring this method:

A second virtue of 'qua' is that it discourages the multiplication of entities. There do not exist both Socrates and Socrates qua musical [i.e. Socrates qua cultured]. Indeed any temptation to multiply entities should be ended by the realization that "qua man" is detachable; "Socrates qua builder is the cause of the house" is equivalent to "qua builder, Socrates is the cause" or even to "Socrates is the cause qua builder." Thus on my account Socrates and Socrates qua builder are not identical — they do not have all the same properties, but they are numerically the same.<sup>44</sup>

It isn't the case that Socrates and building Socrates are the same in every respect: they couldn't be, given Spellman's commitment to their diversity in properties. But they are numerically the same, and it seems as if we are to understand by this that numerical sameness prevents entities from being multiplied. There is not *both* Socrates and Socrates *qua* cultured; any temptation to multiply entities is ended; and so on. Again, it seems, the desire to get rid of accidental unities leads one to affirm that, while *a* and *b* differ in some respect, *a*'s being numerically the same as *b* amounts to 'a' and 'b' naming one and the same thing. That is, it leads one to affirm that *a* in no way differs from *b* and *a* differs in some way from *b*.

To sum up, while both those in favor of accidental unities and those opposed have ways of dealing with texts that are potentially problematic, those ways are not as adequate as using sameness in F, difference in G. Using this conceptual tool reveals Aristotle's

<sup>&</sup>lt;sup>44</sup> Spellman (1990), 22-23.

commitment to accidental unities being the same substance as what underlies them, yet different compounds. Ultimately, then, we see that the core tenets of both camps are preserved: accidental unities are different, in some respect, from substances, but they are also substances. Nevertheless, some argue that, quite apart from textual considerations, a commitment to accidental unities being distinct from substances is incoherent for anyone, Aristotle included, to maintain. In the next section, I consider the implications of this commitment in an attempt to defuse them — in short, I argue that the fact that Socrates and seated Socrates are different compounds is not as strange as usually thought when coupled with Socrates' being the same man as seated Socrates.

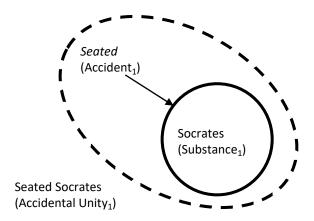
### §5: Aristotle's Fundamental Ontology

Substances have always been the focal point of the picture of Aristotle's ontology, but even he knew that they alone cannot fully capture the grain of what there is — to fill in the details, accidental beings are required. The argument I've presented so far supports a fundamental ontology that includes substances, accidents, and accidental unities, and this last type of entity has given some reason for pause. Sceptics of accidental unities have argued that it simply isn't clear what it takes to count as an accidental unity, and for good reason. To give an ontology that includes accidental unities, it had better be clear how many accidents, substances, and accidental unities there are at any given moment. But what such conditions are, for Aristotle, remains unclear. In this section, I'll set out these conditions, and I'll conclude with a defense against the sceptical arguments.

<sup>&</sup>lt;sup>45</sup> Lewis (1982) gives a formalization of Aristotle's theory of sameness, and in doing so makes headway regarding an ontology that includes accidental unities. But Lewis' formalization is, as

### Counting the Accidental

We've focused on seated Socrates throughout, the accidental unity of Socrates and *seated*. This type of case is straightforward. Socrates is one human substance, *seated* is one accident, and seated Socrates is one accidental unity. The situation is depicted here:



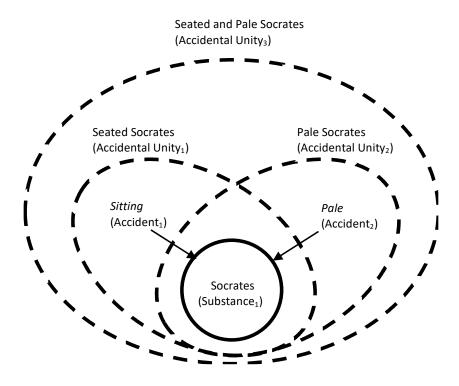
Here, a quality is accidental to a substance, and I mark out lines of accidentality with an arrow. That a quality is accidental to a substance entails that, in addition to a quality and a substance, there is an accidental unity comprising that quality and substance. Even one who is sceptical that there are such things as accidental unities ought to concede that the number of entities her opponent takes there to be in this case is clear. So it's a good starting point for explaining how accidental unities fit into an ontology. But it is only a starting point.

In order to continue, we must consider how many entities there are when Socrates is both seated and pale. Answering this question is crucial to getting a grip on Aristotle's

the overall account, in fact strengthen it.

he says, an idealization of Aristotle's various claims, and ignores some of Aristotle's more difficult commitments, the so-called "blemishes in Aristotle's account." I aim here to explain Aristotle's fundamental ontology in such way that the difficulties, instead of detracting from

ontology, for he takes every substance to have numerous accidents. 46 Socrates' being both seated and pale is the sort of circumstance that is pervasive throughout Aristotle's world. It's clear that, in this situation, there is still only one substance, Socrates. And there must be at least two accidental unities, seated Socrates and pale Socrates. But the examples in [T1] show that there is also a third accidental unity. Aristotle there says that cultured Coriscus and just Coriscus are accidental unities, as is cultured-and-just-Coriscus, for *cultured* and *just* are both accidents of Coriscus. So too are *seated* and *pale* both accidents of Socrates, with the result that there are three accidental unities, the third being seated-and-pale-Socrates. The slightly more complex situation is depicted here:



Seated-and-pale-Socrates is an entity not often mentioned in discussions of Aristotle's ontology — perhaps this is why sceptics of accidental unities accuse supporters of accidental

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<sup>&</sup>lt;sup>46</sup> Metaphysics 4.4 [1007a10-15].

unities of imprecision.<sup>47</sup> Still, we need an account of how many accidental unities there are in this modestly more complicated circumstance, and [T1] suggests that Aristotle would've bestowed seated-and-pale-Socrates with the same status as seated Socrates.

# Boolean Questions

The situation in which there are two accidents belonging to the substance Socrates invites questions that do not naturally arise when considering the simpler case of one accident belonging to Socrates. For in admitting that there is such a thing as seated-and-pale-Socrates, Aristotle allows that, in some cases, some entities combine by means of a Boolean operator to yield a further entity: Socrates, *seated*, and *pale* combine by means of conjunction to yield seated-and-pale-Socrates. And so, one might wonder if the same is true of other such operations, or of conjunctions of other entities. For instance, one might wonder if, in addition to *seated* and *pale*, there is some third accident *seated and pale*. Or if the accidental unity seated-and-pale-Socrates is the same accidental unity as not-(not-seated-or-not-pale)-Socrates. Or if seated-or-pale-Socrates is an accidental unity when Socrates is seated but not pale (or pale but not seated).

Insofar as my approach in this section has been to clarify Aristotle's ontology by explaining how many entities there are when a substance enjoys some number of accidents, these questions demand an answer. I will take them in turn, answering them by following Aristotle's account of what it takes to be an accident. When *seated* and *pale* are accidents of Socrates, Aristotle holds that there is no third accident *seated and pale* enjoyed by him. Two

<sup>&</sup>lt;sup>47</sup> Lewis (1982, 6), likely the most thorough defense of accidental unities within Aristotle's ontology, denies that seated-and-pale-Socrates is an accidental unity. But again, Lewis does not take his formalization to capture every aspect of Aristotle's account, he takes it to be an idealization of Aristotle's views.

such qualities do not combine to form one compound accident, even when they hold of one and the same substance:

Of things predicated, and things they are predicated of, those which are said accidentally, either of the same thing or of one another, will not be one. E.g., a man is pale and cultured, but *pale* and *cultured* are not one, because they are both accidents of the same thing. And even if it is true to say that *pale* is cultured, *cultured pale* will not be one thing; for it's accidental that *cultured* is pale, and so *pale cultured* will not be one. (*De interpretatione* 11 [21a7-14]; trans. Ackrill.)<sup>48</sup>

Even though, when Socrates is seated and pale, it might be true to say that *pale* is seated, *seated* and *pale* will not be one thing, and therefore they will not be one quality. And even though this truth has the same grammatical structure as "Socrates is seated," we should not infer from this that *seated* is an accident of *pale*, for there are no accidents of accidents.<sup>49</sup>

There is a wrinkle to consider. Earlier in in this very chapter (20b12ff.), Aristotle says that, just as *pale cultured* is not one thing, so too "pale and man and walking" do not make up one thing, and this seems to fly in the face of the claim in [T1] that cultured-and-just-Coriscus is an accidental unity. <sup>50</sup> But no such inconsistency lurks, and we need not attribute to Aristotle a change in mind on this issue. Aristotle cannot mean that there is no F whatsoever according to which pale and man and walking are one F. For as he says earlier in *De interpretatione* [18a18ff.], it's perfectly acceptable to call a group of seemingly disparate items 'cloak' and formulate truths about that cloak. His example there is of horses and humans: say that Alexander and his horse are a cloak, and that they are both pale; it follows then that a cloak is

<sup>&</sup>lt;sup>48</sup> τῶν δὴ κατηγορουμένων, καὶ ἐφ' οἶς κατηγορεῖσθαι συμβαίνει, ὅσα μὲν λέγεται κατὰ συμβεβηκὸς ἢ κατὰ τοῦ αὐτοῦ ἢ θάτερον κατὰ θατέρου, ταῦτα οὐκ ἔσται ἔν· οἶον ἄνθρωπος λευκός ἐστι καὶ μουσικός, ἀλλ' οὐχ εν τὸ λευκὸν καὶ τὸ μουσικόν· συμβεβηκότα γὰρ ἄμφω τῷ αὐτῷ. οὐδ' εἰ τὸ λευκὸν μουσικὸν ἀληθὲς εἰπεῖν, ὅμως οὐκ ἔσται τὸ μουσικὸν λευκὸν ἔν τι· κατὰ συμβεβηκὸς γὰρ τὸ μουσικὸν λευκόν, ὥστε οὐκ ἔσται τὸ λευκὸν μουσικόν.

<sup>&</sup>lt;sup>49</sup> *Metaphysics* 4.4 [1007b1-13]. For an alternative reading of these lines, see Irwin (1988, 76-77). <sup>50</sup> Matthews goes so far as to say that this passage requires "softening" to be made consistent with [T1]; see Matthews (1982, 223).

pale. But we very well might call a different conjunction 'cloak' and say that, when Socrates is pale and walking, there is one cloak. Rather, when Aristotle says that pale and man and walking do not make up one thing, he seems to mean that the only F for which pale and man and walking are one F is something merely conventional or trivial, in contrast with Fs for natural entities — indeed, in this chapter "pale and man and cloak" are contrasted with "man and two-footed and tame", the latter of which denotes something that is one F by nature — and this reading is compatible with seated-and-pale-Socrates being an accidental unity.

This understanding of the beginning of *De interpretatione* 11 is likewise consistent with his claim later on in the chapter that *pale cultured* is not one F. We might also give this conjunction an arbitrary name — 'garment', say — and hold that there is one garment when Socrates is pale and cultured. But this cannot be Aristotle's point. Rather, *pale cultured* is one F only for an arbitrary F. It isn't even an accidental unity, for it can't be the case that one is an accident of the other, and thus they cannot comprise an accidental unity. There's no non-trivial F for which *pale cultured* is one F. And generally, it seems that, regarding our first Boolean question, the accidents of a substance don't combine so as to yield further accidents and further accidental unities.

The second Boolean question concerns a familiar equivalence: if Aristotle takes seated-and-pale-Socrates to be an accidental unity, does he take not-(not-seated-or-not-pale)-Socrates to be an additional accidental unity? This question is more difficult to answer. If it is sensible to speak of the quality *not not seated*, then we can proceed as follows. If that quality is the same quality as *seated*, and *not not pale* is the same quality as *pale*, then it seems that seated-and-pale-Socrates it the same accidental unity as not-(not-seated-or-not-pale)-Socrates, since the constituents of the former are the same as the constituents of the latter. There would not, then, be an accidental unity to be counted in addition to seated-and-pale-Socrates. Moreover,

there is some reason to think that *not not seated* is the same quality as *seated*: in *De interpretatione* 10 [19b19ff.], Aristotle seems to take "a man is just" to be equivalent to "a man is not not-just." If this is because *just* and *not not just* are the same quality, then seated-and-pale-Socrates is the same accidental unity as not-(not-seated-or-not-pale)-Socrates.

The last Boolean question I'll consider asks whether seated-or-pale-Socrates is an accidental unity when Socrates is seated but not pale (or pale but not seated). If seated-or-pale is a quality of Socrates, and a different quality from seated or pale, and a quality Socrates could have whilst also having not pale or not seated, then it would seem that yes, seated-or-pale-Socrates is an accidental unity to be included in our count. Still, I doubt that Aristotle would tolerate merely disjunctive qualities such as seated-or-pale in his ontology, for reasons similar to those given above: there's no non-trivial F for which pale-and-seated is one F, so pale-and-seated is not a quality; similarly, there's no non-trivial F for which pale-or-seated is one F, with the result that pale-or-seated is not a quality. In this case, seated-or-pale-Socrates is not an accidental unity to be counted in addition to seated Socrates, pale Socrates, and seated-and-pale-Socrates.

So the final count for our second situation remains: one substance, two accidents, and three accidental unities. We might construct more sophisticated examples — to be sure, Socrates is more than merely pale and cultured. And indeed, Aristotle concludes his discussion of accidental unities in *Metaphysics* 5.6 with the remark that "everything called an accidental

<sup>&</sup>lt;sup>51</sup> You might think that Aristotle shouldn't allow this. Both green and black are not-pale, and both pale and black are not-green. So something might be not(pale) in virtue of being green, and something else might be not(green) in virtue of being black. In which case not(not(pale)) doesn't necessarily map to pale. However, Aristotle says that names like 'not-pale' are indefinite names, for what they signify are indefinite (*De interpretatione* 2 [16a29]). Perhaps this is Aristotle's way of saying: not(pale) maps to black&green&... In which case, not(black&green&...) would map back to pale, and the equivalence he holds to in *De interpretatione* 10 would remain intact.

unity is, then, so called in this manner," suggesting that he takes himself to have given the tools for extending his account to accidental unities of a substance and three or more accidents. In the case where *pale, cultured,* and 6' tall are all accidental to Socrates, the count is as follows: one substance, three accidents, and seven accidental unities. (At the risk of being long-winded: there are seated Socrates, pale Socrates, 6' tall Socrates, pale-and-cultured Socrates, pale-and-6' tall Socrates, cultured-and-6' tall Socrates, and, finally, pale-and-cultured-and-6' tall Socrates.) I doubt another diagram will help here, but the point remains that it's clear what the conditions on being an accidental unity are because it's clear how to count accidental unities: a substance with n accidents will be a part of  $2^n - 1$  accidental unities. We therefore can count the entities for Aristotle's ontology in any circumstance in which we know the number of substances and their accidents.

### Defusing Ontological Difficulties

The criticisms of an ontology that includes accidental unities also hinge on how to count them. For instance, here is an objection from Shields, one who denies that Socrates and seated Socrates differ in some way when Socrates is seated:

This would be rather staggering. The results of individuating objects so finely yields some immediately counter-intuitive results. When a seated woman stands, the seated woman ceases to exist and a new woman comes into existence, namely, the standing woman. When a child yawns, a fleeting, yawning child comes into existence, then perishes, and then a (new?) non-yawning child is born. Admitting relational changes of the sort Aristotle himself mentions (*pros heteron* at *Phys.* 190a35), the matter becomes still more complicated. When Sally sneezes near Larry, a man-in-the-room-where-Sally-sneezes comes into existence and then perishes in an instant. The man with this short life span is not Larry, for Larry has a long life span and both pre-exists and post-dates the man in question.<sup>52</sup>

<sup>&</sup>lt;sup>52</sup> Shields (1999), 159.

The thought that when we admit accidental unities into our ontology there are simply too many entities is a representative one. What is so peculiar about taking accidental unities seriously, according to Shields and others, is that the existence of accidental unities entails that new women, new children, etc., are coming into, and going out of, existence far too often.

To be sure, Shields is right that it is false that the number of women changes when Sarah stands, and that it is false that the number of children changes when Warren stops yawning. And generally, it would be bizarre if taking accidental unities seriously had these entailments. But on my approach, it doesn't. When a seated woman stands, no new woman comes into existence, for Sarah and standing Sarah are the same woman, and Sarah did not come into existence at the same time as her standing. Nor is a non-yawning child born when the yawning child ceases from yawning — Warren is the same child as yawning Warren and as non-yawning Warren. Now, Warren lived through the night, so no new child comes to be or passes away when, just after midnight, he stirs, yawns, and goes back to sleep. There are no new women or new children in either of these cases.

Dancy argues against there being accidental unities along the same lines:

A substance, a quality, and a quantity are just plain different, no holds barred. But a substance, a quale, and a quantum are formally distinct; in particular cases they might be numerically one. For the most part, the last point is not relevant; it becomes relevant only when some sophist produces confusion by ignoring it, and argues, say, that the census-taker must note down two citizens, Callias and Callias educated [i.e. cultured Callias].<sup>53</sup>

Again there is the concern that Aristotle's ontology would be vitiated with counting errors if it included accidental unities. It really would be startling if one who counts human beings were supposed to jot down both Callias and cultured Callias. But this is no problem for Aristotle's

<sup>&</sup>lt;sup>53</sup> Dancy (1975), 368.

commitment to accidental unities as I understand it. Callias and cultured Callias are the same man, and so there would be no problem with the census-taker's record.<sup>54</sup>

We cannot do away, then, with accidental unities on the basis of the ontological issues raised above. It might be that the resulting ontology is not as parsimonious as philosopers today would prefer, but this difference doesn't reveal an incoherence on the part of Aristotle. Rather, it simply shows that, for him, the world has an additional level of grain to it that a focus on substances might have otherwise obscured.

<sup>&</sup>lt;sup>54</sup> Lewis (1982, 22-23) responds to Dancy's objection as well, but in a different way than I do. Lewis argues that "at those times when Socrates exists, but is no longer pale, the census-taker still records one citizen, Socrates. But he does not count Socrates + pale, for Socrates is not pale, so that Socrates + pale does not exist." The debate concerns Socrates when he is pale, however — certainly Dancy would simply ask "whatever skin tone belongs to Socrates when the census-taker arrives, does the census-taker record that skin toned Socrates?" Better, then, to take on board that Socrates and tan Socrates are the same man etc.

# **Bibliography**

Bailey, D.T.J. (2012) "Megaric Metaphysics." Ancient Philosophy, Vol. 32, No. 2.

Barnes, J. (1979) "Review: Substance, Body and Soul." Philosophical Books, Vol. 20.

—. (1984) The Complete Works of Aristotle, The Revised Oxford Translation, Vol. 2. Princeton, NJ: Princeton University Press.

Bostock, D. (2003) Aristotle: Metaphysics Books Z and H. Oxford: Clarendon Press.

Bowin, J. (2008) "Aristotle on Identity and Persistence." Apeiron, Vol. 41, No. 1.

Charlton, W. (1970) Aristotle: Physics Books I and II. Oxford: Clarendon Press.

Code, A. (1976) "Aristotle's Response to Quine's Objections to Modal Logic." *Journal of Philosophical Logic*, Vol. 5, No. 2.

Cohen, S. Marc. (2008) "Kooky Objects Revisited: Aristotle's Ontology." *Metaphilosophy*, Vol. 39, No. 1.

Dancy, R. (1975) "On Some of Aristotle's First Thoughts About Substances." *The Philosophical Review*, Vol. 84, No. 3.

Denyer, N. (1991) Language, Thought and Falsehood in Ancient Greek Philosophy. New York: Routledge.

Forster, E.S. (1960) Aristotle: Topica. Cambridge, MA: Harvard University Press.

Frede, M. (1987) "Individuals in Aristotle." In *Essays in Ancient Philosophy*. Minneapolis, MN: University of Minnesota Press.

Geach, P.T. (1967) "Identity." Review of Metaphysics, Vol. 21, No. 1.

—. (1980) Reference and Generality. Ithaca, NY: Cornell University Press.

Hennig, B. (2017) "The man without properties." Synthese, Vol. 194, No. 6.

Huismann, T. (2016) "Aristotle on Accidental Causation." *Journal of the American Philosophical Association*, Vol. 2, No. 4.

Irwin, T. (1988) Aristotle's First Principles. Oxford: Clarendon Press.

Irwin, T. and Fine, G. (1995) Aristotle: Selections. Indianapolis, IN: Hackett Publishing Company.

Kirwan, C. (1971) Aristotle: Metaphysics, Books Γ, Δ, and E. Oxford: Clarendon Press.

Lewis, F. (1982) "Accidental Sameness in Aristotle." Philosophical Studies, Vol. 42, No. 1.

—. (1991) Substance and Predication in Aristotle. Cambridge: Cambridge University Press.

Matthews, G. (1982) "Accidental Unities." In *Language and Logos*, ed. M. Schofield and M. Nussbaum. Cambridge: Cambridge University Press.

Miller, F. (1973) "Did Aristotle have the Concept of Identity?" The Philosophical Review, Vol. 82, No. 4.

Nabokov, V. (1961) Nikolai Gogol. New York: New Directions Publishing Company.

Pelletier, F.J. (1979) "Sameness and Referential Opacity in Aristotle." Nous, Vol. 13, No. 3.

Peramatzis, M. (2011) Priority in Aristotle's Metaphysics. Oxford: Oxford University Press.

Peterson, S. (1985) "Substitution in Aristotelian Technical Contexts." *Philosophical Studies*, Vol. 47, No. 2.

Ross, W.D. (1924) Aristotle's Metaphysics: a Revised Text with Commentary and Translation. Volume 1. Oxford: Oxford University Press.

Schofield, M. (1996) "Likeness and Likenesses in the *Parmenides*." In *Form and Argument in Late Plato*, ed. C. Gill and M.M. McCabe. Oxford: Clarendon Press.

Shields, C.J. (1999) Order in Multiplicity: Homonymy in the Philosophy of Aristotle. Oxford: Clarendon Press.

—. (2012) "Being qua Being." In *The Oxford Handbook of Aristotle*, ed. C.J. Shields. Oxford: Oxford University Press.

Smith, R. (1997) Aristotle: Topics, Books I and VIII. Oxford: Clarendon Press.

Sorabji, R. (1980) Necessity, Cause and Blame: Perspectives on Aristotle's Theory. Ithaca, NY: Cornell University Press.

Spellman, L. (1990) "Referential Opacity in Aristotle." History of Philosophy Quarterly, Vol. 7, No. 1.

Rosen, J. (2012) "Motion and Change in Aristotle's Physics 5.1." Phronesis, Vol. 57, No. 1.

Weiner, S.F. (2012) "Aristotle's Metaphysics V 7 Revisited." Apeiron, Vol. 48, No. 4.

White, N. (1971) "Sameness and Oneness." The Philosophical Review, Vol. 80, No. 2.

White, N. (1986) "Identity, Modal Individuation, and Matter in Aristotle." *Midwest Studies in Philosophy*, Vol. 11, No. 1.

Wiggins, D. (1967) Identity and Spatio-Temporal Continuity. Oxford: Basil Blackwell.

Williams, C.J.F. (1985) "Aristotle's Theory of Descriptions." The Philosophical Review, Vol. 94, No. 1.