

## Iγ1: the senses of being and the causes of being

### Iγ1c Δ7 and the many senses of being

Metaphysics Δ7 is clearly important. As we saw in Iγ1a, it structures the overall argument of Metaphysics EZHΘ; and even if all the references back to Δ7 were intrusions by Peripatetic editors, Δ7 would still be the only text where Aristotle systematically assembles and distinguishes all the meanings of being. And yet remarkably little has been done with the chapter--there are, for instance, no systematic discussions of it in two books with promising titles, Owens' The Doctrine of Being in the Aristotelian Metaphysics and Aubenque's Le problème de l'être chez Aristote.<sup>1</sup> The reasons are, presumably, that the chapter seems too abbreviated, and gives too little justification or explanation for the ways that it is cutting up the senses of being. But it is important to try to tease out the reasons that Aristotle is presupposing.

The senses of being that Aristotle distinguishes in Δ7 do not seem to fit neatly either with each other or with the senses that Aristotle distinguishes elsewhere, or with the senses that we might ourselves want to distinguish. A reader who has been reading continuously through the Metaphysics, and who has thus read the account of the many senses of being in Γ2, might well expect Δ7 to be about the different senses of being corresponding to the different categories. Instead, the primary division is into four: being per accidens, being as said of the categories, being as truth and being as actuality and potentiality; the division of senses of being according to the categories would be merely a subdivision of the second main sense. It is not at all clear how these different divisions are supposed to fit together. Being per accidens is described at 1017a7-22, and contrasted with being per se (1017a7-8 and again a19-23), as if these would be the only two senses of being, and then it is said that "however many things are signified by the figures of predication are said to be per se" (1017a22-3). This seems to say that being per se is just being as said of the categories. But then "being [εἴναι] and 'is' also signify that [something is] true" (1017a31), and "being also signifies what is, on the one hand potentially [δυνάμει], on the other hand actually [ἐντελεχείᾳ], [any] of the aforementioned [kinds of being]" (1017a35-b2): are these further senses of being neither per se nor per accidens? (We might also find it strange that being per se has as many senses as there are categories, since Posterior Analytics I,4 says that substances have being per se and accidents do not.) Again, it often seems as if the same instance of being will fall under several different senses of those distinguished in Δ7. Perhaps it is innocuous enough if the being asserted by (say) "Socrates is white" falls both under being-as-

<sup>1</sup>Franz Brentano in another book with a promising title, although his list of topics is taken from Δ7 (he goes through each of its four senses of being, although he's mainly interested in the categorial senses), doesn't give a connected exegesis of the chapter, and it's hard to extract his answers to some of the basic questions I'll raise about the chapter. There are more extended discussions in Suzanne Mansion's Le jugement d'existence chez Aristote and in two recent books, Allan Bäck's Aristotle's Theory of Predication (Leiden, 2000), pp.62-87 and L.M. De Rijk's Aristotle: Semantics and Ontology (Leiden, 2002), v.2 esp. pp.108-16 and pp.136-9. There is also a very stimulating short article by Ernst Tugendhat, "Über den Sinn der vierfachen Unterscheidung des Seins bei Aristoteles (Metaphysik Δ7)," collected in his Philosophische Aufsätze (Frankfurt, 1992), pp.136-44 {originally published in N.W. Bolz and W. Hübner, eds., Spiegel und Gleichnis, Würzburg, 1983, pp.49-54}. Of course, much has been written on Aristotle on being, in particular on the relation between 1-place and 2-place uses of being, which makes use of or has implications for Δ7: maybe list some of the most important (Owen, various Kahn, Matthen, Lesley Brown, David Charles). There are also some very interesting medieval discussions inspired in one way or another by Δ7, of which the most important is Fârâbî's in the Kitâb al-Hurûf, on which see my article "Fârâbî's Kitâb al-Hurûf and his Analysis of the Senses of Being," Arabic Sciences and Philosophy, v.18, n.1, March 2008, pp.59-97; I intend to discuss this medieval history in a further monograph.

quality and under being-as-actuality; the ten categories and actuality and potentiality might combine to give a 10x2 grid of senses of being. But it is more disturbing that Aristotle gives "the man is musical" to illustrate being per accidens, "Socrates is musical" to illustrate being as truth, and (apparently) "[a] man is healthy" to illustrate categorial being--what is the difference supposed to be? Aristotle causes similar trouble when, in describing being per accidens, he says that "in this way even the not-white is said to be, since that to which it happens [συμβέβηκε] is" (1017a18-19), and then later gives "Socrates is not white" to illustrate being as truth. At best the examples do not seem well-chosen; at worst, they call into question whether Aristotle had clearly distinguished the senses of being that they are supposed to illustrate.

### 1-place and 2-place being

Beyond these obvious difficulties there is a deeper difficulty which must be resolved if there is to be hope of restoring order to the distinctions of  $\Delta 7$ . This difficulty arises from distinctions Aristotle does not draw in  $\Delta 7$ , and can most easily be introduced by contrasting Aristotle's with modern distinctions of the senses of being. Since Frege and Russell, we standardly distinguish at least three senses of being, namely existence ("F is" or "there is an F," represented in logical notation as " $\exists x Fx$ "), predication ("c is F," represented as " $Fc$ "), and identity ("c is d," represented as " $c = d$ "); we might also distinguish other less fundamental senses of being such as class-inclusion ("F is G," represented as " $\forall x (Fx \rightarrow Gx)$ ").  $\Delta 7$  pays no attention to these distinctions, and draws others that cut across them. Is this because Aristotle is, for better or worse, not "sophisticated" enough to draw Frege's or Russell's distinctions? The answer depends on which distinctions we mean. The modern distinctions between predication, identity, and class-inclusion depend on distinguishing (in Frege's terms) concepts from objects. That is, we say that "whales are mammals" cannot have "whales" as its logical subject, because "whale" is not an object-word but a concept-word, and so we reanalyze the sentence so that both "whale" and "mammal" appear in predicate-position, " $\forall x ((x \text{ is a whale}) \rightarrow (x \text{ is a mammal}))$ ." Likewise, we say that "Hesperus is Phosphorus" cannot have "Phosphorus" as its logical predicate, because "Phosphorus" is not a concept-word but an object-word, so we analyze the sentence instead as "Hesperus = Phosphorus," where "=" is a 2-place predicate-term and "Hesperus" and "Phosphorus" fill its two argument-slots (and where we perhaps further analyze the sentence, using second-order quantification, as " $\forall F ((Hesperus \text{ is } F) \leftrightarrow (Phosphorus \text{ is } F))$ "). This is not something that we can expect Aristotle, without the concept-object distinction, to do: he takes "whales are mammals" and "Hesperus is Phosphorus" as simple predicative sentences, perhaps peculiar predications because the predicates are in the category of substance, but predications nonetheless. For the same reason, we cannot expect Aristotle to recognize that existence is a second-order predicate, a predicate of concepts rather than of objects. However, the distinction between existence, as a 1-place kind of being, and all the others, as 2-place kinds of being, is obvious enough and does not depend on modern theories.<sup>2</sup> But Aristotle never flags this

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<sup>2</sup>I will sometimes say existential vs. predicative being, equivalently with 1-place vs. 2-place being. "predicative" here must be taken broadly, to include identity and class-inclusion (or the subsumption of a species under a genus, which we may not want to take purely extensionally as class-inclusion). Lesley Brown claims that Aristotle has no in principle uncompletable 1-place sense of being, in other words that "F is" is always completable to "F is G" for some value of G (as "Jane teaches" is always completable to "Jane teaches French," "Jane teaches biology," or the like), and therefore that translating 1-place "F is" by "F exists" is misleading, because the English verb "exist" is uncompletable. I think Brown is wrong about Aristotle's semantics for 1-place being, but nothing I have said so far is intended to decide that issue; someone who agrees with Brown should not object to my use of "existential being." existential being is just 1-place being, whatever its semantics may be

distinction in giving what we might expect to be a full account of the different senses of being in Δ7. The large majority of his examples in Δ7 are of 2-place being, plus the "locative" assertion "Hermes [or: a herm] is in the stone" (1017b7) under being-as-potentiality; but the immediately following example "the half of the line [is]" (1017b7-8) seems to be 1-place being, and likewise under being per accidens, "in this way even the not-white is said to be, because what it belongs [συμβέβηκε] to is" (1017a18-19). And yet Aristotle seems to call no attention at all to this difference. Some scholars have tried to deny that Aristotle is aware of a distinction between existential and predicative senses of being,<sup>3</sup> but this is untenable in view of Posterior Analytics II,1, which clearly distinguishes the 2-place object of investigation "ὅτι"--"e.g. whether the sun [is] eclipsed or not" (89b26)--from the 1-place object of investigation "εἰ ἔστι": "e.g. whether a centaur or a god is or is not: I mean 'whether [it] is or is not' simpliciter, not whether [it] is white or not" (89b32-3). But although Aristotle draws the distinction here, he ignores it in Δ7. This is therefore a real problem, and not just an illusory problem generated by our habituation to modern logical distinctions.<sup>4</sup>

Of course, the problem could be solved if some of the distinctions in Δ7 did turn out to line up with the 1-place/2-place distinction. G.E.L. Owen thought that they did: he proposed that "being per se" in Δ7 corresponds to being in the sense of existence, which would then be divided into different senses of existence when applied to beings in different categories;<sup>5</sup> being per accidens would then be 2-place being, or a particular kind of 2-place being.<sup>6</sup> By contrast, Ross and Suzanne Mansion take both being per accidens and being per se in Δ7 to be kinds of 2-place being--being per accidens when the predicate is not essential to (i.e. not part of the definition of) the subject, and being per se when the predicate is essential to the subject. Both the Owen interpretation and the Ross-Mansion interpretation would have the pleasant result that "the man is musical," cited by Aristotle as an example of being per accidens, would not also be an example of being per se (it would still inescapably be an example of being as truth, and presumably also of being as actuality). Unfortunately, both the Owen and the Ross-Mansion interpretations are impossible. What Δ7 says about being per se is as follows:

However many things are signified by the figures of predication [τὰ σχήματα τῆς κατηγορίας = categories] are said to be per se: for in however many ways they [= the figures of predication] are said, in so many ways does "being" [τὸ εἶναι] signify. So, since some predicates signify what [the subject] is [τί ἔστι σημαίνει], others what it is like [ποιόν], others how much, others πρός τι, others action or

<sup>3</sup>who? Gilson; can Kahn be cited for this? Brown thinks something almost like this, but not quite

<sup>44</sup>This contrast between Δ7 and Posterior Analytics II is correctly noted by Suzanne Mansion, Le jugement d'existence chez Aristote, p.218 and p.243. Mansion apparently thinks that the senses of being distinguished in Δ7 are exclusively senses of 2-place being, and this is wrong, but she is right that none of the distinctions he draws there are distinctions between 1-place and 2-place being, and that this should be surprising given Posterior Analytics II. Lesley Brown, in "The verb 'to be' in Greek philosophy: some remarks" (in Companions to Ancient Thought: 3, Language, ed. Stephen Everson, pp.212-36), pp.233-6, notes both that Aristotle draws the existential-predicative distinction in the Posterior Analytics and that he does not do so in Δ7, and also sees that the distinctions he does draw in Δ7 crosscut with the existential-predicative distinction, but she wrongly concludes that Aristotle regards the existential-predicative distinction as unimportant.

<sup>5</sup>"Aristotle on the Snares of Ontology," LSD pp.260-1 and pp.268-9, some doubts creeping in in the latter passage. Owen is apparently followed by Kirwan pp.140-143

<sup>6</sup>Owen's support would be De Interpretatione c11 21a25-33, where "is" is said of Homer per accidens because he is a poet. But even if being per se and per accidens here mean 1-place and 2-place being (which I doubt--he seems to be worrying here about amplified vs. non-amplified senses of "is" rather than about 1-place vs. 2-place senses, cf. Brown pp.233-4), this interpretation as applied to Δ7 cannot make sense of the text.

passion, and others where or when,<sup>7</sup> "being" [τὸ εἶναι] signifies the same as each of these: for there is no difference between "[a] man is healthy [ἀνθρωπος ὑγιαίνων ἐστίν]" and "[a] man is-healthy [ἀνθρωπος ὑγιαίνει]" or between "[a] man is walking" or "cutting" and "[a] man walks" or "cuts," and likewise in the other cases. (1017a22-30)<sup>8</sup>

Against Owen, all of the expressions using the verb "to be" that Aristotle is considering in the second sentence ("So, since some predicates ... and likewise in the other cases") are 2-place uses of "to be"; against Ross and Mansion, all of these expressions except those corresponding to the category of substance are accidental predication, in the sense that the predicate is not contained in the essence of the subject. When Aristotle says in the first sentence that "however many things are signified by the figures of predication are said to be per se," he seems to mean that substance, quality, quantity and so on are said to be per se, and so he seems to want to include some 1-place uses of "to be" under being per se. But there is no correlation between the 1-place/2-place distinction and the per se/per accidens distinction: not only does being per se cover some 2-place examples, but being per accidens covers some 1-place examples--as we have seen, Aristotle says in describing being per accidens that "in this way even the not-white is said to be, since that to which it happens [συμβέβηκε] is" (1017a18-19), and Z4 will say that substance-accident composites (like white man) do not have being per se (1029b22-9).

A further point is that neither the Owen interpretation nor the Ross-Mansion interpretation can explain why being per se is said in as many different ways as there are categories. If Ross and Mansion were right, being per se would be expressed by sentences like "the horse is an animal," "courage is a virtue," "cutting is an action"--and "is" signifies the same thing in all of these sentences, namely the τι ἐστί.<sup>9</sup> If Owen were right, Aristotle would be saying that "is" or "exists" is said in different ways in "Socrates exists" and "courage exists" (or perhaps "the courageous [person] exists"). Aristotle might well be saying this, since he certainly believes it, but he is also supposed to be explaining the grounds for this belief, and the explanation he gives concerns the difference in the meanings of "is" in "[a] man is healthy" and "[a] man is cutting." Since Aristotle is explaining the equivocity of being per se, he must at least inter alia be talking about the equivocity of 2-place being with a substantial subject and a not-necessarily-substantial predicate. If he is also explaining the equivocity of 1-place being as said of subjects in different categories (and I agree with Owen that he is), then he must somehow intend the equivocity of 2-place being to explain the equivocity of 1-place being as well; and it will be important for us to spell out how.

It may help to first step back from Δ7 and give a few general reflections on Aristotle's attitude to 1-place and 2-place uses of "to be."<sup>10</sup> Although Aristotle is perfectly capable of distinguishing these uses, he also frequently groups them together: thus when Aristotle discusses whether "it is possible for the same thing both to be and not to be" (as at Γ4 1005b35-1006a1), this "is" meant to comprehend both existential and predicative states of affairs--that is, it prohibits a thing existing as well as not existing, and equally it prohibits a thing being both F and not-F for any value of

<sup>7</sup>query about ποιόν, ποῖον, ὄποιον. also funny to say signifying πρός τι [ἐστι?], since a relative term (e.g. "double") doesn't signify what the thing is related to. it may be that all these expressions are frozen and that it's pointless to try to construe them more precisely, but it may be worth asking

<sup>8</sup>textual issues, all small:

<sup>9</sup>this point made effectively by Tugendhat, p.138

<sup>10</sup>in some of this I will follow the lead of Mohan Matthen, "Greek Ontology and the 'Is' of Truth," Phronesis v.28 (1983), pp.113-35. I have some disagreements with Matthen, but his article is a model of lucidity in a field dominated by murk

'F'" (Matthen p.113). Even in Posterior Analytics II, where Aristotle most consistently distinguishes 1-place and 2-place being, he still treats them as analogous: investigating *tí ἔστι* is seeking the cause of the state-of-affairs *εἰ ἔστι*, as investigating the *διότι* is seeking the cause of the state-of-affairs *ὅτι*. Indeed, it is more than an analogy. "In all of these cases,<sup>11</sup> it is clear that *tí ἔστι* and *διὰ τí ἔστι* are the same. What is an eclipse? The privation of light from the moon due to blocking by the earth. Why is [there] an eclipse, or why is the moon eclipsed [*διὰ τí ἔστιν ἔκλειψις, ἢ διὰ τí ἔκλείπει ἡ σελήνη*]? Because the light departs when the earth blocks it" (Post. An. II,2 90a14-18). This kind of equivalence depends on our ability to transform assertions of 1-place being into assertions of 2-place being (or into predicative assertions, like *ἔκλείπει ἡ σελήνη*, which can be further transformed to assert 2-place being, *ἡ σελήνη ἔστι ἔκλείπουσα*), and vice versa. We have already seen something of Aristotle's techniques of transformation in the case of non-substances. Because "walking" [*βαδίζον*] is not a substance and is said of some other *ὑποκείμενον*, "the walking [thing], being something else, is walking [*τὸ βαδίζον ἔτερόν τι ὃν βαδίζον ἔστι*]" (Post. An. I,4 73b6-7, discussed Iβ4 above). Thus for [a] walking [thing] to exist is for something else to exist and to be walking; for white to exist is for something else to exist and to be white. Likewise for abstract terms: for [a] whiteness to exist is for something else to exist and to be (not whiteness but) white ("when the man is-healthy, then health too exists," against the Platonist claim that the form exists before the composite, Metaphysics Α3 1070a22-3). We can put this by saying that, at least when F is a non-substance, Aristotle (like Frege and Russell) analyzes "F exists" as "for some x, x is F"--although it might be better to avoid the word "analysis" and speak merely of a necessary equivalence.<sup>12</sup>

Starting from this point, further transformations are possible. If F is per se predicated of some *ὑποκείμενον*, i.e. if there is only one subject, or only one range of subjects, that can possibly be F, then in rewriting "F exists" as "for some x, x is F," we do not have to quantify without restriction over all beings x, but can restrict ourselves to the relevant range of beings, or to the relevant single being. Thus [a] walking [thing] exists iff some animal exists and is walking; an eclipse exists iff the moon exists and is eclipsed;<sup>13</sup> white Socrates exists iff Socrates exists and is white Socrates. And the last case obviously allows a further transformation--white Socrates exists iff Socrates exists and is white--eliminating whatever part of the predicate F may be redundant once the subject x is restricted to the relevant range of beings (or, as in this case, to the relevant single being). As Aristotle says in the Metaphysics Δ6 account of unity per accidens, "it is the same to say that Coriscus and the musical are one and that musical Coriscus [is one]"

<sup>11</sup>grammatically unclear whether this means just non-substances or includes substances too. as Barnes notes, further down (90a31-4) Aristotle states the same equivalence for all cases including substances. he may mean here that the equivalence is clearer in non-substance cases (which would be true), although in his own view it holds equally for both

<sup>12</sup>I will suggest some caveats and refinements below, but this is a first approximation. for a example of the confusions that seem to arise whenever people talk about whether a Greek philosopher had "a concept of existence," Tugendhat p.140 says that whenever Aristotle talks about being in a sense that comes close to our talk of existence, he is talking about a substance, and that whenever anything like existence is attributed to something in the other categories, it means only "daß es einem Ding zukommt, womit aber wieder die so verstandene Existenz in die Prädikation zurückgenommen wäre." but of course from a modern point of view  $\exists x Fx$  is exactly the logical form we want a judgment of existence to take

<sup>13</sup>or so Posterior Analytics II,2 would lead us to believe; of course there are solar eclipses too; so substitute "[a] lunar eclipse exists." it is surely not coincidental that Aristotle takes lunar eclipses as his example here, since the moon genuinely is the *ὑποκείμενον* in a lunar eclipse (the moon is objectively deprived of light, observer-independent), whereas the sun is not genuinely the *ὑποκείμενον* in a solar eclipse (which depends on the position of the observer). same point holds for Metaphysics H4 1044b8-15

(1015b18-19);<sup>14</sup> presumably the Δ7 account of being per accidens assumes a similar transformability, so that it will be the same to say that Coriscus is musical and that musical Coriscus is.<sup>15</sup> And we can use the same principle of transformability, instead of unpacking a 1-place assertion of being into a 2-place assertion, to pack a 2-place assertion of being (or any other predication) into a 1-place assertion of being. Thus something is white iff [a] white [thing] exists, or equivalently iff [a] whiteness exists; Socrates is white iff white Socrates exists, or equivalently iff Socrates' whiteness exists.

Aristotle also allows himself some further transformations, not all of which are as strictly justified. To begin with (and still strictly justified), Socrates is white iff [a] whiteness belongs [ὑπάρχει] to Socrates, or iff [a] whiteness is in Socrates. "[A] whiteness is in Socrates" or "there is in Socrates [a] whiteness" is what is sometimes called a "locative" or "locative-existential" use of εἰναι, and cannot be simply subsumed either under the "1-place" existential use or under the "2-place" predicative/copulative use.<sup>16</sup> Greek authors often pass very easily between pure existential and locative or locative-existential expressions. Thus "F exists" is often taken to be equivalent to "F exists somewhere" (and someone who says that F exists may be asked where it exists). Furthermore, in a given discourse context it may be assumed that when we ask whether F exists, we are asking whether it exists in some given locus L.<sup>17</sup> Contrary to a modern scholarly myth, it would be unusual Greek for someone to say "F is" elliptically for "F is G" (except where G has been cited immediately before--"Socrates is a criminal!" "He is not!"), but common enough to say "F is" elliptically for "F is in L." Thus the Dissoi Logoi say "the same man lives and does not live, and the same things are and are not: for the things that are here, in Libya are not, and the things that are in Libya are not in Cyprus; and the rest on the same pattern. So the things both are and are not" (DK90, 5.5)--this would support the myth<sup>18</sup> only if it said something like "the things that are white are not black, therefore the same things both are and are not." (To make the Dissoi Logoi argument sound less silly, let the "thing" be not an individual, but a species like the silphium-plant, which exists in Libya but does not exist in Athens, or the law against sacrificing one's children, which exists in Athens but does not exist in Libya: in these cases, we might in some contexts say "F does not exist," "there is no F," "there are no F's," when

<sup>14</sup>accepting, with Jaeger, Bonitz' conjecture ταῦτὸ γὰρ εἰτεῖν Κορίσκος καὶ τὸ μουσικὸν <ἐν> καὶ Κορίσκος μουσικός (supported by Alexander?); or perhaps the ἐν could simply be understood from context

<sup>15</sup>as noted in Iy2b, Δ7's account of being per accidens is meant to be smoothed for the reader by Δ6's account of unity per accidens, and this seems Aristotle's reason for putting Δ6 where it is, rather than with the closely related Δ9-10 (Iota takes up Δ6 and Δ9-10 together)--we might have expected a treatment first of being and what follows on being, then of unity and what follows on unity

<sup>16</sup>Kahn describes the "locative copula" as "the verb be construed with an adverb or prepositional phrase of place" (The Verb "Be" in Ancient Greek, p.157), e.g. "Socrates is here," "Socrates is in the house"; Kahn then distinguishes between "pure" locative uses of εἰναι and "paralocative" uses, i.e. "uses which are indistinguishable in form from the locative copula but where the meaning of the sentence is not primarily or exclusively locative" (p.159), of which the most important for our purposes is the "locative-existential," e.g. "in the middle of the crag is a dark cave." this is formally indistinguishable from the pure locative copula (except that the subject is usually postposed in the locative-existential, which it might or might not be in pure locative uses--in English we might often want to say "there is" in locative-existential contexts, just "is" in pure locative contexts, but there is no such lexical distinction in Greek), but it serves to introduce a new subject into the discourse: "there is, in L, an F; now let me tell you about that F." for all this see Kahn pp.156-67 and pp.261-77

<sup>17</sup>David Lewis gives a modern example: someone may say "there is no beer," meaning that there is no beer in the fridge, although there is certainly beer somewhere in the world; Lewis uses this to explain how he can say that there is no god, although he believes that there are uncountably many gods, because there is no god in the actual world, although there are gods in other equally real but non-actual worlds. reference? in On the Plurality of Worlds?

<sup>18</sup>as Myles Burnyeat claims it does in "Apology 30b2-4: Socrates, money, and the grammar of γίγνεσθαι", in the Journal of Hellenic Studies for 2003

we mean "F does not exist in L.") An equivalence between "F is" and "F is in L" is logically justified only where L is the only subject that is capable of being F--thus Aristotle accepts the equivalence between "[there] is [an] eclipse" and "[an] eclipse is in the moon." But even where there is no logical equivalence, there may be an equivalence in the meaning conveyed by "F is" and "F is in L" in some discourse contexts; and this may help to explain some oddities in  $\Delta 7$ .

To return to  $\Delta 7$ . It is clear that Aristotle's distinction here between being per accidens and being per se cannot be lined up with the distinction between predicative and existential being. He feels free to transform 1-place into 2-place uses of  $\epsilon i\nu o i$  and back again in illustrating either of these senses of being.<sup>19</sup> While he is aware that  $\epsilon i\nu o i$  has different uses in different syntactic contexts, he is not trying to collect those different uses in  $\Delta 7$ . (There are some uses that he entirely fails to mention, e.g. "potential" uses such as " $\epsilon \sigma t i$  V-infinitive" = "it is possible to V" or " $\epsilon \sigma t i$  S-dative V-infinitive" = "it is possible for S to V.") His interest is not primarily in the verb "to be" but in the things that are. Furthermore, the reason why he is interested in the things that are is that he wants to discover the causes, to the things that are, of the fact that they are, and to do this he needs to distinguish different senses of the fact that they are, whose causes we might seek. For this purpose he does not need to distinguish between causes of the fact that X exists and causes of the fact that Y is Z; as we have seen from Posterior Analytics II, he thinks that causes of either type can be reexpressed as causes of the other type. This does not mean that the distinction between 1-place and 2-place being is simply irrelevant. In setting out the program of seeking the  $\alpha p x a i$  as causes of being--as  $\Gamma 1$  does--it seems advantageous to describe them as causes of 1-place being (and this is certainly how  $\Gamma 1$  seems to be thinking of them). This would include not only causes to Socrates of the fact that he is, but causes to the whiteness of Socrates of the fact that it is, and causes to white Socrates of the fact that he is; but the  $\alpha p x a i$  will be found as causes of what is primary, as causes of substances rather than of accidents or substance-accident compounds, and so in fact Aristotle will only need to consider causes to substances of the fact that they are. On the other hand, once we are seeking the cause, to X, of the fact that it is, we may well find it advantageous to transform this into a search for a cause of 2-place being. If Y is the per se  $\nu \pi o k e i \mu e v o$  of X, we can transform the question "why does X exist" into the question "why is Y X," or, by eliminating redundancies, into a question "why is Y Z" (from "why does white Socrates exist" through "why is Socrates white Socrates" to "why is Socrates white," from "why does the snub exist" through "why is a nose snub" to "why is a nose concave," from "why is there an eclipse" through "why is the moon eclipsed" to "why is the moon deprived of light"). And indeed Metaphysics Z17, relying on Posterior Analytics II, recommends just such a transformation of a search for causes of 1-place being into a search for causes of 2-place being. But this investigation, whether framed in terms of 1-place or of 2-place being, could be carried out in different ways, corresponding to the different senses of being distinguished in  $\Delta 7$ . Some of these ways Aristotle mentions only because he wants to dismiss them; others are more promising.

### Being per accidens: $\Delta 7$ and E2-3

Aristotle starts with being per accidens, in conformity with his method on unity ( $\Delta 6$ ) and sameness ( $\Delta 9$ ). Being per accidens will not itself have any scientifically useful causes, but since

<sup>19</sup>it is worth noting that many medieval readers seem to treat all four senses as if they were senses of 1-place being. the first three senses are often arranged from broadest to strictest: most broadly being as truth, which applies to even to entia rationis such as negations; then real being, including real per accidens beings like white Socrates; then real per se being (then, even more narrowly, substance)

it is always parasitic on being per se, it will lead us on to consider the type of being that does have scientifically useful causes.

What is is said per accidens and per se: per accidens, in the way that we say that [3] the just [person] is musical and [1] the man [is] musical and [2] the musical [is a] man, speaking in close to the same way as if<sup>20</sup> [we were saying] that the musical [person] housebuilds because it happens [συμβέβηκε] to the housebuilder that he is musical or to the musical [person] that he is a housebuilder (for that this is this signifies that this happens to this). So too in the aforesaid cases: for<sup>21</sup> when we say [1] that the man [is] musical and [2] that the musical [is a] man, or [3] that the white [person is] musical or that the latter [is] white, [this is] in the one case [3] because they both happen to the same thing-that-is,<sup>22</sup> in another case [1] because it happens to the thing-that-is, and [2] that the musical [is a] man because musical happens to him (and in this way even the not-white<sup>23</sup> is said to be, since that to which<sup>24</sup> it happens is.) So the things that are said per accidens to be are so said, either [3] because they both belong [ὑπάρχει] to the same thing-that-is, or [1] because this belongs to a thing-that-is,<sup>25</sup> or [2] because this is what what it is predicated of belongs to. (1017a7-22)

While there are many difficulties in this passage, some things are clear. Aristotle starts from the per accidens application of verbal predicates like "housebuilds," and, by rewriting "the musician housebuilds" as "the musician is a housebuilder," infers that  $\varepsilon\iota\omega\iota$ , in its 2-place use, can also be applied per accidens. Undoubtedly he thinks it also follows, without his needing to say so, that musical housebuilder has 1-place being per accidens. So far this is what we would expect; what may be surprising is how broad a range of predication he is willing to describe as asserting being per accidens. We expect what I have marked as type [3] predication, like "the white is musical"; also the type [2] predication "the musical is [a] man" is a per accidens predication as described in Posterior Analytics I,22 ("when I say that the white is wood, I mean that that to which it happens to be white is wood, not that the  $\omega\kappa\omega\kappa\mu\epsilon\nu\omega\omega$  of wood is the white: for it is not the case that, being white or being some white thing, it became wood, so that also it is not wood except per accidens," 83a5-9). However, the type [1] predication "the man is musical" is exactly the type that Posterior Analytics I,22 describes as predication simpliciter and contrasts with being per accidens; and it seems that  $\Delta 7$  itself will a few lines further down describe predication like "the man is musical" as asserting per se or categorial being (1017a27-30). So why does Aristotle describe it here as asserting being per accidens?

The answer becomes clearer if we regard the distinction in senses of being as subordinated to an inquiry into the causes of being. We may start with a case like "the musician is a housebuilder," the type of predication that is most clearly per accidens. As Aristotle will argue in E2, this kind of being has no determinate cause. There is a cause of someone's being a musician,

<sup>20</sup>whether ὡσπερ EJ Bonitz or ὡσπερει A<sup>b</sup> Ross Jaeger makes no difference

<sup>21</sup>reading ἐπὶ τῶν εἰρημένων τὸν γὰρ ἄνθρωπον with A<sup>b</sup> Ross Jaeger; but EJ Bonitz ἐπὶ τῶν εἰρημένων τὸν ἄνθρωπον is also possible

<sup>22</sup>reading τῷ αὐτῷ ὄντι with A<sup>b</sup> (Translatio Media? William?), against τῷ αὐτῷ EJ (Alex, Asc?) Bonitz Ross Jaeger (if William disagrees with J, this is unusual--check Vuillemin-Diem)

<sup>23</sup>reading τὸ μὴ λευκόν A<sup>b</sup> Bonitz Ross Jaeger against τὸ λευκόν EJ. Alexander clearly has the negative

<sup>24</sup>or "he to whom" if we read ἐκεῖνος EJ (E corrects this to ἐκεῖνο) rather than ἐκεῖνο A<sup>b</sup> Bonitz Ross Jaeger

<sup>25</sup>reading the lectio difficilior ὄντι ἐκεῖνο ὑπάρχει with A<sup>b</sup> (Translatio Media? William? d check) Jaeger rather than ὄντι ἐκείνῳ ὑπάρχει EJ Bonitz Ross (is this right?)

and there is a cause of someone's being a housebuilder, but there is no further cause that explains why these two chains of causality should converge to produce a musician-housebuilder. It simply happens that in this particular case they converge, and the vain search for a cause of this "happening" gives rise to the notion of chance [τύχη] as a cause "unmanifest to human thought, as being something divine and more daimonic" (*Physics* II,4 196b5-7), a notion which Aristotle carefully deconstructs in his treatment of chance and spontaneity in *Physics* II,4-6.<sup>26</sup> Because Aristotle thinks that this kind of causal inquiry leads to no science, he wants to distinguish being per accidens at the outset, in order to set it aside and to help sharpen the concepts of the kinds of being that will have scientifically useful causes. It is less clear that this concept of being per accidens should also cover the cases of "the man is musical" and "the musical is a man." But, as Δ7 points out, both of these predication hold good only because one thing "happens" [συμβέβηκε] to another; and such "happening" has no determinate cause. "Accident" or "what happens" [συμβεβηκός] gets its own chapter, Δ30, in explication of Δ7 and in preparation for E2-3. The chapter begins from the *Physics* II kinds of examples of chance (someone is digging a trench around a plant and hits buried treasure), but extracts from these examples something more general: an accident is "what belongs [ὑπάρχει] to something and is true to say [of it], but neither of necessity nor for the most part" (Δ30 1025a14-15), which includes "the musician is white" and every other case where Y belongs to [an] X but not because it is X (a19-24); "so there is no determinate cause of an accident, but rather what chances [τὸ τυχόν]: and this is indeterminate" (a24-5). (Presumably if X is Y for the most part, then something's being X is a cause of its being Y, but a cause that could be obstructed by other causes.) It is this idea from *Physics* II which Aristotle will build on in his brief and negative account of the causes of being per accidens in *Metaphysics* E2-3; and the function of Δ7's discussion of being per accidens, and of Δ30, is just to lead to that negative account, and to focus attention instead on the causes of being per se. A predication like "the man is musical," to the extent that it expresses a conjunction of two things, and to the extent that this conjunction has no determinate causes beyond the causes of each of the two things, will express being per accidens, the kind of being that we are discouraged from investigating. But there is no reason why the same sentence "the man is musical" should not also express being per se, inasmuch as man is the per se ὑποκείμενον of musical, and to this extent it is has a per se cause: since nothing except a human being can be musical (in the relevant sense), the essence what-it-is-to-be-musical, in being a cause of anything's being musical, will also be a cause of a human being's being musical. What is accidental, and has no per se cause, is the conjunction of this essence with a ὑποκείμενον specified in some other way--the particular human being Socrates, or whoever makes "the man is musical" true.

Aristotle takes up the causal questions about being per accidens in *Metaphysics* E2-3. The main account is in E2; E3 is formally a digression (to be skipped in a shorter version), a response to an objection to the account of E2.<sup>27</sup> E2 starts by briefly recalling Δ7's four senses of being (1026a33-b2), and then devotes itself to dismissing being per accidens, in the first place by arguing for the thesis that "no ἐπιστήμη, whether practical or productive or theoretical [= the three types distinguished in E1], is concerned with it [sc. what is per accidens]" (1026b4-5), and therefore in particular that wisdom will not be concerned with it. To say that a productive ἐπιστήμη (an art) is not concerned with what is per accidens seems to come to much the same as

<sup>26</sup>cp. Evans-Prichard *Witchcraft, Magic and Oracles among the Azande* on why the granary falls at the moment when this man is sitting under it. Aristotle's reason for giving separate treatments of chance and of spontaneity is not that there is any intrinsic difference between them, but simply that some people, wrongly, treat chance as if it were a special more divine causality

<sup>27</sup>clear from the first sentence of E4, picking up from the last sentence of E2

saying that it does not produce what is per accidens: the art of housebuilding (or the housebuilder, acting qua housebuilder) makes a house, and perhaps it makes a wooden house or a two-story house, but it does not also produce all the things which hold per accidens of the house, e.g. that it is "pleasant to some, harmful to others, beneficial to yet others, and other than almost everything" (1026b7-9): rather, it just produces the house, and these are merely byproducts which also exist when the house exists. And this example from productive  $\epsilon\pi\sigma\tau\mu\eta$  is supposed to lead to a deeper and more general reflection. The things that hold per accidens of the house are not produced--they are not produced by the art, and what else would they be produced by?--and this is equivalent to saying that they do not come-to-be, since what is  $\pi\sigma\eta\sigma\varsigma$  from the point of view of the agent is  $\gamma\epsilon\nu\sigma\varsigma$  from the point of view of the patient. And the fact that beings per accidens neither exist eternally nor come-to-be, but are not and then are without coming-to-be, is diagnostic of the deeper fact that they are "close to not-being" (1026b21): they do not properly come-to-be, because they never properly are.<sup>28</sup> These per accidens things, and specifically the fact that they are and are not without coming-to-be, notoriously give rise to sophisms, and Aristotle suggests that being per accidens is the natural object of sophistic rather than of any genuine  $\epsilon\pi\sigma\tau\mu\eta$ : this is how he reinterprets Plato's saying in the Sophist that the sophist deals in not-being (1026b14-21, and cf. I $\beta$ 4c above).<sup>29</sup> We might think that this is unfair: of course the art of housebuilding is not concerned with the fact that a house is "other than almost everything," but this is because otherness is a per se attribute not of houses but of something more general, namely beings: so instead of concluding that this otherness is the object of no science, we should conclude that it is the object of the science of being qua being. However, Aristotle is perfectly willing to agree that otherness will be treated in the science of being qua being (it will, in fact, be treated in Iota). But to the extent that it is treated in the science of being, it is not a being per accidens: it will be treated, not as an attribute of its per accidens  $\bar{\nu}\pi\kappa\epsilon\mu\eta\varsigma$ , house, but as an attribute of its per se  $\bar{\nu}\pi\kappa\epsilon\mu\eta\varsigma$ , being. Under that description it is not a being per accidens, and that is the right description under which to look for its causes.

This self-contained and completely negative treatment of being per accidens might seem to be all that Aristotle needs. But in fact, having said that being per accidens is close to not-being, he

<sup>28</sup>on the correlativity of  $\pi\sigma\eta\sigma\varsigma$  and  $\gamma\epsilon\nu\sigma\varsigma$  compare Sean Kelsey's paper. note Aristotle does not think (despite what he seems to say at E2 1026b22-4) that it is only things which exist per accidens that are and are not without coming-to-be, since this is also the case for souls and more generally forms. however, in the case of things that exist per accidens, the fact that they do not properly come-to-be is diagnostic of the fact that they do not properly exist. somewhere (where?) I should collect all of the places where Aristotle talks about things that are and are not without coming-to-be, and all the things that he applies this to. Aristotle pretty clearly did not make up this idea, but is intervening in an ongoing discussion ... an example in the De Sensu on acts of sensation; B#12 on surfaces; Z8, Z15 etc. on forms

<sup>29</sup>I hope I have a full treatment of all this in I $\beta$ 4c on sophistic; if not, something will have to be added. in E2 1026b14ff on the sophists: (i) note that Topics I,11 104b24-7 contains an almost open admission that the sophists solved these sophisms as well as posing them (most people will agree that if something is and has not always been, it came-to-be; they are refuted; solve by denying the universal premise, at the cost of paradox); (ii) something seems likely to be wrong with the text at b19-20; De Rijk proposes to interchange  $\mu\sigma\sigma\kappa\kappa\kappa\varsigma$  and  $\gamma\pi\mu\mu\pi\kappa\kappa\kappa\varsigma$  twice; perhaps we should just emend  $\bar{\omega}\sigma\tau$  '  $\epsilon\iota$  to  $\bar{\omega}\sigma\tau\epsilon\iota$ --note that at E1 1025b25  $\bar{\omega}\sigma\tau\epsilon\iota$   $\epsilon\iota$ , A<sup>b</sup>M have just  $\bar{\omega}\sigma\tau\epsilon\iota$ . (iii) Ross' comments here are very strange. on the musical/grammatical argument he might be right, although there could be many relevant arguments here {note by the way that the argt ps-Alexander suggests here, together with the argt Simplicius attributes to the Megarians to show that the Socrates is separated from himself (In Physica 120,12-17?--I've cited this elsewhere, maybe on Z6), can help to show there was a Megarian/sophistic use of the sophism at the beginning of Z6, as well as the obvious Platonic use to show that things are not the same as their essences}; but Ross' reconstruction (not ps-Alexander; something like this in someone on SE c22?) of the Coriscus/musical Coriscus argt is ridiculous, and on the argt at b19-20 is not much better

adds, "nonetheless, it should also be said about accident, so far as it admits of it, what is its nature and on account of what cause it exists: for perhaps at the same time it will also become clear why there is no science of it" (1026b24-7). Aristotle is here echoing, perhaps parodying, the sequence laid down in *Posterior Analytics* II for proceeding to the science of some (non-primitive) object: having established that X exists, we should next ask why X exists, and in learning why X is (it thunders because of fire being extinguished in the clouds) we will also discover the scientific definition of what X is (thunder is noise of fire being extinguished in the clouds). But in the present case, instead of leading to a science of X, this process will lead us to understand why there is no science of X. "The ἀρχή and cause of the fact that accident exists" (1026b30-31) is that while some things are necessarily, and therefore are always, most things are only for the most part; just because these things are only for the most part, there are other things (notably the contraries of these) which are neither always nor for the most part; and it is these that are per accidens (1026b31-1027a28, esp. 1026b31-3 and 1027a8-11). Here as in Δ7 the discussion of "things that are" is neutral between 1-place being (X exists always, or for the most part, or not even for the most part) and 2-place being (Y is Z always, or for the most part, or not even for the most part), and doubtless Aristotle assumes that we can transform one type of expression into the other. While what Aristotle says here is brief, he is able to be brief here because he can rely on things he has established before. Thus his account of necessity

("necessity, not in the sense of the violent [βίαιον], but what is so called through not being able to be otherwise [τῷ μὴ ἐνδέχεσθαι ἄλλως]," 1026b18-9) clearly relies on Δ5 (τὸ βίαιον 1015a26, τὸ μὴ ἐνδέχομενον ἄλλως ἔχειν 1015a34); his assertion that most things (τὰ πλεῖστα) are only for the most part and not always seems to rely on E1, which had said that physics considers the οὐσία-in-the-sense-of-λόγος of movable things "for the most part, but not separate" (1025b26-8, but text and interpretation are controversial).<sup>30</sup> And most clearly he is relying on the *Physics* II account of what happens by chance as "neither what is necessary and always nor what is for the most part" (*Physics* II,5 196b12-13 and repeatedly); *Physics* II,5 goes on to speak of accident, of chance as a per accidens cause, and of the fluteplayer as the per accidens cause of the house while the housebuilder is its per se cause (esp. 196b23-9, 197a12-21, cp. *Metaphysics* E2 1026b37-1027a5).<sup>31</sup> In the longer *Physics* II,4-6 as in the briefer *Metaphysics* E2, the aim is to debunk any special cause of what happens by chance or accident, and to show that what happens by chance or accident is a mere byproduct of what happens by nature and for the most part. As *Physics* II argues precisely by eliminating cases of chance, every natural power aims at some determinate end, and it achieves this end for the most part,<sup>32</sup> and the same may be said for the arts; when a natural or rational power fails to achieve its end, or achieves its end in such a way that some byproduct results as well, the case is like that of the "relish-maker aiming at pleasure

<sup>30</sup>discuss, and coordinate with your account (accounts?) of E1; I am not sure what I think here {in Iyl1 I translated and had some discussion of the text-situation in E1 with ως ἐπὶ τὸ πολύ}. Bonitz (followed by Jaeger) takes the text to mean "physics is mostly concerned with form rather than with matter"; Ross "physics deals with forms that are, for the most part, inseparable." but ως ἐπὶ τὸ πολύ is such a stereotyped and indeed technical phrase that Bonitz' interpretation seems unlikely; and, against Ross, all of the forms that physics deals with are inseparable (cp. 1025b34ff). note as possibly relevant *Physics* II,5 197a18-20 "it is right to say that chance is something παράλογος: for λόγος is either of things that always are or of things that are for the most part, and chance is in what comes-to-be besides these." of course the formula of the essence of X always applies to X whenever X exists, but if the formula refers to a δύναμις which will be exercised if nothing obstructs (and any formula of an essence of a sublunar natural thing does refer to such a δύναμις), then it refers to activities which will take place not always but only for the most part

<sup>31</sup>thus the K8 transition from E2-4 to *Physics* II,5-6 (do I want to say more about this?)

<sup>32</sup>or so Aristotle says; obvious questions about e.g. how often a stone makes it to the center of the universe

[who] produces [ποιεῖ] health for someone,<sup>33</sup> but not in accordance with [the art of] relish-making: for which reason, we say, it was an accident [συνέβη, i.e. it happened, or they came together], and he produces it in a way, but not simpliciter" (Metaphysics E2 1027a3-5). To the extent that a power that aims at X can by accident produce Y, it is per accidens a cause of Y and per accidens produces Y (or, if it is the passive power of matter, becomes Y, cp. 1027a13-15); and if Y is a being per accidens, this is the only kind of cause it has, and there is no further power for Y (cp. 1027a5-7, but note textual trouble). There seem to be several types of case here. If the housebuilder who is also a doctor produces health (1026b37-1027a2), then the health has a per se cause, and indeed its per accidens cause is just its per se cause under another description; and the effect, health, is neither by chance nor a being per accidens. If the relish-maker who is not also a doctor, in exercising the art of relish-making, happens to produce health, then the health does not have a per se cause, although the type "health" has a per se cause in other instances; this health is by chance in the sense of Physics II, but is not a being per accidens. However, in both of these cases some agent does something per accidens, so we have an instance of 2-place being per accidens (the housebuilder or relish-maker is healing), which can be transformed into an instance of 1-place being per accidens (the housebuilder's or relish-maker's act of healing is per accidens, cp. 1026b37-1027a1), and this has no cause except per accidens.

If for some X--say the housebuilder's act of healing--there is no power that produces [ποιεῖ] X except per accidens, then, as we have seen, X also does not come-to-be [οὐ γίγνεται] except per accidens, although X exists and has not always existed. E3, marked as a digression, is responding to an objection against the claim that this can happen. The objection is not explicitly stated, and it might be a dialectical objection to the intelligibility of not-being-and-then-being-without-coming-to-be, but it seems rather to be a causal-scientific objection, that if we trace an effect back only to a non-eternal starting-point, ἀρχή, that does not itself have a cause, there will be no genuine causal explanation of the effect. Aristotle's answer says nothing specifically about beings per accidens: while E2 has claimed that beings per accidens are and are not without coming-to-be, E3 is just defending the claim that some things, or specifically some ἀρχαί, are-and-are-not in this way, and we know from elsewhere that Aristotle thinks this holds not only of beings per accidens but also of forms (Z8) and especially of souls (Physics VIII,6, esp. 258b16-22). His point here is that every non-eternal ἀρχή that is genuinely an ἀρχή, a starting-point for causal explanation, cannot have come-to-be (except per accidens), since if it had it would have been produced by something and would not be the original cause but would simply be transmitting the causality of something prior;<sup>34</sup> and that there must be some non-eternal ἀρχαί, on pain of everything being eternally necessitated. Aristotle's presentation of his argument here is so abridged, and so lacking in context, that disputes about interpretation are likely to persist,<sup>35</sup> but he seems to offering a solution to a causal argument from the necessity of the past to the necessity of the future (as opposed to the logical argument that he solves in De Interpretatione c9): if everything that comes-to-be (or "occurs") is produced either by some cause that came-to-be previously, or by some cause that existed from eternity, then, if we trace back the causal

<sup>33</sup>with Jaeger's τινὶ γίγνεται. E's τι γίγνεται (accepted by Bonitz and Ross) may be right, but the stemma is against it. incidentally, according to Bonitz a manuscript (of Asclepius) has Jaeger's reading; why doesn't Jaeger note this?

<sup>34</sup>for the idea that an intermediate cause is not genuinely the cause (but merely an instrument or the like) see Physics VIII,5 and Metaphysics α2. note two points with Kelsey, (i) that in saying that X is and is not without coming-to-be, Aristotle need not be saying that it happened instantaneously, it's enough if there was no process directed at producing X; (ii) when we say that if the cause X itself had a cause, it would merely be transmitting the causality of that cause, we mean if X has a cause inasmuch as X is a cause: if Socrates causes a house, the mere fact that Sophroniscus begot Socrates does not make him a cause of that house

<sup>35</sup>references to Kelsey and Sorabji

chains far enough, any future object X will have been completely caused by objects that have already come-to-be before the present moment, or that have existed from eternity; and since everything that has already come-to-be, or has existed from eternity, is now necessary, each future object X is also now necessary. Aristotle's solution concedes that everything that comes-to-be is produced by some prior cause, but insists that some things come-to-be only per accidens, and are therefore produced only per accidens; and if X is produced by Y, and Y is produced by Z only per accidens, then Z is not the cause of X (except presumably per accidens), and the argument for the necessity of the future breaks down. The picture can be filled out from Physics VIII: everything that is moved is most properly speaking moved by its first mover, and this first mover must itself be unmoved (Physics VIII,5), and therefore in particular ungenerated. But it does not follow that this first mover must be eternal and eternally in the same state, like the movers of the heavenly bodies: the first mover of a given causal chain can be moved per accidens, and indeed can come-to-be per accidens, and this is the case in particular for the souls of sublunar animals (Physics VIII,6 258b16-22).<sup>36</sup> The eternally constant motions of the heavenly bodies (caused by their eternally constant movers) are still needed to regulate the per accidens coming-to-be of these souls, i.e. the per se coming-to-be of sublunar animals, whose periods of life and gestation and maturation are measured by the periods of the heavenly bodies, and this guarantees that there will be an approximate regularity in all sublunar things; but because sublunar souls are not just transmitting heavenly causality, and can initiate new causal chains (although doubtless every new motion they produce has a per accidens antecedent cause), sublunar things are not entirely controlled by heavenly causes, and are not entirely necessary.<sup>37</sup> Since it was taken as obvious in Metaphysics E2 that most things down here are not necessary, and since the causal argument for necessitarianism will go through if everything that is, but has not existed from eternity, has come-to-be per se and has therefore been produced per se, it follows that some non-eternal things have not come-to-be except per accidens, and this removes the objection to Aristotle's conclusions in E2.

#### Δ7 on the not-white as being per accidens and the white as being per se

Another difficulty in Δ7's account of being per accidens turns on its assertion that the not-white has being per accidens. We would expect the not-white man to have being per accidens (this should be equivalent to saying that "the man is not white" expresses being per accidens), but how can something which is said without combination, like the not-white, be said to be per accidens? However, in referring to type [1] being per accidens, exemplified by "the man is musical," Aristotle says that here something is said to be "because it happens/belongs to a/the thing-that-is" (1017a16). In other words, Aristotle is willing to consider "the man is musical," not

<sup>36</sup>actually, the movers of the non-equatorial heavenly motions, although they are eternal, are not eternally in the same state, but rather are moved per accidens; see IIIβ2 below, which will also have a full discussion of the other issues in Physics VIII. here I will be dogmatic and will not document the evidence for my interpretation of Physics VIII, some of which turns on other texts (e.g. from the On Generation and Corruption and Generation of Animals), which will be cited in IIIβ2

<sup>37</sup>I am not sure whether Aristotle thinks the alternative is merely necessitarianism, or something stronger, e.g. the impossibility of generation or of any non-trivial change. if it were not for the per accidens motions of the movers of the non-equatorial heavenly motions, which lead to the change in the length of daylight between summer and winter, and thus to greater heat in summer, and thus to the approximate cycles of the sublunar elements and of the things generated out of them, plants and animals, the sublunar would be an inert sphere of earth surrounded by an inert sphere of water surrounded by an inert sphere of air surrounded by a rotating but otherwise inert sphere of fire, with no elemental transformations and no generation of composites. this does not, however, require per accidens generation, which happens only with the souls of sublunar animals

just as asserting the existence of the musical man or of the musicality of the man, but also as asserting the existence of the musical or of musicality. The sentence "X is Y" may be asserting several things at once, but one of them is the existence of its predicate (not the existence of its subject): this is because the existential "Y[-ness] exists" is taken as equivalent to the locative-existential "Y[-ness] is in X." (When Aristotle says that a type [3] per accidens predication "X is Y" like "the white [person] is musical" asserts being "because they both happen/belong to the same thing-that-is" (1017a16-17, a20-21), apparently both the subject X and the predicate Y are asserted to be--more precisely, the combination XY, "white musical [person]," is asserted to be--but this is only because, ontologically, both X and Y are predicates of some other underlying subject Z, say Socrates.) So the kind of being that something has because it happens to something that exists, i.e. to some other underlying subject, is being per accidens. This kind of being would apply to the white, and Aristotle is right to point out that it would equally apply to the not-white. This sense of being per accidens seems close to the sense of Posterior Analytics I,4, where the walking, which "being something else, is walking," has being per accidens. However, in Posterior Analytics I,4, an accident like the white has being only per accidens, and only substances have being per se; whereas here in Δ7 not only substance but also accidents like the white have being per se (although the white also has being per accidens), and only negations like the not-white and compounds like white Socrates fail to have being per se. Why is Δ7 so liberally extending being per se to beings in all of the categories?

Once again, the answer is that Δ7's account of the senses of being is subordinated to an account of the causes of being. Something will have being per se if it has a per se cause of being, that is, an essence. Man has an essence (say, biped animal); white man has no essence, no per se cause of being. The white in one sense has a per se cause of being, and in another sense does not; that is, "the white is" can be taken in one sense in which it has a per se cause, and in another sense in which it does not. For the white to be is for something to be white, and in one sense there is a per se cause of something's being white and in another sense there is not. There is no determinate cause of this subject's being white: this subject and the predicate whiteness simply happen to be conjoined, and there is no determinate cause of their being conjoined, just as there is no determinate cause of the musician's being white, i.e., no determinate reason why the causes of being musical and the causes of being white should coincide in a single subject. On the other hand, there are determinate causes of being musical, and determinate causes of being white. And so there are determinate causes, to this subject, of its being white, as long as we look only for causes of the predicate, and not for causes of the union of the predicate with the subject. "The man is healthy" expresses being per se, namely the being per se of health, insofar as it expresses not the presence [ὑπάρχειν] of health to a human being, nor the presence of health to this subject, but simply the presence of health, the formal cause of which is given by specifying the essence of health. But "the man is not healthy" can express the being per accidens of not-healthy-man (the absence of health from a human being), or the being per accidens of non-health (the absence of health from this subject), but not the being per se of non-health--there is no being per se of non-health, and there is no formal cause of the absence of health, although there may be formal causes of disease, or rather, formal causes of particular diseases.

### Δ7's positive account of being per se

Given this understanding of the difference between being per accidens and being per se, Δ7's account of being per se is straightforward enough:

However many things are signified by the figures of predication [τὰ σχήματα τῆς κατηγορίας = categories] are said to be per se: for in however many ways they [= the figures of predication] are said, in so many ways do they signify being [τὸ εἶναι]. So, since some predicates signify what [the subject] is [τί ἔστι σημαίνει], others what it is like [ποιόν], others how much, others πρός τι, others action or passion, and others where or when, being [τὸ εἶναι] signifies the same as each of these: for there is no difference between "[a] man is healthy [ἀνθρωπος ὑγιαίνων ἔστιν]" and "[a] man is-healthy [ἀνθρωπος ὑγιαίνει]" or between "[a] man is walking" or "cutting" and "[a] man walks" or "cuts," and likewise in the other cases. (1017a22-30, cited above)

The things that are are the things that some subject is, and things are said to be in as many ways as a subject is said to be the many things that are predicated of it. So Aristotle analyzes the senses of being by analyzing predication. The primary sense of being is the being of substances, and even here Aristotle analyzes their 1-place being by transforming it into 2-place predicative being: a term signifies a substance if it signifies what some subject (essentially) is, and so the substances are the substances of things, what things (essentially) are. Now having said that the things that are (1-place) are the things that some subject is (2-place), and having said that substances are the τί ἔστι of some subject, we might seem to have implied that substances are the only things that are. But Aristotle replies that "is" (2-place) is said in many ways: when I say that a substance is the τί ἔστι of some subject, I am using predicative ἔστι in its strongest sense, for essential predication; and there are other weaker senses of predicative ἔστι. This is not quite as obvious or uncontroversial as it might sound. It is uncontroversial that there are non-essential kinds of predication, for instance in "[a] man walks," but that sentence does not contain a form of εἶναι, and it is not quite so obvious that predicative εἶναι can also express non-essential predication. Aristotle says that we can convert any predicative sentence into a predicative sentence with εἶναι and a nominal complement: "there is no difference between '[a] man is healthy [ἀνθρωπος ὑγιαίνων ἔστιν]' and '[a] man is-healthy [ἀνθρωπος ὑγιαίνει]' or between '[a] man is walking' or 'cutting' and '[a] man walks' or 'cuts,' and likewise in the other cases." This would be accepted by most philosophers, but not by Antisthenes, who "thought that nothing can be said except by its proper λόγος, one λόγος for one thing" (Δ29 1024b32-3--Aristotle responds by saying that Socrates is in a way the same as musical Socrates, so that the λόγος of musical Socrates can be said of Socrates as well); also not by the philosophers discussed in Physics I,2 who refused to say that the man is white: "some, like Lycophron, took away 'ἔστιν' [i.e. said ὁ ἀνθρωπος λευκός, without εἶναι], and others changed the expression around, saying not that the man is white but that he whitens [λελεύκωται], not that he is walking but that he walks, so that they should not, by attaching 'ἔστι', make the one to be many [since they supposed] that unity or being is said in only one way" (185b27-32, mostly cited in Iβ4 above). These philosophers are forced to deny that Socrates is white because they think that εἶναι always signifies identity and is therefore transitive, so that if Socrates is white and Socrates is musical, white and musical will be the same thing, or the one thing Socrates will be the two things white and musical (Δ6 and Δ9 drawing distinctions that allow us to resolve these difficulties). If, against these philosophers, we maintain the ordinary assertion that Socrates is white, or the ordinary equivalence between "Socrates walks" and "Socrates is walking," then we must agree that predicative being is said in many ways, sometimes signifying identity (or essential predication) and sometimes signifying something weaker, such as what the subject is like or what the subject is doing.<sup>38</sup>

<sup>38</sup>make sure all of this is taken into account in your discussion of the sophism at the beginning of Z6 in IIγ1a

Thus by defending ordinary language against people like Antisthenes and Lycophron, Aristotle seeks to establish that predicative being is said in many ways, and therefore also that existential being is said in many ways. Does this procedure involve a "reduction" of 1-place being to 2-place being? That would be an oversimplification. If F is a non-substance, then we can in a sense reduce the existence of F to an instance of 2-place being: the white exists iff some substance exists and is white, and [a] whiteness exists iff some substance exists and is (not whiteness but) white. However, this reduction will not have eliminated 1-place being, but will only have replaced the 1-place being of an accident with the 1-place being of a substance and the 2-place being that predicates the accident of the substance.<sup>39</sup> The case is different if F is a substance. Here too, if F is a material substance, F exists iff some matter exists and is F. But this equivalence is not a "reduction," since Aristotle thinks that the matter of the substance F is ontologically parasitic on the substance F, rather than vice versa. Nonetheless, this equivalence can be useful in looking for the cause to F of the fact that it is, since (as noted above) it is easier to discover causes of 2-place being than of 1-place being. Just as we can transform the question of the cause of 1-place being to a non-substance, "why is there an eclipse," into a question of a cause of 2-place being, "why is the moon eclipsed" or "why is the moon deprived of light," so we can transform "why is there a house" into "why are these. e.g. bricks and stones, a house," or "why is there [a] man" into "why is thus-and-such an animal a man"; and this is what Aristotle recommends in Z17 and H2-3 (discussed in IIe below).

It is particularly important to be clear about the transformations that Aristotle accepts and uses between 1-place and 2-place being, because G.E.L. Owen in an influential article, "Aristotle on the Snares of Ontology," read H2 as reducing 1-place being to 2-place being in a quite different way, so that "F is" would be short for "F is G" for some value of G: as Owen cites H2, "a threshold is, in that it is situated thus and so: 'to be' means its being so situated. And that ice is means that it is solidified in such and such a way" (Owen's translation of H2 1042b26-8, LSD p.264).<sup>40</sup> Now this passage of H2 has several textual and interpretive difficulties, some of which Owen mentions in a footnote. Does οὐδὸς γὰρ ἔστιν at 1042b26 mean "a threshold exists" or "it is a threshold"? Does τὸ κρύσταλλον εἶναι at 1042b27-8 mean "for ice to exist" or "for it to be ice"?<sup>41</sup> Owen says that the parallel a few lines below, "the οὐσία [sc. of each thing] is the cause

<sup>39</sup>from a modern point of view, we could just say "white exists iff something is white," so that the right-hand side would have no special clause asserting 1-place being; but it will still contain an existential quantifier, so it would be strange to describe it as eliminating existence

<sup>40</sup>it is not easy to sort out what Owen thinks about all this (see Dancy's complaints): in particular, what is G? on p.265 Owen's answer is that "F is" is short for "F is G" where G is the category or highest genus under which F falls, so that "Socrates is" is short for "Socrates is a substance" and "courage is" is short for "courage is a quality"; this is supposed to explain why in Δ7 being per se (which Owen takes to be existential being) has just as many senses as there are categories. but Owen's proof-text in H2, no matter how it is read, completely fails to support this idea: it puts the εἶναι of F not in its genus but in its differentia. however, by p.269, "for [Aristotle] it is one and the same enterprise to set up different definitions of 'ice' and 'wood' and to set up two different uses of 'exist'"--here apparently the view is that "man is" is short for "man is man" (or "man is wingless biped animal") and that "Socrates is" is short for "Socrates is [a] man" (or "Socrates is [a] wingless biped animal"). as Gary Matthews points out in his BICS article, and as Owen himself seems to recognize on p.265, this implies that sentences like "Rufus and Rosy are" are illegitimate, since "Rufus is" is short for "Rufus is a cat" and "Rosy is" is short for "Rosy is a ferret." a philosopher might, in the Russellian type-theoretic spirit, reject "Socrates and his whiteness are," but to extend this to cats and ferrets is going too far. Lesley Brown, while broadly following Owen's approach to existential and predicative εἶναι, thinks that "F is" is equivalent to "ƎG (F is G)", with no predicate favored over any other (except that ampliating or alienating predicates, e.g. "possible" or "non-existent," are ruled out). this is certainly a more plausible version of the story, but Owen's whole approach is wrong

<sup>41</sup>as Owen notes (LSD p.264 n10), Ross in his paraphrase of this passage in his commentary apparently (it's awfully brief) assumes the existential reading, while Ross' translation reflects a predicative meaning. I agree with Owen that

τοῦ εἶναι ἔκαστον" (1043a2-3, cp. a3-4), supports the existential reading, and he has a point. But what is striking is that throughout this passage Aristotle does not care enough to distinguish "F exists" from "something is F"--they are equivalent (which is not the equivalence Owen wants), and the way to find the cause of F's existing is to find the cause of something's being F: that is, the cause, to the matter of F, of its being F. This is the method that Aristotle systematically recommends in H2 for finding the *oὐσία* of a sensible thing F: first find the appropriate matter of F, and then find the cause of this matter's being F in one instance when it is not F in another instance--that is, find the *differentia* which constitutes an F, and this will be the *oὐσία* of F. And since H2 is systematically working out the program for finding the *oὐσία* of a thing which Z17 had proposed on the basis of *Posterior Analytics* II, this is exactly how we would expect H2 to proceed. To discover what an eclipse is we ask why there is an eclipse, that is, why the moon is eclipsed, and we conclude that it is because the earth is obstructing the sun's light; to discover what ice is we ask why there is ice, that is, why water is frozen, and we discover that it is because it is solidified (more correctly "it has been condensed," *πεπυκνώσθαι*) in such and such a way. But of course for ice to exist, or for water to be ice, is for water to have been condensed in this way, not for ice to have been condensed--as Aristotle says a few lines further on, "if we have to define [a] threshold, we will say [that it is] wood or stone situated thus ... if ice, water that has been solidified or condensed [*πεπηγός, πεπυκνωμένον*] in such a way" (1043a7-10). So H2 interprets "ice exists," not as asserting that ice has some favored predicate (such as being solidified), but as asserting that something is ice--that the appropriate matter of ice (water) has the predicate (having been solidified or condensed in this way) that constitutes it as ice.<sup>42</sup>

Owen resorted to some extraordinary measures in trying to deny this. He denies that Aristotle's concept of existence in Δ7 or H2 resembles the modern concept symbolized by " $\exists x Fx$ ", but he cannot deny that *Posterior Analytics* II uses such a concept, for instance in discussing the questions "whether a centaur or a god is or is not: I mean 'whether [it] is or is not' simpliciter, not whether [it] is white or not" (II,1 89b32-3, cited above, cited by Owen LSD p.270). So Owen attributes to Aristotle two distinct concepts of existence, "being\*" in Δ7 and H2 and "being\*\*" in *Posterior Analytics* II (LSD pp.270-73; these are both concepts of 1-place, existential being): being\* is equivocal across the categories, but being\*\* is probably univocal, although, since poor Aristotle "nowhere distinguishes these two uses of the verb ... he is not in a position to say that his analysis of the different predicative senses of 'exist' applies to being\*", but not to his present concern [sc. in *Posterior Analytics* II], being\*\*" (LSD p.271). Owen is thus denying that H2 is applying the *Posterior Analytics* analysis of existence: his article manages never once to mention *Metaphysics* Z17, since comparing the texts would make it obvious that H2 is applying Z17 and that Z17 is applying *Posterior Analytics* II. Indeed, Owen tries his best to discredit *Posterior Analytics* II altogether: he speaks of its "hesitations over existential statements" (LSD p.271), and says condescendingly that it "draws a formal distinction between the question whether A

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we should keep the manuscript *τὸ κρύσταλλον εἶναι* with Ross rather than emending to the dative *τὸ κρυστάλλῳ εἶναι* with Bonitz and Jaeger ("with one manuscript of [ps.-]Alexander" says Ross, d check), which would make it a technical "the essence of ice." I also agree with Owen in rejecting, or at any rate in setting aside, Jaeger's supplement *τὸ εἶναι <οὐδὲ> τὸ οὗτος αὐτὸ κεῖσθαι σημαίνει* in 1042b27 {"suasit Bonitz" says Jaeger--not in his text, in his commentary?}: Jaeger may be right that something needs to be supplied here, but he has no good reason for putting it in the dative rather than the accusative

<sup>42</sup>d cite, here or elsewhere, as allies against Owen and Brown, Crubellier-Pellegrin's comment (roughly: a being is not the thing that is but what something is, as a semblant is not the thing that seems but what something seems to be--is there an English analogue?), and Tugendhat's article. his basic claim is that Aristotle is distinguishing per se from incidental functions of the word "is": its per se function is to assert the existence of F by asserting "S is F," but in the same utterance it also incidentally does something else, namely, to link F with S

exists and the question what A is, and even, at the start of one tangled argument, treats the second question as arising after the first has been settled (89b34-90a1)," although "it amends this later" (at 93a21-33, which does nothing of the kind--it merely says that to know that thunder exists we must know the nominal definition that is [a] noise in the clouds, which we presuppose in seeking the real definition which gives the cause of its existence; the Owen quotes are LSD p.270). Perhaps what moved Owen to all this was the view that an analysis of "F exists" as " $\exists x Fx$ " would be unable to preserve the equivocity of being across the categories. But for Aristotle, as we have seen, predicative being is equivocal across the categories (e.g. between "Socrates is white" and "Socrates is walking"), and so if " $Fx$ " and " $Gx$ " assert different senses of predicative being, naturally " $\exists x Fx$ " and " $\exists x Gx$ " will assert different senses of existential being. And, against Owen's reading of Metaphysics Δ7, Aristotle grounds the diversity of senses of existential per se being in the diversity of senses of predicative per se being (cf. Owen's attempt to explain away "the odd lines 1017a27-30 in Metaphysics V 7," LSD p.269 n14).<sup>43 44 45</sup>

<sup>43</sup> Owen's distinction between being\* (Socrates exists) and being\*\* (there are [not] unicorns) is largely taken from Peter Geach, "Form and Existence" and his Aquinas chapter in Anscombe and Geach, Three Philosophers; Geach is mostly trying to save and interpret Thomas Aquinas on the act of being and on God as his own esse, and to show that Thomism is not refuted by Frege's analysis of existence. Geach's distinction between two kinds of being is a version of Thomas' distinction between two senses of being as existence, one which is the being-as-actuality completing the being-as-potentiality which is categorial being, and the other which is being-as-truth. this in turn is part of Thomas' response to Fârâbî's and Averroes' criticisms of theories (Kindi's [following Proclus]--and Avicenna's respectively) on which things other than God exist, not through themselves, but by participating in being (identified with God by Kindi but not by Avicenna). Fârâbî and Averroes distinguish between two senses of (1-place) being, categorial being, which is real but equivocal across the categories and predicates of each thing its own essence (so not a separate being for things in the different categories to participate in), and being-as-truth, which is univocal and non-essential to the things that have it, but is not something really existing outside the mind. if Fârâbî and Averroes are right, neither categorial being nor being-as-truth can be by participation as Kindi and Avicenna want; Kindi's and Avicenna's theory is held to depend on a confusion of these two senses of being, which allows them to combine some features of each of them. Thomas basically accepts Averroes' conclusions on the senses of being, but nonetheless wants to hold on to Avicenna's essence-existence distinction; his solution is to call on another sense of being from Δ7, being-as-actuality, and to concede that being-as-truth is non-real and that categorial being is essential, but to assert that the essence is of itself a potentiality, whose actuality is a real equivocal non-essential existence. (as far as I have been able to find, Avicenna never describes existence as the actuality or activity [fi'l] of the essence: that seems to be Thomas' innovation). Thomas' interpretation of Δ7 is very dubious: the potentiality which being-as-actuality completes in Δ7 is something like the stone in which Hermes is potentially present, not a preexistent essence of the Hermes. but what Thomas takes over from Fârâbî and Averroes is also dubious, namely the identification of existence as analyzed in Posterior Analytics II with being-as-truth as described in Δ7. according to E4, being-as-truth has no external causes, while Posterior Analytics II is emphatic that the cause of the thing's existence is its essence--in fact, existence as described in Posterior Analytics II is per se or categorial being as described in Δ7. much of what Geach and Owen say about their two senses of being-as-existence, and their downplaying of the Posterior Analytics on existence, seems to be a hangover ultimately from Fârâbî, and to be liable to the same criticisms as his account. {but note that for Fârâbî-Averroes-Thomas, what has being in the weaker sense but not the stronger is e.g. a negation, whereas for Geach and Owen it's e.g. Arrowby who is no more but who still falls under the scope of the existential quantifier; Geach mangles Thomas on this}

<sup>44</sup> some loose ends: note Λ6 on whether motion will be, De Interpretatione c9 on whether a sea-battle will be: the right paraphrases are "something will move something, some people will fight a battle at sea," not "motion will be something, a sea-battle will be something" ... also (perhaps develop at more length--or do I do this elsewhere?): show how the Physics I analysis of γίγνεσθαι ἀπλῶς reflects the analysis of "F exists" as " $\exists x Fx$ " rather than Owen's or Brown's analysis (now esp. relevant against Burnyeat's claim of the contrary in his Socrates and money article) ... also perhaps add into the text note agreeing with Owen that "the F is" = "the F is F"; but that is equivalent to "the thing which is F is F" = "the appropriate subject of F has the predicate that constitutes it as F"; Z17 notes the sterility of asking "is white man white man" or "is man man," but these can be rewritten as "is the man white" or "is the animal a biped" or the like ... this may help avoid misunderstandings in talking about being-as-truth, since there Aristotle will say that the not-white is because it is not-white

## Why does Aristotle mention being as truth?

We might think that Aristotle, after leading us up from being per accidens to being per se, and dividing being per se into its different senses in the different categories, would have said enough about the senses of being. After all, how can there be a sense of being which is neither per accidens nor per se? Instead, he adds first a brief account of being as truth (1017a31-5), and then an account of being as actuality and potentiality (1017a35-b9). The account of actuality and potentiality will be very important for the subsequent argument of the Metaphysics. It is much less clear why the account of being as truth is needed in  $\Delta 7$ , or what the isolated chapters E4 and Θ10 on truth (and  $\Delta 29$  on falsehood) are supposed to contribute to the Metaphysics. Like the discussion of being per accidens, the discussion of being as truth seems to contribute chiefly by giving a sharper conception by contrast of per se or categorial being. But to see how this works we have to tease out some important details from what Aristotle says about being as truth, and about not-being as falsehood.

$\Delta 7$  says: "being [εἶναι] and 'is' also signify that [something is] true, and not-being that [it is] not true but false, equally in affirmations and in denials, e.g. that Socrates is musical [ἔστι Σωκράτης μουσικός] because this is true, or that Socrates is not white [ἔστι Σωκράτης οὐ λευκός], because that is true; whereas the diagonal is not commensurable [οὐκ ἔστιν ἡ διάμετρος σύμμετρος],<sup>46</sup> because this is false" (1017a31-5). This is short enough that it leaves open many interpretive possibilities, and it is not immediately clear how the being-as-truth asserted in "Socrates is musical" differs from the being-per se asserted in "the man is healthy" (1017a28). But one point that emerges strongly from Aristotle's account of being-as-truth is that he wants it to apply "equally in affirmations and in denials," whereas a sentence "S is F" asserts being per se only if F falls under one of the categories, and so not if the predicate is a negation.<sup>47</sup> Aristotle imposes a regimented and unnatural word-order on his sample sentences precisely to handle the case of denials: by transposing ἔστι to the head of the sentence, we come to see that the negative sentence "X is not Y" asserts not only a not-being ("it is not the case that X is Y") but also a being ("it is the case that X is not Y"), whereas if we had left the sentence in a more natural word-order we might well think that "X is not Y" does not contain a form of εἶναι except one standing under a negation-sign.

We can try to get clearer on what Aristotle means by being-as-truth by asking what kinds of things being in this sense applies to. Is it only "is" in 2-place uses that can be (moved to the head of the sentence and) read as asserting being-as-truth, or does being-as-truth, like being per se and being per accidens, apply indifferently in 1-place and 2-place contexts? Is what is true always a mental or linguistic item, like the sentence or utterance "Socrates is white" or the thought it expresses, or can it also be a mind-independent object? And, if the latter, what sort of object--e.g. would whiteness simply be true of Socrates, or does the sentence signify some further object,

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<sup>45</sup>on all these points I've got a fair amount of further argument, and a lot of bibliography, in the document "Iγ1cnotes", some of which should be pasted into the footnotes; probably my whole account here should be expanded to take fuller note of some of the controversies, although the points made above about Geach, Owen, Brown and Tugendhat are maybe the crucial ones

<sup>46</sup>reading σύμμετρος Bonitz Jaeger Ross (said to be presupposed by Alexander, d check, anyway obviously necessary) against all manuscripts ἀσύμμετρος.

<sup>47</sup>Likewise, the 1-place assertion "F is" will assert being per se only if F falls under one of the categories, and so not if F is a negation. Aristotle does say at 1017a18-19 that we can say "the not-white is" (apparently 1-place) asserting being per accidens, so both being per accidens and being as truth can be asserted of negations. I will come back to how these kinds of being differ.

something like τὸ Σωκράτην εἶναι λευκόν or τὸ Σωκράτη εἶναι λευκόν, which would be true if the sentence is true?

Unfortunately, at least verbally Aristotle seems to speak on both sides of these questions. E4 sounds decisive: "falsehood and truth are not in the things [πράγματα], as if the good were true and the bad were straightway false, but rather in thought [διάνοια], and about simples and essences [τὰ ἀπλᾶ καὶ τὰ τί ἔστιν] not even in thought" (1027b25-8), an affirmative judgment being true if the things are composed in reality as they are in thought, and a negative judgment being true if the things are divided in reality as they are in thought. However, Δ29, Aristotle's most extensive discussion of falsehood (a full Bekker column), starts with a discussion of false πράγματα (first things which are not, then things which are but give rise to a false appearance, i.e. an appearance of what is not), and then says that false λόγοι are false derivatively, because they are of things that are not. Still, it remains constant between Δ29 and E4 that there are no false simple πράγματα: Δ29 is willing to allow πράγματα to be false (otherwise than by giving rise to false appearances) only because it admits propositionally structured objects, named by accusative-infinitive phrases, which are false either "through not being composed," i.e. when the subject-πρᾶγμα and the predicate-πρᾶγμα are not conjoined in reality, or "through being incapable of being composed," when there is a contradiction between the subject-πρᾶγμα and the predicate-πρᾶγμα (1024b17-21). It seems possible that non-propositional πράγματα might also be false, as long as they are somehow composite, so that e.g. white Socrates might not be, as being false, if whiteness is not combined with Socrates in reality. A predicate might also be false of a subject, through not being combined with that subject; Aristotle gives an example where the predicate is a λόγος and the subject is a πρᾶγμα (Δ29 1024b26-8), but presumably this could also happen where they are both πράγματα. Now if simples, whether πράγματα or thoughts or linguistic items, cannot be false, we might think that they also cannot be true, and indeed this is what E4 1027b25-8, quoted above, seems to say (so too Categories c10 13b10-11). Metaphysics Θ10, however, insists that truth is said not only of composites (truth "in the πράγματα, [consists in] being composed or divided" in accordance with an affirmative or negative judgment, 1051b1-5),<sup>48</sup> but also of simples or incomposites [ἀσύνθετα], which cannot be true by being composed. Aristotle starts to say that "as truth is not the same in these things [as in composites], but something is true or false ..." (1051b22-3), but then he corrects himself: there is truth but not falsehood in incomposites. "Laying hold of them [θηγεῖν] and saying them [φάναι] is true (saying is not the same thing as affirmation [κατάφασις]), and ignorance [ἀγνοεῖν] is not laying hold of them" (b24-5). So while simple ignorance about these things is possible, opinion is not, and thus error is not; either you are in touch with them, and there is no scope for falsehood, or you are not in touch with them and so cannot think any false thoughts that would be about them. Aristotle's claim is presumably that truth or falsehood in judgments or utterances would not be possible unless there were more basic "incomposite" mental and linguistic items that can only be true and not false. And this is a familiar solution to a familiar post-Parmenidean problem. How can there be falsehood, if there is no thinking or saying what is not, i.e. if thinking or speaking of what is not simply fails to refer? Answer: for falsehood to be possible, the simple terms must refer, and so must be of things that are, but the complex thought or utterance may combine the terms in a way that their referents are not combined, so that as a whole it is not of something that is. Falsehood, as opposed to ignorance, is possible only of things that somehow both are and are not, and this is possible only through composition.

Aristotle wants to bring out that the sense of being, whether for composites or for simples, that emerges from these reflections applies to negative mental and linguistic items and the

<sup>48</sup>or read EJ τὸ συγκεῖσθαι at 1051b2 rather than A<sup>b</sup> Bonitz Ross Jaeger τῷ συγκεῖσθαι? the point is the same

corresponding *πράγματα* just as much as to affirmative ones. There is no more being-as-truth when S is F than when S is not-F: there is truth equally when there is composition both in thought and in reality, or when there is division both in thought and in reality. So too with 1-place being-as-truth. Λ1 says that, in a sufficiently weak sense, we say that even "the not-white and the not-straight" are, "e.g. it is not white" (1069a23-4); similarly, Γ2 says that the different things that are said to be each stand in some relation to substance, some by being qualities or the like of substances, but others by being privations or negations of substances or qualities or the like, "for which reason we say that even not-being is not-being" (1003b6-10). The kind of being that is here asserted of the not-white or of not-being as such is not simply being per accidens, but it also cannot be being per se as divided into the categories. The only possibility is being-as-truth; and this is apparently also the only sense Aristotle recognizes in which "S is not white" contains an *εἰναι* not falling under a negation-sign. And the fact that a true sentence can be formed with "not white" as subject or predicate apparently implies that the simple *πρᾶγμα*, the not white, also has being-as-truth. It is noteworthy that medieval Arabic and Latin philosophers take being-as-truth, and indeed all of the senses of being distinguished in Δ7, as primarily senses of 1-place being; they take being-as-truth to be the broadest sense of 1-place being, applying to "beings of reason" such as negations and privations (and "relations of reason" such as Socrates' knownness by Plato, which is nothing real in Socrates) as well as to real beings; being per accidens is narrower, applying to all real beings, both beings per se like Socrates and whiteness and beings per accidens like white Socrates; being per se is yet narrower, applying only to beings in the categories, like Socrates and whiteness but not white Socrates; there would be a yet stricter sense that applies only to substances.<sup>49</sup>

When Aristotle says that "we" say that the not-white, or not-being, is, he is not simply reporting a fact of ordinary language, or a conclusion that philosophers in general might draw. "We" are, also and especially, we Platonists; Aristotle is implicitly claiming that Plato's abstract [λογικόν, cf. Λ1 1069a26-30], dialectical and non-causal way of understanding being leads him to a conception of being so broad and so weak that it applies even to the not-white, and even to not-being as such. And Aristotle has texts to support him. The fifth hypothesis of the *Parmenides* argues that a one-which-is-not "must somehow participate in being" (161e3: Plato's word for "being" here is actually "οὐσία"), because we speak truly (literally "speak true things") in saying that it is not, "and since we say that we are speaking true things, we must say that we are also speaking things which are" (161e7-162a1). Since "ἔστιν ... τὸ ἐν οὐκ ὁν" (162a1-2; Plato preposes the verb *ἔστιν* just as Aristotle does in the Δ7 discussion of being-as-truth, for the same reason, to make it clear that the verb does not stand under the negation-sign), Plato concludes that this one, and also not-being as such (162a4-b4), must have being; and the text amply justifies Aristotle in referring to this kind of being as "being as truth." And, continuing farther down the same path, the *Sophist* seems to conclude that positive beings do not have being in any stronger sense than negations or than not-being as such. "Is the beautiful more among beings for us, and the not-beautiful less? No [more and no less]" (257e9-11); and likewise "not-being ... does not fall short of any of the others in being [οὐσία]" (258b7-10), but rather "stably is, having its own nature: just as the large was large and the beautiful was beautiful and the not-large was not-large and the not-beautiful was not-beautiful, so too not-being in the same way was and is not-being, counting as one form among the many that are" (258b11-c4). For Aristotle all this is a mistake: *Sophistical Refutations* c25 describes an inference from "not-being is something that is

<sup>49</sup> references (say Fârâbî and Thomas). do they say how actual and potential relate to these senses? simply orthogonal, qualifying any of these senses of being? also note, picking up the previous note, on two senses of "the not-white is"

not [τὸ μὴ ὄν ... ἔστι γέ τι μὴ ὄν]<sup>50</sup> to "not-being is" as turning on a fallacious step from "being something" to "being" simpliciter (180a32-8; cp. SE c5 166b37-167a2). Aristotle would presumably be willing to make a number of concessions here. Presumably it is legitimate to infer from "S is F" to "S is" when the predicate is positive and non-ampliating and there is no other ampliating circumstance.<sup>51</sup> Presumably we can infer from "the not-white [thing] is yellow" to "the not-white is," but this will give us only being per accidens (the not-white is, because something to which it belongs, namely the yellow or some particular yellow thing, is). We could conclude in the same way that not-being is, if by "not-being" we mean only "what is not X" for some value of X (which is one thing that Plato means by "not-being" in the Sophist), but again this would conclude only to being per accidens. And, finally, Aristotle thinks it is legitimate to say that not-being is, and not merely per accidens, if we take "is" in the broadest and weakest sense, being-as-truth. His objection is to Plato's failure to distinguish this sense from the stronger sense of being that applies only to positive things.

The reason why it is so important for Aristotle to distinguish these senses of being is, once again, the causal project of the Metaphysics. E4 argues that since truth and falsehood consist in a composition or division in thought, the cause of being-as-truth is something in the mind, and does not lead to any further beings; and it uses this argument to justify dropping being-as-truth from the further argument of the Metaphysics. But unless we clearly distinguish being in the stronger senses from being-as-truth, we will not be able to pursue their causes effectively either.

What Aristotle says in rejecting a pursuit of causes of being-as-truth sounds exaggerated. "Since combination or division is in thought and not in the things, and what is in this way is different from [what is] in the primary way"<sup>52</sup> (for thought connects or divides what-it-is or that it is such or so-much or whatever else it may be), let what is ... as true be dismissed: for ... [its] cause is some affection of thought, and [it] is about the remaining kind of thing-that-is and [it does] not reveal the existence of any further nature of thing-that-is [οὐκ ἔξω δηλοῦσιν οὖσάν τινα φύσιν τοῦ ὄντος] (E4 1027b29-1028a2, leaving out the interlaced dismissal of being per accidens).<sup>53</sup> There are two difficulties. First, combination may be in the things rather than in thought, as in Δ29's examples of πράγματα named by accusative-infinitive phrases like τὸ σὲ καθῆσθαι. Second, even if being-as-truth is only in thought, it seems too strong to say that its cause is only in thought: surely the cause, to my thought that you are sitting, of its being true, is precisely that you are sitting, which is in the πράγματα and not merely in thought. However, we

<sup>50</sup>the Revised Oxford has "[what is not] is something, despite its not being". Dorion's "[le non-être] est bien quelque chose qui n'est pas" seems to me clearly right

<sup>51</sup>maybe note on "Homer is a poet" and surrounding discussion at the end of De Interpretatione c11; the example there of δοξαστόν (as an ampliating or even alienating predicate) connects it with SE c5. I agree with some of Lesley Brown's points on this in her article in the Everson volume

<sup>52</sup>a fair number of manuscript issues here, including ή διαίρεσις or καὶ ή διαίρεσις at 1027b30 (not esp. important), somewhat more serious issue τῶν κυρίων or τῶν κυρίων b31 (A<sup>b</sup> seems to preserve the lectio difficilior); I don't really understand why the second ὄν in b31 is ὄν rather than ἔστιν. query: do I have a consistent policy for translating κυρίως (primary? principal? chief? main?) and should I try to impose one?

<sup>53</sup>ἔξω must mean "over and above the things in the categories from which we started," not "external to the mind," since this applies not only to being-as-truth but also to being per accidens. (so apparently Ross' translation, but see his note w/ ref to Natorp). the K8 parallel τὸ ἔξω ὄν καὶ χωριστόν (1065a24) does mean external to the mind (a perfectly possible meaning of ἔξω in Greek philosophy), but K8 applies this only to being-as-truth and not to being per accidens. note also that K8 says only that being-as-truth is an affection of thought, not that its cause is, which is more moderate and plausible (could it be right as against E4? more likely a watering down). (Bonitz says that being as truth and per accidens depend on being in the primary sense and "do not even have existence disjoined from it," so taking separate to mean separate from the categories, but he takes "reveal" to mean "by being such a thing" rather than "by having such a thing as its cause"). perhaps note on the history of the inspired mistranslation, through the Arabic, of τὸ λοιπὸν γένος τοῦ ὄντος = esse diminutum. {see Maurer in Mediaeval Studies for 1950}

can see Aristotle's basic point if we think about what he is against. Plato thinks we can infer, from the premiss that the thought or sentence "X is Y" is true, the conclusion that X and Y have being; presumably X and Y would be in some very broad sense causes of truth to the thought "X is Y" (Aristotle says that the *πρᾶγμα*, a man, is "somehow" the cause of the truth of the sentence "a man exists," *Categories* c12 14b15-22). In some cases, for Plato, the "causes" X and Y will be "further" things-that-are beyond the categories, notably if one or both of them are negations, "not house" or "not white" or "not being": Plato seems to use this form of inference in the *Sophist* to establish the existence of previously unsuspected Forms of negatives, and Aristotle apparently thinks that the *Sophist* is also trying to establish  $\tau\ddot{o}\mu\ddot{h}\ddot{o}\nu$  as an  $\dot{\alpha}\rho\chi\dot{\eta}$  that combines with  $\tau\ddot{o}\ddot{o}\nu$  to produce the plurality of things-that-are.<sup>54</sup> Aristotle intends to reject these inferences by saying that an affirmative judgment is true if the things are composed in reality as they are composed in thought, and a negative judgment is true if the things are divided in reality as they are divided in thought. So in the judgment "X is Y," if Y is a negation = not-Z, the judgment "X is not Z" is true, not because X is composed in reality with not-Z, but simply because X is divided in reality from Z. There is thus no inference to a not-Z, existing beyond the categories, as a cause of the truth of the judgment.

When Aristotle says that the cause of being-as-truth is "some affection of thought," he presumably means that the cause of the truth of "X is Y" is that the things are compounded or divided in thought as they are compounded or divided in reality. Undoubtedly one could push the causal inquiry further and, taking it for granted that the things are composed or divided in thought in a certain way, ask why they are also composed or divided in reality in that way. Beyond establishing the truth-conditions of "X is Y" (by giving the meanings of the terms and the logical form of the sentence), I could look for the cause, to X, of its being Y. This could be done in different ways, corresponding to different senses of being. For instance, I can look for the causes of *per se* being by pursuing the causes, to the *per se*  $\dot{\alpha}\rho\kappa\epsilon\iota\mu\epsilon\nu\nu$  of Y, of its being Y (say the causes, to the moon, of its being eclipsed). This is supposed to lead me to the essence of Y, as expressed in its scientific, causal, definition; but for Aristotle this is quite different from looking for the causes of being-as-truth, which terminates with the nominal definition (an eclipse is a deprivation of light from the moon, by contrast with the scientific definition, deprivation of light from the moon by interposition of the earth between moon and sun). And the further, properly scientific inquiry can succeed only if being Y is in fact a case of *per se* being. Notably, if Y is a negation, there is no essence of Y and no causal definition of Y, but only a nominal definition of the form "Y is not Z." And this is a sign that, in establishing causes of *per se* being, causes which might lead to the desired  $\dot{\alpha}\rho\chi\dot{\alpha}\iota$  (say to Platonic Forms, if there are any), we will have to draw on more specific features of the explanandum which distinguish it from negations and other essenceless things-that-are.

Somewhat surprisingly, though, Aristotle does make a positive use in the *Metaphysics* of the Platonic thesis that thoughts that are capable of being true or false must be directed at composites, and presuppose more fundamental thoughts, directed at simples, which are only capable of being true. E4 says "let what is ... as true be dismissed," but it also promises a future discussion, and this promise is taken up in Θ10, a kind of appendix awkwardly positioned at the end of the Θ1-9 account of  $\delta\dot{\nu}\nu\dot{\alpha}\mu\dot{\iota}\dot{\varsigma}$  and  $\dot{\epsilon}\nu\dot{\epsilon}\rho\gamma\dot{\epsilon}\iota\dot{\alpha}$ , and at the end of the whole E2-Θ9 investigation of the causes of being *per accidens*, as truth, in the categorial senses and as actual and potential. (The promissory note E4 1028b28-9 may be a later insertion in an originally self-contained E4, to justify a later addition of Θ10 to the *Metaphysics*.) Θ10 is clearly not necessary

<sup>54</sup>if *Metaphysics* N2 1089a2-31 is referring to the *Sophist* (or to discussions coming out of the *Sophist*), as it looks to be--note that at a19-23 it is said that the not-being in question is the false

for the overall argument of the Metaphysics, but we can also see why Aristotle thought that it would have something to contribute.

Θ10 can be divided into two main sections, 1051a34-b17 on truth and falsehood with respect to composites, and 1051b17-1052a11 on truth and ignorance with respect to incomposites (whose initial thesis was cited above), except that Aristotle returns at the end of the second section (1052a4-11) to consider a special case of truth and falsehood with respect to composites.<sup>55</sup> In each section, Aristotle seems to modulate into a strictly metaphysical application, that is, an application to immaterial substances. At the end of the discussion of truth and falsehood with respect to composites, where truth consists in composition and falsehood in division (or vice versa in the case of negative judgments), Aristotle notes that in some cases the things are capable of being composed at one time and divided at another time, while in other cases they must be eternally composed or eternally divided (1051b9-17, end of the first section); while this may not yet be properly metaphysical, Aristotle applies the point at the end of the chapter, 1052a4-11, to conclude that "about unchanging things there is no deception on account of time, if they are believed to be unchanging" (1052a4-5). That is: if S is eternally unchanging, then "S is F" must be either eternally true or eternally false (Aristotle is presumably setting aside, as per accidens predication, "the eternal substance S is currently being imitated" or "the eternal substance S is currently being contemplated"). Furthermore, as long as a thinker is aware that S is eternally unchanging, he will not believe that "S is F" is true at one time and false at another (a6-7). He may perhaps change his mind about whether S is F as he learns more about S, but whatever he thinks about S he will think to be eternally true about S, and his judgment will be eternally right or eternally wrong. He cannot go wrong about S in the way we often go wrong about changeable things, that is, by observing at some time that S is F and then continuing to believe that S is F, even if S has in fact ceased to be F, so that a judgment that was previously true has become false. Aristotle here seems to be excluding from eternally unchanging beings one Platonic way of being F-and-not-F, namely by being F at one time and not-F at another time. Another Platonic way of being F-and-not-F could still apply, namely being F in one instance and not-F in another instance, as even number is prime in one instance and not-prime in the other instances (a8-9); someone might rightly believe that some even numbers are prime and some even numbers are not-prime, but he might instead overgeneralize from limited observation and judge simply "even number is not-prime," so that this judgment, right in some instances, will be wrong in another. But in the case where S is not only eternally unchanging but also numerically

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<sup>55</sup>(1) somewhere in here you should discuss the textual/interpretive issue at 1051b1-2 about τὸ κυριώτατα ὄν: if we keep the text of A<sup>b</sup>, it is the true that is being in the most proper sense, which seems to go against what we are told elsewhere, but perhaps it could be said that this is linguistically although not philosophically the strictest sense? the text of A<sup>b</sup> is defended by--who (Kahn?)? note Jaeger's and Ross' proposals. note also that EJ have τὸ κυριώτατα [or κυριώτατον] εἰ [or ἢ or η̄] ἀληθὲς ἢ ψεῦδος, where this has an advantage over A<sup>b</sup> in that A<sup>b</sup> seems to say that being is true or false, EJ might mean "what is in the primary sense [being or not being, from 1051a34], i.e. whether it is true or false" (but still hard to explain why it's primary) or "whether what is in the primary sense is true or false" (i.e. it's the categorial and actual and potential senses that are primary, but we now ask under what conditions such a being is true or false--but would that exclude negative judgments?). (2) you need to say something, here or elsewhere, about what you think is the status of Θ10 in the Metaphysics. I take it it's by Aristotle and E4 refers forward to it; that could be an insertion in E4 when Θ10 was added, whether by Aristotle or by a later editor. it is possible that Θ10 is simply a scrap left over and added at the end of EZHΘ. on the other hand, although E4 rightly dismisses being-as-truth as an effect whose causes might lead to the ἀρχαί, a further examination of being-as-truth, esp. one-place being-as-truth, does have some light to shed on Λ; it may also be seen to presuppose Θ8 on the ἀρχαί as being eternally in ἐνέργεια with no δύναμις. so even if it's a scrap it's relevant, and there's some reason why Aristotle might have intended it in its present position. the first sentence of Θ10 as we now have it certainly seems to look back to ZH and to Θ1-9

one, this kind of deception too is excluded: the judgment "S is F" must be either true for every time and instance, or false for every time and instance.

However, while this line of thought, in a Platonic spirit, shows that some common sources of error (as Plato diagnoses them) cannot arise in the case of eternally unchanging substances, it is still possible to be eternally wrong about them; Aristotle is clearly talking about truth with respect to composites (albeit eternal composites--on the assumption that there are any), where falsehood is possible, even though no one judgment is capable of both truth and falsehood. However, he wants also to talk about "higher" metaphysical cases where falsehood is not possible at all. In a passage with several difficulties, Aristotle says:

There is no deception about the *tí ἔστι* except *per accidens*; likewise, neither is there deception about incomposite substances. Also all [such substances] are in actuality, not in potentiality, for [if they were in potentiality] they would come-to-be and pass-away, but the thing-that-is itself [*τὸ δὲ αὐτό*] does not come-to-be or pass-away, for it would come-to-be out-of something [and therefore would have a matter and would be composite, contrary to assumption]. So about those things which are just [what it is] to be something and [just what they are] in actuality [*ὅπερ εἴναι τι καὶ ἐνέργεια*] there is no deception, but only thinking [*νοεῖν*] them or not; but we inquire about their *tí ἔστι* [to find out] whether they are such or not. (1051b25-33)<sup>56</sup>

Aristotle's starting point here is not especially metaphysical, and comes out of familiar reflections on what kinds of deception are and are not possible. I cannot get the essence of horse wrong. Instead of getting the essence of horse right, I can think "horned ruminant quadruped," but then I am not thinking about horses at all, but about cows, and there is no deception but only a not-thinking of horse. I cannot think "horse is cow" (*Theaetetus* 190c1-3 [reversed]), or, to give an example with individual terms, "Theaetetus is Theodorus" (*Theaetetus* 192e8-193a3). I can of course go wrong in attaching a qualitative predicate to the subject "horse," or in judging that [a] horse is present here in front of me, but these are not errors about the *tí ἔστι* of horse. The only way I can go wrong about the *tí ἔστι* is *per accidens*, by giving a wrong answer to a question "*tí ἔστι X?*" when X is presented under an accidental description. Thus I may judge "the person approaching is Theodorus" when the person approaching is in fact Theaetetus, or I may judge "the domestic animal with the longest ears is the horse," when the domestic animal with the longest ears is in fact the donkey; I am thus *per accidens* committing an error about the *tí ἔστι* of Theaetetus or of the donkey.<sup>57</sup>

<sup>56</sup>textual issues: (1) at 1051b27 E has *τὰς συνθέτους οὐσίας*, J *τὰς συνθετὰς οὐσίας*, A<sup>b</sup> *τὰς μὴ συνθετὰς οὐσίας*; a later hand in E adds the *μὴ*. the negative is clearly needed for the sense. most likely, as I will assume, Aristotle wrote *τὰς ἀσυνθέτους οὐσίας* (connecting with *τὰ ἀσύνθετα* at 1051a17, and cp. the *στοιχεῖα* as *ἀσύνθετα* at *Theaetetus* 205c7) and the *α*-privative dropped out, leaving a mess which different scribes tried to correct in different ways; according to Bonitz, several early printed editions have *ἀσυνθέτους*; (2) at b28 A<sup>b</sup> has *ἐνέργεια* rather than EJ *ἐνέργειά*, which has its attractions, but since the contrast is with *δυνάμει* it is better to keep *ἐνέργειά*; (3) at b31 Ross prints *ἐνέργεια* rather than codices *ἐνέργειά*, which also has its attractions (d think about this); (4) at b32 *τὸ τί ἔστι* *ζητεῖται* A<sup>b</sup> leaves out *τί*, but it seems clearly necessary

<sup>57</sup>Ross cites ps-Alexander and Bonitz as thinking that the *per accidens* error is simply the not-thinking of the thing, but I agree with Ross that Aristotle would not call this an error even *per accidens*. Ross' own account is long and complicated and turns on a systematic confusion between the *tí ἔστι* of b26 and the incomposite substances of b27ff, both of which Ross calls "forms," although the notion of form seems to have nothing to do with what Aristotle is saying about the *tí ἔστι* here, and of course he does not think that immaterial substances are forms at all. Ross thinks that although forms are simple relative to composite substances or to propositions, they can be composed out of

Now, however, Aristotle applies these general reflections to the properly metaphysical case of "incomposite substances." These are pure actuality without potentiality, and it is clear that they are not (as Bonitz and Ross think) the forms of sensible things, but eternal substances existing separately from matter, like the "unchanging things" of 1052a4-11; but the "incomposite substances" will be at least *prima facie* a narrower class, as excluding all forms of composition and not merely change or the capacity for change (in fact, however, Aristotle thinks that all substances without the capacity for change are pure *ἐνέργεια* and that this excludes any form of composition). Aristotle refers to any such substance, in deliberately Platonic language, as *τὸ ὅν αὐτό*. He seems to mean, however, not that it is anything like a Form of being-itself, but rather that it is just *the thing that it is*: if it is F, then it is just F, rather than F composed with a *ὑποκείμενον* or with any other attributes. Thus he can equally say of such a substance that it is *ὅπερ εἶναι τι*--it is just being-F, not predicated of any distinct *ὑποκείμενον*, as it is also just the *ἐνέργεια* of being F, not predicated of any distinct *δύναμις*.<sup>58</sup> Because any such substance is simply a *τί ἐστι*, there is no room for error about it, but only for grasping or not-grasping. I can commit errors about horses, although not about the *τί ἐστι* of horse, by wrongly thinking that horsemanship is instantiated in some given *ὑποκείμενον*, or by wrongly thinking that horses (or some given horse) have a given accident such as visibility. But an incomposite pure essence can have neither *ὑποκείμενα* nor accidents, and as long as we recognize it as an incomposite pure essence, we cannot make either of these kinds of mistakes about it. Once we have grasped the essence, there are no further inquiries to be made about it. There is only one sense in which we can inquire about a pure essence and pure *ἐνέργεια*: if the thing is presented to us under a description which does not express its essence but only relates it to other things, such as "the mover of the daily equatorial motion of the heavens," we can "inquire about [its] *τί ἐστι*" (1055b32), that is, we can ask "what *is* the mover of the daily equatorial motion of the heavens," not in the hope of finding an adequate verbal formula for it, but simply "[to find out] whether [it is] such or not" (1055b32-3), that is, to find out whether it is a pure essence and pure *ἐνέργεια* or not.<sup>59</sup> If it is, then there is properly speaking no further inquiry about it; all we can do is to try to grasp it by grasping the actions on other things through which we became aware of it (it moves and is thought and desired), and by purging from our conception of the agent any description that would imply potentiality or composition or a *ὑποκείμενον*. This is what Aristotle will do in Λ6-10. The description of being as truth, including truth as applied to incomplices, does not yield any causal program for inquiry into the *ἀρχαί*. Nonetheless, it can help to describe the process that we will follow in proceeding from composites, where we must discriminate true from false propositions, to grasping their simple *ἀρχαί*, whose truth we either perceive or fall short of. But this process will have to start, not from a general account of truth, propositional composition, and so on, but from an inquiry into the causes of being in some other and more determinate sense.<sup>60</sup>

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genus and differentia, and so errors can arise in defining them through miscombinations of genus and differentia. This is clever in a desperate way, but has nothing to do with the text

<sup>58</sup>I take *εἶναι τι* to mean "e.g. being-F"; *εἶναι* might also be taken as a noun modified by the indefinite pronoun *τι*, which may be how Ross takes it (the *τι* does not turn up explicitly in his translation). I think here about *ἐνέργεια* vs. *ἐνέργεια*.

<sup>59</sup>against Ross, who thinks that asking *εἰ τοιωντά ἐστιν ή μή* means asking of a given species whether it falls under a given genus or differentia. apart from other objections, this turns on Ross' confusion between incomposite substances and forms (or species) of material substances. Ross notes several other desperate attempts at interpretation. the interpretation I am suggesting seems simple and natural, and corresponds to Aristotle's practice (it also seems to be implied in Fārābī, for what that's worth)

<sup>60</sup>I incorporate into Iy1c comment currently in the notes for Iy2 on the *Sophist* on truth/falsehood as attributes of the predicate

### Being δυνάμει and ἐντελεχείᾳ

Being also signifies what is, on the one hand potentially [δυνάμει], on the other hand actually [ἐντελεχείᾳ], [any] of the aforementioned [kinds of being]: for we say that both what sees potentially [δυνάμει, i.e. what has the sense of sight] and what sees actually [ἐντελεχείᾳ] are seeing, and likewise we say that both what is capable [δυνάμενον] of exercising [χρῆσθαι] knowledge [ἐπιστήμη] and what is exercising it know, and both that to which rest already belongs and what is capable [δυνάμενον] of resting [are] resting. And likewise with substances: for we say that Hermes<sup>61</sup> is in the stone, and that the half of the line is, and that what is not yet ripe is grain; but when [something like this] is δυνατόν [= capable of being, or capable of being present in something, or capable of being something], and when it is not yet [so δυνατόν], we must determine elsewhere [= Θ7]. (Δ7 1017a35-b9)<sup>62</sup>

Aristotle's distinction between these two senses of being, being δυνάμει and being ἐντελεχείᾳ or ἐνέργειᾳ, will be structurally crucial for the Metaphysics, since Metaphysics Θ will be devoted to investigating the causes of being δυνάμει, namely δυνάμεις and their bearers the δυνάμενα causes, and the causes of being ἐνέργειᾳ, namely ἐνέργειαι and their bearers the ἐνεργοῦντα causes. I will come back to a deeper discussion of this passage in talking about Θ in Part III below. Here I will avoid discussing the causes of being δυνάμει and ἐνέργειᾳ, and thus in particular the relations between δυνάμεις (discussed in Δ12) and being δυνάμει;<sup>63</sup> I will confine myself to sketching briefly how Δ7 tries to establish that being does indeed have these two senses, and how being δυνάμει appears in different syntactic contexts.

Here as elsewhere in Δ7 Aristotle goes back and forth between 1- and 2-place uses of εἰναι without explicitly calling attention to the difference or saying how the 1- and 2-place uses are connected. Aristotle assumes that the unmarked case of being is being in actuality, and his effort goes to showing that we do also use forms of εἰναι in the sense of εἰναι δυνάμει: he starts with 2-place contexts where this can be shown more easily. Indeed, he starts with quite special 2-place contexts, "S is V-ing" where "is" links a noun with a participle of a verb of action or passion, indeed specifically with a participle of a verb of cognition. These examples have the advantage that for them what Aristotle is saying is in fact true as a matter of ordinary usage. We do indeed call something "seeing" if it has the ability to see, whether or not it is seeing anything at the moment (a sighted person as opposed to a blind person, a cat as opposed to a kitten whose eyes have not yet opened, an animal with eyes as opposed to an earthworm); likewise, we call a person "knowing" if he has the ἔξις of ἐπιστήμη of (say) the Pythagorean theorem, that is, if he has the ability to actually know or contemplate it when he attends to it, even if he is not actually contemplating it at the moment.<sup>64</sup> We would not, as a matter of ordinary Greek, say "S is V-ing"

<sup>61</sup>or adopt Beere's translation "a herm"--if so, be consistent about it, here and in other sections

<sup>62</sup>note some textual issues. what follows heavily overlaps with an (earlier) discussion in IIIο2: d think how to harmonize and avoid duplication. the basic principle is that discussions of εἰναι δυνάμει as a sense of being go here, discussions of δυνάμεις or δυνάμενα causes as the causes of being in that sense go in Part III. but it will probably be impossible to maintain this division consistently

<sup>63</sup>I will also avoid the question of the relation (synonymy?) between ἐντελέχεια and ἐνέργεια; give refs

<sup>64</sup>note however that while Aristotle says "we say that the potentially seeing [thing] is seeing" he says only "we say that what capable of exercising knowledge knows," without using a form of εἰναι. but since he is arguing that we can use εἰναι in the δύναμις-sense, he must be assuming that we can further convert "knows" into "is knowing," just as we converted "sees" into "is seeing"

(ordinarily we would say "S V's," without a form of εἰναι), but we would apply to S the term "V-ing," and so it would be legitimate to form the unusual sentence "S is V-ing," logically equivalent to "S V's." Aristotle has already used this equivalence earlier in Δ7, converting ἀνθρωπος βαδίζει into ἀνθρωπος βαδίζων ἐστι to argue that εἰναι can signify ποιεῖν, as it can signify any of the other categories (1017a24-30, discussed above). So now, if ἀνθρωπος ὄρῶν ἐστι is equivalent to ἀνθρωπος ὄρᾳ, and ἀνθρωπος ὄρᾳ can mean that a person is able to see, then εἰναι can signify δύνασθαι ποιεῖν (or δύνασθαι πάσχειν, since seeing is in fact a πάσχειν and not a ποιεῖν). However, Aristotle wants to claim something stronger, namely that εἰναι can signify δύνασθαι in all categories, and in either a 2-place or a 1-place context, just as he has argued earlier that εἰναι can signify any of the categories in either a 2-place or a 1-place context. To do this he needs, first, to show that the ambiguity of "S is F" occurs even when "F" is not a participle of a verb of cognition, or of any other verb of action or passion.

Although Aristotle goes very fast in Δ7 in extending the δύναμις-sense of "S is F," he seems to be roughly recapitulating the historical sequence of his own successive extensions of the δύναμις/ἐνέργεια ambiguity. In the Protrepticus, he applies this distinction only to verbs of cognition and to the verb "to live" (and the Protrepticus glosses living as sensing-or-thinking). But already in the Protrepticus he describes the stronger sense of these verbs as signifying ποιεῖν or πάσχειν, and the weaker sense as signifying being "such as to ποιεῖν or πάσχειν in that way" (B83), and he speaks in general of the possibility of a word signifying two things, the stronger of which is a ποιεῖν or πάσχειν (B81), so perhaps this ambiguity might occur also in verbs that are not verbs of cognition. But Aristotle is not yet locating this ambiguity in the verb εἰναι: if "S is V-ing" is ambiguous for some values of V, this is because the verb "V," and therefore the participle "V-ing," have a δύναμις/ἐνέργεια ambiguity, not because the verb εἰναι does. It is only in later works that Aristotle will say "S is F" in the δύναμις-sense (or will say "S is F δυνάμει" to make this sense explicit) in cases where the predicate F is not in the categories of ποιεῖν or πάσχειν.<sup>65</sup> He gives the fullest account of this process of extension in Metaphysics Θ, to be discussed in Part III below. Here in Δ7 he first extends the ambiguity to sentences where the predicate is a participle, but a participle of a verb that does not signify ποιεῖν or πάσχειν. As he says here, "both that to which rest already belongs and what is capable [δυνάμενον] of resting [are] resting" (1017b5-6); similarly in Θ3 (1047a22-9) he will speak of being capable [δυνατόν] of sitting or standing alongside being capable of moving or walking. This has the effect of extending the δύναμις-sense to cases where the predicate is not in the categories of ποιεῖν or πάσχειν--or, as Aristotle sometimes puts it, in the category of κίνησις--but rather in the category of κεῖσθαι, "position." But surely it is merely a grammatical accident that in "S is sitting" the predicate is expressed by a participle, while in "S is upright [ὀρθός]" the predicate is expressed by an adjective: if we can say "S is sitting" in the δύναμις-sense, we should also be able to say "S is upright" in the δύναμις-sense; and, if so, we should also be able to say "S is white" or "S is F" in general in the δύναμις-sense, where F is in the category of quality, or indeed in any other category of accidents. However, in Δ7 Aristotle skips these intermediate stages, saying immediately "and likewise with substances" (1017b6), presumably because for the larger purposes of the Metaphysics it is substances, rather than qualities or quantities, which give the most important extended cases of εἰναι δυνάμει and ἐνέργεια.

One of the three sample sentences Aristotle gives to illustrate εἰναι δυνάμει in the case of substances, "what is not yet ripe is grain," is syntactically similar to the examples of seeing and resting: a 2-place εἰναι links subject and predicate, but the predicate is now in the category of substance. The other two examples are syntactically different, with a 1-place existential use of

<sup>65</sup>I take it that V-ing or being F δυνάμει or κατὰ δύναμιν means V-ing or being F "in the sense of the δύναμις"

εῖναι in "the half of the line is," and a locative-existential use in "[a statue of] Hermes is in the stone" (perhaps the Hermes, and certainly the half-line, are on Aristotle's view not really substances, but some people think they are, and Aristotle is willing to assume that they are for purposes of the argument). Aristotle intends the different syntactic contexts to be mutually transformable in the ways we have discussed above; but the 2-place context makes it easier to see how the being-in-the-δύναμις-sense of substances is related to the being-in-the-δύναμις-sense of accidents. As we can say "S is seeing" because S has a δύναμις for seeing, so we can say, pointing to a bud that will become an ear of corn, that it is corn, because it has a δύναμις for becoming an ear of corn (we might especially do this to distinguish it from another species--"that's corn, not soybeans," because it has a δύναμις for becoming or producing ears of corn, and does not have a δύναμις for becoming or producing soybeans). But we are more likely with a substance than with an accident to want to use εῖναι in a 1-place or existential context: the line-segment is, the Hermes is, the grain is (in English more naturally, "the grain exists" or "there is grain"). By transforming a 1-place use of εῖναι into a 2-place use, we will be able to see what the 1-place use would mean if taken in the δύναμις-sense. The same transformations are possible in the case of accidents: "walking [the abstract action-noun βάδισις, or the infinitive βαδίζειν] is" is equivalent to "something is walking [the concrete paronym, the participle βαδίζοντος]," and "walking [βάδισις, βαδίζειν] is in S" (or "walking [βάδισις, βαδίζειν] belongs [ὑπάρχει] to S") is equivalent to "S is walking [βαδίζοντος]." So to say that walking [βάδισις, βαδίζειν] is in the δύναμις-sense is to say that something is walking in the δύναμις-sense, i.e. that something has the δύναμις for walking. So too in the case of substances, the grain is in the δύναμις-sense because something has the δύναμις to become or to produce grain; the half-line is in the δύναμις-sense because the whole line has the δύναμις to be bisected (and something has the δύναμις to bisect it), and the Hermes is in the stone in the δύναμις-sense because the stone has the δύναμις to be carved into a Hermes (and something has the δύναμις to so carve it). Going by grammatical parallels, we might think that the Hermes is δυνατόν [possible], or is δυνατὸν εἶναι [capable of being], or δύναται εἶναι [can be], because it has a δύναμις for being, just as Socrates is δυνατὸς βαδίζειν [capable of walking] because he has a δύναμις for walking. But of course a not-yet-actually-existent thing has no δυνάμεις at all: the Hermes is δυνατόν not because it is δυνατόν [capable] of doing something, but because the Hermes is δυνατόν [possible] for something else to become or to produce, that it, it because something else has a δύναμις to become or to produce the Hermes. (This analysis is allied with Aristotle's analysis, in *Physics* I,7, of "S comes-to-be": uncontroversially, "white comes-to-be" is equivalent to "something [some appropriate substance] comes-to-be-white"; Aristotle then claims that, even for a substance, "S comes-to-be" is equivalent to "something [some appropriate matter] comes-to-be S," and thus he resolves the difficulties that would arise if we took the not-yet-existent S as the subject of coming-to-be.) But, in the last line of Δ7, Aristotle defers to a later discussion--evidently Θ7, which picks up the promise--the question of the conditions under which something is δυνατόν. And I too will defer deeper discussion of these issues to my discussion of *Metaphysics* Θ in Part III below. Which is as it should be. *Metaphysics* Θ is Aristotle's systematic discussion of δυνάμεις and ἐνέργειαι (and their bearers), which we know as causes of being in the δύναμις- and ἐνέργεια-senses, as candidates for being the ἀρχαί; many of the questions about being δυνάμεις which arise from Δ7 can only be resolved by a causal investigation, and the purpose of Δ7 is precisely to prepare for and to motivate such an investigation. Θ will draw on Δ7, but also on Δ12's discussions of δύναμις, ἀδυναμία, δυνατόν, and ἀδύνατον, and it will integrate them into a systematic investigation of active and passive δυνάμεις as the efficient and material causes of being δυνάμεις (in all categories and in all syntactic contexts) and of the priority relations between δυνάμεις and ἐνέργειαι. This investigation, alongside ZH's investigation of the causes of being-as-said-of-the-

categories (and especially of being as *oὐσία*), will be one of the most plausible ways to get to the *ἀρχαί*, after the paths to the causes of being *per accidens* and being-as-truth have been distinguished and dismissed in E2-4. The main conclusion of Θ will be that, contrary to the views of most earlier philosophers, *ἐνέργεια* is prior to *δύναμις*, and therefore that *δυνάμεις* and their bearers are not among the *ἀρχαί* in the strict sense; and this conclusion will be applied in Aristotle's positive account of the *ἀρχαί* in Λ.