Aristotle's second problem about the possibility of a science of being *qua* being: a reconsideration of Metaphysics Γ 2

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1.

There is a variety of interpretations of how, in Metaphysics Gamma 2, Aristotle argues for the possibility of a science of the essence of being – of what being is; of being qua being – and does so, famously, by introducing the claim that this kind, being, exhibits a $\pi\rho\delta\varsigma$ $\xi\nu$ structure; that is, the claim that the different kinds of being are essentially dependent on a single kind that is primary. It appears that the several interpretations come in three main varieties. First, there are those who, following Owen's classic article of 1960, argue that Aristotle's primary aim is to obviate the danger that the term 'being' is simply ambiguous, in the way in which the word 'bank' is in English and the word κάλυξ in Greek.' This, these critics think, is a real danger due to Aristotle's theory of categories, understood as the view that there are different ultimate kinds of being which do not fall under a single genus and which, for all that theory tells us, may or may not be essentially related. For it is obvious that if 'being' is ambiguous in this way, then there cannot be a science of the essence of being. Secondly, some critics, challenging Owen's view that the theory of categories represents such a danger and arguing that the $\pi \rho \delta \varsigma$ έν structure is present already in that theory, argue that Aristotle's aim, rather, is to show that the possibility of a science of a subject-matter does not require that the different kinds of the subject must belong to a single genus (the so-called καθ' ἕν structure) but is likewise provided for by a πρὸς ἕν structure. According to these critics, the need to show this is due to Aristotle's, in the Posterior Analytics, having accounted for the unity of a science entirely in terms of the strict genus-species relation (xαθ' ἕv structure); so that his aim in the *Metaphysics* is, in effect, to relax the Posterior Analytics' requirements for the unity of a science.² Thirdly, other critics argue that the $\pi\rho\delta\varsigma$ žv structure, invoked for the purpose of unifying a science, is present already in the Posterior Analytics, and that the aim of the Metaphysics is to extend this mode of unification of a science from the special sciences to the general science of being.³

Our question in the present paper is this: Does Aristotle, in *Metaphysics* Gamma 2, think that the claim that being exhibits a category-based $\pi \rho \delta \varsigma \, \tilde{\epsilon} v$ structure is also sufficient to defend the possibility of a science of being *qua* being, or does he think that it is only necessary?⁴ We

¹ Owen (1960); Ferejohn (1980); Bostock (1994), 67.

² Yu (2001); Aubenque (1962); Kirwan (1993); Irwin (1988), ch. 7-8, especially 154, 162 f.; Irwin (1990); Code (1997); Ward (2008), 169 f.; Loux (2003), 163.

³ Fraser (2002); also Bolton (1994), see especially 352 and Bolton (1995), see especially 427, 464 f.; De Haas (2009), see especially 75; McKirahan (1995); Bell (2004), 27-33.

⁴ By the term 'the claim that being exhibits a category-based πρòς ἕν structure' we mean the claim that being exhibits a πρòς ἕν structure that is based on the view that there are different categories of being, according to the notion of categories developed in the *Categories*. We do

want to defend the latter answer. Our impression is that the former answer is commonly assumed. For, even though there are several interpretations of Aristotle's defence of the possibility of a science of being *qua* being in Gamma 2, it appears that they all rely, either exclusively or certainly in the main, on the first part of the chapter, that is, 1003a33-b19, in which Aristotle defends the possibility of this science, precisely, by arguing that being exhibits a category-based $\pi\rho\delta\varsigma$ $\xi\nu$ structure.⁵

Our thesis in the present paper is that, whereas, certainly, Aristotle thinks that the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\ddot{\epsilon}\nu$ structure provides a resolution of *one* problem about the possibility of a science of being *qua* being, he does not think that this is *the only* problem about the possibility of such a science; and he does not think that the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\ddot{\epsilon}\nu$ structure, which provides the resolution of the first problem, is either necessary or sufficient for resolving a different problem about the possibility of a science of being *qua* being. It follows that, whereas, certainly, Aristotle thinks that the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\ddot{\epsilon}\nu$ structure *is necessary* to establish the possibility of a science of being *qua* being, he does not think that it *is sufficient*. (For how our thesis stands opposed to a tradition of long standing regarding Gamma 2, we refer the reader also to Section 2, below).

Owen (1960), in a classic paper that is addressed, precisely, to Aristotle's defence of 'the nature 5 and possibility of any general science of $\tau \delta$ $\delta \nu \hat{\beta} \delta v'$ (163), has nothing to say about what Aristotle does in Gamma 2 following 1003b19, when the claim that being exhibits a categorybased $\pi \rho \partial \zeta$ žv structure has been made and defended; except, that is, for one sentence: This [i.e. the *pros hen* structure of 'being'] is the pattern of reductive translation that Aristotle later [i.e. later in Met. Gamma 2] applies to 'being' and to those other expressions, such as 'one' and 'same' and 'opposite', which have a use in all categories but a primary use in the first [he refers here to: '1004a22-31']'. (169-70, emphasis added) Owen is simply mistaken when he says (168, emphasis in underlining added; emphasis in italics original): 'And from this [i.e. the pros hen structure of 'being'; O. refers here to the whole of 1003a21-b19, i.e. Gamma 1 and the first part of Gamma 2] Aristotle concludes at once that there is a single science of being *qua* being'. The 'at once' is mistaken and ignores, in effect, 1003b19-1005a13, i.e. the second part of Gamma 2. It shows plainly that Owen thinks that the first part of Gamma 2 (i.e. up to 1003b19) is supposed to be sufficient to establish that there is a science of being qua being. While the numerous critics of Gamma 2 after Owen have disagreed with Owen on many, including basic, points about the first part of Gamma 2, it is our impression that they have followed Owen in dedicating the lion's share of the attention to this, the first part of the chapter; and so, in effect, implying that it is here that Aristotle does the work to establish the possibility of a science of being qua being.

not, however, intend this term to imply that, already in that work, the *Categories*, Aristotle was committed to this claim; this is a matter of controversy. The term is, admittedly, cumbersome; neater would be, simply, 'the claim that being exhibits a $\pi\rho\delta\varsigma$ $\xi\nu$ structure'. In our view, however, the qualifier 'category-based' is needed, because, as we shall argue, Aristotle thinks that there are philosophers who think that (or who, in Aristotle's view, have reason to think that) being exhibits a $\pi\rho\delta\varsigma$ $\xi\nu$ structure, but who, he recognizes, would not accept the view that there are different categories of being according to his, Aristotle's, notion of categories.

The second problem about the possibility of a science of being *qua* being that Aristotle articulates in Gamma 2 can be summarily formulated in the following question: How can a plurality of apparently primary kinds – they include identity ($\tau \dot{o} \alpha \dot{v} \tau \dot{o}$), similarity ($\tau \dot{o} \ \ddot{o} \mu \sigma \sigma \nu$), their opposites (difference, $\tau \dot{o} \ \ddot{e} \tau \varepsilon \rho \sigma \nu$, and dissimilarity, $\tau \dot{o} \ \dot{a} \nu \dot{o} \mu \sigma \sigma \nu$), and such opposites in general – be the subject-matter of a single science, and, in particular, the science of being *qua* being?⁶ Aristotle turns to this problem directly after having articulated, and defended a resolution of, the first problem. This was the problem of how a plurality of categories of being (according to Aristotle's notion and theory of categories) can be the subject-matter of a single science, and, in particular, the science of being *qua* being. The second problem, we shall see, occupies Aristotle extensively and for the remainder of the chapter (1003b19-1005a13; not including the last few lines of the chapter, which are a summary conclusion to the whole chapter and indeed the whole of Gamma 1-2).

We shall argue that he defends a resolution of *this* problem by arguing for the following claims. First, even though there is a plurality of such kinds of paired opposites – identity and difference, similarity and dissimilarity, and such opposites in general – and they appear to be primary on account of their being true of all things,⁷ they are all derivable from being and unity. Secondly, this implies that being and unity are prior to, and are oùoíai in relation to, these kinds. Thirdly, being and unity are themselves related to each other as primary oùoía and consequent oùoía. And, fourthly, Aristotle leaves open, at this stage of the *Metaphysics, which* of the two is the primary oùoía and *which* the consequent oùoía.

There is, of course, a very major and important general question here, namely what does Aristotle mean by $o\dot{v}\sigma\dot{\alpha}$ in this context of Gamma 2 and in general in the context of books Alpha, Beta and Gamma of the *Metaphysics*.⁸ For present purposes, we are not taking on this question, rather, we are making the following supposition. Aristotle is here using this term, $o\dot{v}\sigma\dot{\alpha}$, in a way that is deliberately flexible and, therefore, to a considerable extent indeterminate; namely, to signify *that which is, in some relevant way, primary in relation to something else*. Of course, it is plausible to suppose that the primacy he has in mind is, precisely, *primacy in being*. However, even this clarification needs to be handled with care; because, first, there are, according to Aristotle, different ways in which one thing can be prior *in being* to another, and, secondly, and most important for our present purpose, he will use

⁶ The phrase 'primary kind', πρῶτον γένος, is not used in Gamma 2. It is, however, used in the Seventh Aporia of book Beta (998b15, b20; 999a22-3). We may also note that at Gamma 2, 1004b9 Aristotle says 'οὐσία is prior' (πρότερον ἡ οὐσία); and it is clear, as we shall see, that he means that οὐσία is prior to precisely such kinds as identity, similarity, their opposites, and such opposites in general. What Aristotle says (at 1004b8-10), we shall see, is that certain thinkers suppose that these kinds are primary; but that they are wrong, because there is a kind that is prior to them.

⁷ The claim that these kinds are true of all things is not prominent in Gamma 2, but it is, we shall see, present; and it is, we shall see, present elsewhere in the *Metaphysics*.

⁸ For an attempt to address this issue comprehensively, see Politis and Su (2016).

οὐσία to refer not only to primary being but also to primary unity (expressly so called). This flexible and considerably indeterminate use of the term οὐσία here is consonant with, and, we may suppose, motivated by, Aristotle's overall aim in Gamma 1-2, which is to consider the possibility of a unified science of being *qua* being, rather than what being *qua* being is.

Whereas it is familiar that the problem to which Aristotle's introduction of the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\xi\nu$ structure provides a resolution has its source in Aristotle's own views, and in particular the theory of categories as defended in the eponymous work,⁹ we shall see that the other problem that he articulates and proposes a resolution of in this chapter is presented as a problem that is common to both his views and the views of a variety of other thinkers, including, most prominently, Plato. And, whereas it is familiar that the resolution of the first problem relies on his own theory of categories, we shall see that the resolution that he defends in response to the second problem, while it is consistent with and can be combined with the theory of categories – Aristotle indicates how the two can be combined at 1004a22-31 – does not rely on that theory and does not have to be associated with it.

This shows, we conclude, that a significant part of Aristotle's aim in this chapter is to demonstrate that his general account of this science, $\sigma o \varphi i \alpha$ (or $\varphi i \lambda o \sigma \varphi i \alpha$ as he will call it in Gamma 2), as, precisely, the science of being *qua* being, is acceptable also to a variety of other thinkers. That Aristotle intends an ecumenical conception of the science of being *qua* being is confirmed later in the *Metaphysics*; such as, for instance, in book Zeta. Thus, in Zeta 2, and having just pointed out, at the end of Zeta 1, that the aim of his overall inquiry is to establish what being is by establishing what $o d \sigma i \alpha = - and having famously referred to this as an age-old inquiry – he proposes to examine what things are <math>o d \sigma i \alpha = - a d \phi a \phi i \alpha$ is, in a way that substantially involves assessing the views of a wide variety of other thinkers on these same questions, including two that he immediately mentions by name: Plato and Speusippus.

We shall not, in this paper, consider where or how Aristotle will take up, later in the *Metaphysics*, this second problem, which he introduces and indicates a resolution of in Gamma 2. What one would need to consider, to undertake this further task, would be two things. First, where and how does Aristotle argue that a certain variety of kinds (including *identity* and *difference*, *similarity* and *dissimilarity*), which would otherwise have a strong claim to being basic and primary on account of their being true of all things, can be derived from *being* and *unity* as from their principle? And secondly, where and how does Aristotle argue that is prior to *unity*, and not, as apparently Speusippus would have it, *unity* that is prior to *being*? We may surmise that these questions will be taken up in books Mu and Nu (see e.g. N 5). But also, we may note, book Iota.

⁹ Again, we want to emphasize that when we say that this problem *has its source in* the theory of categories as defended in the *Categories*, we do not mean to imply that, already in that work, Aristotle was committed to the claim that being exhibits a category-based πρός ἕν structure.

We shall observe, however, that when, in the course of Gamma 2, Aristotle articulates this second problem, and at the point at which he articulates this as the problem whether it belongs to a single science, $\varphi i \lambda o \sigma o \varphi i \alpha$, to give an account *both* of the kinds that come in opposites (identity-difference, similarity-dissimilarity, etc.) *and* of $o \delta \sigma i \alpha$, he refers to this problem as one of the *aporiai* articulated in book Beta. We shall point to the Third and the Fourth Aporiai, but also to the Seventh, as good candidates for the Aporia that Aristotle is referring to in Gamma 2 (see 1004a31-b1).

2.

According to a tradition of long standing regarding *Metaphysics* Gamma 2, there really is no reason to attach such importance, as we do, or to dedicate such effort, as we do, to the argument in this part of the chapter, that is, the part following the claim that *being* exhibits a category-based $\pi\rho\delta\varsigma$ $\ddot{\epsilon}\nu$ structure – a tradition exemplified most especially by Ross and Owen (as we shall see later). This is because we know well that Aristotle thinks that *being* has *per se* attributes that are not, however, part of its essence, hence not part of the being *qua* being, and that these include: *unity, identity, similarity*, their opposites and in general such opposites as are true of all things. What this part of Gamma 2 does is, basically, remind us of this well-familiar Aristotelian view.

If our reading is correct, then this traditional reading is quite mistaken. We shall argue that Aristotle does not *assume* here that such kinds as *identity, similarity,* their opposites, and in general such kinds as come in pairs of opposites and are true of all things, are *per se* accidents of *being*. On the contrary, he is at pains to *argue* for this claim; indeed, to introduce an argument for this claim that will only later in the *Metaphysics*, in such places as books Iota, Mu and Nu, be properly carried through. He will, in Gamma 2, argue for this claim in response to a view which he ascribes to others, in particular Plato and Speusippus, and which holds that such kinds are constitutive of *being* and *that which being is*.

Moreover, the claim for which he will argue is *not*, contra Ross and Owen, that such kinds as *unity, identity, similarity*, their opposites, and in general such kinds as come in pairs of opposites and are true of all things, are *per se* accidents of *being*. The claim for which he will argue is a significantly different one, namely, that *identity, similarity*, their opposites, and in general such kinds as come in pairs of opposites and are true of all things, are *per se* accidents of *being* and *unity* conceived as a single principle. The significance of this is, precisely, that the issue that divides Aristotle and, most especially, Speusippus and the brand of Platonism that he represents, is not begged.

We may start at 1003b22 (we shall consider lines 1003b19-22 presently):

If, now, being and unity are the same and a single nature ... (εἰ δὴ τὸ ὂν καὶ τὸ ἒν ταὐτὸν καὶ μία φύσις ...). (1003b22-23)

Here we need, immediately, to be mindful of the view of a number of critics, according to which the sixteen lines that start here, i.e. 1003b22-1004a2, are out of place in this argumentative nexus and may, therefore, be surmised to belong elsewhere in the text of the *Metaphysics*.¹⁰ We shall proceed by first examining these lines on their own, and then examining how, and indeed whether, they fit into the argumentative nexus, that is, lines 1003b19-22 and lines 1004a2 f. We shall first consider lines 1003b22-1004a2 as a single, continuous piece of reasoning, before we look into the details.

The overall reasoning seems to be as follows:

STEP1) The supposition is introduced at 1003b22-23 that being and unity are the same and a single nature. That this is intended as a supposition is indicated by the fact that the sentence which says that 'being and unity are the same and a single nature' is the antecedent of a conditional introduced with 'if' (ϵ i).

STEP₂) The following lines, b₂₃-26 (from τ $\hat{\psi}$ ἀχολουθεῖν ἀλλήλοις ὥσπερ ἀρχὴ καὶ αἴτιονⁿ to πρὸ ἔργου μάλλον), offer clarification of the sense in which being and unity are the same. Two senses are distinguished, a weaker (b₂₃-25) and a stronger (b₂₅-26). It is the weaker that is in question and that Aristotle will go on to defend – though he adds that it would have been all the better for his purposes (πρὸ ἔργου μάλλον) if the stronger could have been supposed.

STEP₃) The lines that follow, b26-33, argue that the supposition that being and unity are the same, understood in the weaker of the senses distinguished, is true; or that it is plausible. There are two arguments: the first runs from b26-32; the second from b32-33.

¹⁰ Jaeger *ad loc.* brackets these lines. Ross (1924), 256, says '[1003b]36-1004a2 is probably out of place'. Kirwan (1993), 82, says 'this paragraph [1003b22-1004a2], ... interrupts the run of argument'. Hequet-Devienne *ad loc.* moves 1003b19-22 to after 1004a2. Regular reference is made by critics in this context to Alexander (250.32 ff.), who is said to have wanted to move 1004a2-3 to just after 1003b19, and hence, apparently, thought that 1003b22-1004a2 interrupts this connection. However, it seems to us that Alexander does not make such a strong claim. What he says is, rather, that 1004a2-3 'picks up on' (ἀxόλουθον) 1003b19 and that, therefore, it would have been clearer if Aristotle had said it immediately after 1003b19.

We shall return to this important phrase, τῷ ἀκολουθεῖν ἀλλήλοις ὥσπερ ἀρχὴ καὶ αἴτιον, and defend our reading of it, later.

STEP4) It is then, in b33-35, inferred ($\dddot{\omega}\sigma\tau\epsilon$...), first, that there are as many kinds ($\epsilon \ddddot{\omega}\eta$) of being as there are kinds of unity; and, secondly, that it will be the task of a science that is generically one to investigate the essence of these kinds ($\pi\epsilon\rho$ ì 𝔅ν τὸ τἱ ἐστι τῆς αὐτῆς ἐπιστήμης τῷ γένει θεωρῆσαι); that is, the kinds that belong to being and unity. STEP5) Aristotle immediately indicates, in b35-36, what he has in mind as being such kinds, by citing two examples, identity (τὸ αὐτὁ) and similarity (τὸ ὅμοιον), adding 'and

the others of this sort' (καὶ τῶν ἄλλων τῶν τοιούτων).

STEP6) He concludes, in 1003b36-1004a2, with the assertion that 'almost all opposites are derivable from this principle' ($\sigma\chi\epsilon\delta\delta\nu$ $\delta\epsilon$ $\pi \dot{\alpha}\nu\tau\alpha$ $\dot{\alpha}\nu\dot{\alpha}\gamma\epsilon\tau\alpha\iota$ $\tau\dot{\alpha}\nu\alpha\nu\tau(\alpha \epsilon l\varsigma \tau\dot{\eta}\nu \dot{\alpha}\rho\chi\dot{\eta}\nu$ $\tau\alpha\dot{\nu}\tau\eta\nu$).¹² The principle ($\dot{\alpha}\rho\chi\dot{\eta}$) he has in mind here is either being, or unity, or, more likely, we shall argue, both together. This statement also indicates that such kinds as identity and similarity come in opposites, hence include opposites (e.g. difference and dissimilarity, these being the opposites of identity and similarity; *they* will be mentioned, both individually and collectively as, precisely, opposites, later in the chapter). He also, and incidentally, refers the reader to his treatment of opposites in another work.

A grammatical problem with these lines, starting at 1003b22, is that there is not a grammatical consequent (*apodosis*) corresponding to the antecedent (*protasis*) introduced by εi at b22; we have, therefore, an anacoluthon. It seems, however, that we have a logical consequent in lines b33-34: 'it follows that there are as many kinds of being as there are kinds of unity' ($\omega\sigma\theta'$ $\delta\sigma\alpha$ $\pi\varepsilon\rho$ to $\hat{\nu}$ $\delta\sigma\gamma$, to $\sigma\alpha$ $\hat{\tau}$ $\hat{\nu}$ $\hat{\nu}$

The overall reasoning in these lines, therefore, may be summarised as follows:

If we suppose that being and unity are the same and a single nature (and there is good reason to do so, at least in one sense of sameness, as may be seen from the following arguments ...), then we may infer that there are as many kinds of being as there are kinds of unity. And it will be the task of a generically single science to investigate these kinds and their essence (they include identity, similarity, their opposites, and in

¹² For 'X ἀνάγεται εἰς Y' we translate 'X is derivable from Y'. This phrase occurs in three further passages in the chapter (1004b28, 1004b34, 1005a1), and it is, we shall see, crucial in Aristotle's overall argument. Our translation does, it is true, look at this relation from the opposite direction than does ἀνάγεται εἰς. The German 'X ist auf Y zurückführbar' is what is needed. To preserve this directionality in English, however, one would have to use either 'X can be traced back to Y' or 'X can be reduced to Y' or 'X can be referred to Y'; and none of these translation are at all useful, since either they do not capture the logical sense of, precisely, a derivation, or they have unwanted associations (as with 'reducible to').

general such opposites). For, all such opposites are derivable from being and unity as from their principle.

An important issue is whether Aristotle agues for, as opposed to merely asserting, the claim (at 1003b36-1004a2) that such opposites - identity-difference, similarity-dissimilarity, etc. – are derivable from being and unity as from their principle. For it may appear that he does not offer any defence of this important claim and assertion. In one sense, it is true that he does not offer an argument for it; that is, in the sense of an argument for the claim by itself and in its own right. In another sense, however, he does argue for it; that is, by arguing that it provides a way out of a problem for the possibility of a science of being *qua* being that may otherwise seem intractable. In this way Aristotle argues that anyone who wants to defend the possibility of this science will have reason to accept, and to defend, the derivability claim. This mode of defence seems sufficient and adequate for Aristotle's present purposes, which is to defend the possibility of a single science of being qua being and provide an outline of the structure of this science, by arguing that there is a single first principle of being; he will refer to this principle as οὐσία and πρώτη οὐσία. For it is not part of his present task to establish what being *qua* being is or what οὐσία is; this being a task whose proper undertaking will take up the several books of the *Metaphysics*. To that end it will, of course, be necessary to defend the derivability claim in a more direct way and in its own right.

We may ask whether the argument in the first part of the chapter, when Aristotle argues that being exhibits a category-based $\pi\rho\delta\varsigma$ $\ddot{\epsilon}v$ structure and that all the other categories of being are dependent on ($\ddot{\eta}\rho\tau\eta\tau\alpha\iota$, 1003b17) primary being, $\sigma\dot{\upsilon}\sigma\dot{\iota}\alpha$, as on a single principle ($\pi\rho\delta\varsigma$ $\mu\dot{\iota}\alpha\nu$ $\dot{\alpha}\rho\chi\dot{\eta}v$, 1003b6), is substantially different in status. Does Aristotle, in Gamma 2, argue for the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\ddot{\epsilon}v$ structure directly and in its own right? Or does he argue for this claim only in the sense of arguing that it provides a way out of a problem for the possibility of a science of being *qua* being that may otherwise seem intractable, leaving its proper defence for later in the *Metaphysics*? It seems that, apart from asserting the claim (1003a33-34), and arguing that, if it is supposed, then this provides for a single science of being *qua* being (1003b11-19), all Aristotle does is illustrate it by invoking the analogy of how *health* exhibits a $\pi\rho\delta\varsigma$ $\ddot{\epsilon}v$ structure (1003a34-b10).

We have, so far, deliberately been avoiding the term '*per se* accidents' (or, '*per se* attributes') for these opposites (*identity* and *non-identity, similarity* and *difference* etc.). There is very good reason to do so. First, one may note that Aristotle does not use this term for them until much later in the argument (1004b5-6; we shall comment on this passage below). Secondly, to call them '*per se* accidents' may suggest that they come part and parcel with the theory of categories. But, as we shall see, these opposites need not be associated with that Aristotelian theory. It will become apparent that, although Aristotle will point out that his account of these opposites is compatible with the theory of categories, the account is not based on or dependent on that theory. Finally, to call them '*per se* accidents' is to assume that

there is something, namely, being *qua* being and $\circ i \sigma(\alpha)$, which is prior to them, and, therefore, that they are not themselves constitutive of *that which being is*. But, as we shall see, Aristotle is not assuming this; on the contrary, he is arguing for it, and he is arguing for it in response to a view which he ascribes to others and which holds, precisely, that such opposites are constitutive of *that which being is*. It is no exaggeration to say that this argument is his principal task in Gamma 2 (at any rate following 1003b19), and this means that any suggestion that the conclusion of the argument is assumed from the start is tantamount to missing Aristotle's entire argument.

4.

How does this reasoning, the extended reasoning in what follows 1003b22, fit into the argumentative context and the juncture of the chapter by which Aristotle has already argued for the possibility of a science of being *qua* being by arguing that being exhibits a category-based $\pi\rho\delta\varsigma$ $\xi\nu$ structure? We should begin by noting that, practically immediately after 1003b19 and immediately preceding the lines whose reasoning we have just considered, the idea is introduced, in lines b21-22, that there may be more than one kind of being *qua* being:

So too (did xaí) it will be the work of a science that is generically one to investigate ($\theta \epsilon \omega \rho \eta \sigma \alpha \iota \mu \iota \alpha \varsigma \dot{\epsilon} \sigma \tau \iota \nu \dot{\epsilon} \pi \iota \sigma \tau \eta \mu \eta \varsigma \tau \hat{\omega} \gamma \dot{\epsilon} \nu \epsilon \iota)$ as many kinds [as there may be] of being *qua* being ($\tau \circ \vartheta \dot{\delta} \nu \tau \circ \varsigma \dot{\eta} \dot{\delta} \nu \ddot{\delta} \sigma \alpha \epsilon \ddot{\delta} \eta$); and it will be the work of the kinds of this science to investigate the individual kinds [of being *qua* being].¹³ (1003b21-22)

Evidently, the possibility that there is more than one kind of being *qua* being represents a problem for the possibility of a science of being *qua* being; that is, a single science that investigates being *qua* being in general and as a whole. For, unless the question of the relation among the several kinds of being *qua* being is taken up and properly addressed, it will be a distinct possibility that there are as many, and apparently unrelated, sciences of being *qua* being as there are kinds of being *qua* being. It is not, therefore, unreasonable to suppose that Aristotle is, at this juncture of the chapter (i.e. 1003b19 ff.), turning to this problem.

Ross translates: 'Therefore to investigate all the species of being *qua* being, is the work of a science which is generically one, and to investigate the several species is the work of the specific parts of the science.' Our translation differs in one substantial respect: whereas for ὄσα εἴδη Ross translates 'all the species', we translate 'as many kinds/species [as there may be]'. This is an important difference. For whereas Ross' translation implies, or certainly gives the impression, that Aristotle thinks that there is more than one kind/species of being *qua* being, we think that Aristotle is here only entertaining the possibility that there is more than one kind/species of being *qua* being. Our translation is certainly possible; for ὅσα εἴδη appears to be elliptical for 'as many kinds as there are' or 'as many kinds as there may be'. But we think our translation is required. For Aristotle will go on to argue that the apparent plurality of kinds of being *qua* being is derivable from a single kind, οὐσία and πρώτη οὐσία.

It is striking that this passage, i.e. lines 1003b21-22, appears to be picked up and continued in lines 1003b33-35; lines which are within the scope of the passage that is thought by a number of critics not to fit into the argumentative nexus of Gamma 2:

It follows that $(\omega \sigma \tau \epsilon)$ there are as many kinds of being as there are of unity; and it will be the task of a science that is generically one to investigate their essence. (1003b33-35; we shall comment on this passage later)

The apparent continuity between the two passages is indicated especially by the way in which the θεωρήσαι μιας ἐστὶν ἐπιστήμης τῷ γένει at b21-22 is picked up by the περὶ ὧν τὸ τί ἐστι τῆς αὐτῆς ἐπιστήμης τῷ γένει θεωρήσαι at b34-35. If this is correct, then there is immediate reason to be sceptical of the view which says that lines 1003b22-1004a2 are out of place in the present argumentative nexus.

At this juncture of Gamma 2 (i.e. following 1003b19) it has already been argued, in the first part of the chapter and through the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ žv structure, that a plurality of *category-based* kinds of being is compatible with the possibility of a science that considers being qua being in general and as a whole. Aristotle's present suggestion (i.e. at 1003b21-22), that there may be more than one kind of being *qua* being, is, therefore, thoroughly puzzling. It is especially puzzling, if we think that the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\xi\nu$ structure is supposed to be sufficient to establish the possibility of a science of being *qua* being. It is not at all clear how the claim at 1003b21-22 that there may be more than one kind of being *qua* being is related to the claim that being exhibits a category-based $\pi \rho \delta \zeta \xi v$ structure. In fact, it is not clear how the two claims can be compatible. The claim that being exhibits a category-based $\pi\rho\delta\varsigma$ žv structure may, if taken on its own and as doing all the work, be taken to imply that there is just one (cf. $\pi\rho\delta\zeta$ $\tilde{\epsilon}\nu$) kind of primary being, οὐσία. And since, according to the claim that being exhibits a category-based πρὸς ἕν structure, the kind being *qua* being is determined by the kind *primary being*, οὐσία, there will be *just one* kind of being *qua* being. Nor will it do to attempt to make room for the idea that there may, nonetheless, be more than one kind of being qua being, by simply reminding ourselves that a single kind may have several species. For the existence of a single kind, being *qua* being, has been defended by arguing that being exhibits a category-based $\pi \rho \delta \zeta$ $\tilde{z} v$ structure, as opposed to, precisely, a strict genus-species structure (which, in the first part of the chapter, is referred to as a $x\alpha\theta$ ' ἕν structure).

It is no doubt these difficulties that have led critics to despair of making sense of how what follows 1003b19 fits into what comes before; and have let them have recourse to drastic measures, including questioning that whole passages are in the right place. We can, however, resolve the difficulties and make sense of the relation between Aristotle's argument in the first part of the chapter (i.e. up to 1003b19) and what immediately follows, if we suppose that, in what follows 1003b19, Aristotle is taking up *a different* problem about the possibility of a science of being *qua* being; and that whereas the problem that he took up in the first part of

the chapter was supposed to be resolved by the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\ddot{\epsilon}\nu$ structure, the present problem is not thought to depend, for *its* resolution, on that claim. If, therefore, we give up thinking that the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\ddot{\epsilon}\nu$ structure is supposed to be sufficient to establish the possibility of a science of being *qua* being, then we can resolve these difficulties and we can make sense of the overall reasoning in *Metaphysics* Gamma 2.

5.

Let us return to the reading of lines 1003b19-1004a2 and look closer at Aristotle's reasoning. In 1003b22-25, two versions are distinguished of the supposition that being and unity are the same: a weaker and a stronger. The stronger version, which Aristotle sets to one side, is that being and unity are the same in that they have a single account ($\dot{\omega}\varsigma \dot{\epsilon}\nu i \lambda \delta\gamma \omega$). The weaker version, at least part of which he will directly go on to defend, is that being and unity are the same 'in that they follow one another in the manner of principle and cause' ($\tau \dot{\omega} \dot{\alpha} \varkappa 0 \lambda 0 \upsilon \theta \epsilon i \nu$ $\dot{\alpha} \lambda \lambda \dot{\eta} \lambda 0 \varsigma \ddot{\omega} \sigma \pi \epsilon \rho \dot{\alpha} \rho \chi \dot{\eta} \varkappa \alpha \ddot{\iota} \tau 10 \nu$).

This is a central claim in Gamma 2. What does it mean? It seems that it can be read in two different ways. On one reading, all it says is that being is always associated with unity and unity is always associated with being. On this reading, the additional phrase $\omega \sigma \pi \epsilon \rho \, \alpha \rho \chi \eta \, \kappa \alpha i \, \alpha i \tau \tau \omega \sigma$ does not add anything to the claim itself; all it does is illustrate the point, by invoking an analogy, that of a principle and a cause. The analogy is that whenever there's a principle, there's a cause, and wherever there's a cause, there's a principle. This is how Aquinas read the passage.¹⁴ On a different reading, the claim is, first ($\tau \psi \, \alpha \kappa o \lambda o \upsilon \theta \epsilon i \nu \, \alpha \lambda \lambda \eta \lambda o \epsilon c)$, that being is always associated with unity and unity is always associated with being; and, secondly ($\omega \sigma \pi \epsilon \rho \, \alpha \rho \chi \eta \, \kappa \alpha i \alpha i \tau \tau \upsilon \nu$), that the manner in which they are associated with one another (this being a reciprocal and symmetrical relation) is that the one is the principle and cause of the other (this being an asymmetrical relation) – though Aristotle does not say *which* is the principle and cause of *which*. This reading, we think, finds some support in Alexander (251.22 f.). Commenting not on this passage (1003b24), but on 1004a3-5, Alexander observes that these two elements of $\sigma \upsilon \sigma i \alpha$, being and unity, are not distinct kinds of $\sigma \upsilon \sigma i \alpha$ but are related as prior and posterior.¹⁵

We prefer the latter reading, for the following reasons. First, it assists with making sense of a very important claim that Aristotle will make in what follows (at 1004a3-5), namely, that there are two $o\dot{v}\sigma(\alpha)$ and that the one is primary and the other consequent upon it. Considered by itself, that claim will, we think it will be admitted, seem unmotivated and not so clear in its

¹⁴ Thomas Aquinas, *Sententia Metaphysicae*, lib. 4 l. 2 n. 1-2: 'For some things are one which are associated as interchangeable (*convertibiliter*) things, like principle and cause; [...] Now the terms one and being signify one nature according to different concepts, and therefore they are like the terms principle and cause [...].' (trans. Rowan) Same position: Schwegler (1847), 153; Syrianus, 59.4; Alexander, 247.7.

¹⁵ We shall consider this important comment of Alexander's later.

meaning and reference. Its precise meaning, reference and provenance in the argument will, however, be clear, if we suppose that the two $o\dot{v}\sigma(\alpha)$ are, precisely, *being* and *unity*, and that it is of these that Aristotle says that the one is primary and the other consequent upon it – though, once again, he does not say *which* is the primary $o\dot{v}\sigma(\alpha)$ and *which* the consequent $o\dot{v}\sigma(\alpha)$.

Secondly, even though it may be true that wherever there is a principle, there is a cause, and wherever there is a cause, there is a principle, it is not clearly true to say that every cause is a principle; all that is clearly true is that every principle is a cause. But Aristotle is arguing, it appears, that every being is a unity and every unity is a being. There appears, therefore, to be a problem with the other reading, the one defended by Aquinas.

Let us hasten to add, though, that the reader who prefers Aquinas' reading of $\omega \sigma \pi \epsilon \rho \, d\rho \chi \dot{\eta}$ xal alticov need not, for that reason, refuse to follow us further in our reading of Gamma 2. She will, however, have more of a problem in making sense of that most important subsequent claim by Aristotle, namely, that there are two oùotat and that the one is primary and the other consequent upon it.

Aristotle's first argument for the claim that being and unity are the same (b26-32) defends this claim understood in the sense that being and unity always follow one another; it defends the claim that being and unity are, as we would say, necessarily co-extensive. Aristotle says that they 'reveal' (δήλον) not different things (ἕτερα) but the same thing (ταὐτό). The argument includes the observation that the sentences 'there is one man' (εἶς ἐστιν ἄνθρωπος) and 'there is one existent man' (εἶς ἐστιν ὢν ἀνθρωπος) reveal the same thing. It includes also the claim that being and unity cannot be separated (οὐ χωρίζεται) from one another, and hence they necessarily follow one another. We may note that Aristotle does not take this argument to support the stronger view, that being and unity have the same account. This shows that he distinguishes, as we may say, between the claim that two kinds are necessarily co-extensive and the claim that two kinds are identical in account. It is notable that Aristotle's argument here (b26-32) defends only the claim that being and unity are the same in that they follow one another (τῷ ἀκολουθεῖν ἀλλήλοις); it does not defend the claim that they follow one another *in* the manner of principle and cause (ὥσπερ ἀρχὴ καὶ αἴτιον). It appears that Aristotle does not want, at this point of the *Metaphysics*, to open up the issue of *which* is the principle and cause of which.

The conclusion that Aristotle draws from this argument is, as he formulates it, that 'unity is not something different over and above being' ($o\dot{v}\delta\dot{v}$ $\ddot{\varepsilon}\tau\epsilon\rho\sigma\nu$ $\tau\dot{o}$ $\ddot{v}\nu$ $\pi\alpha\rho\dot{\alpha}$ $\tau\dot{o}$ $\ddot{o}\nu$, b31-32). We may ask whether the claim that unity is not something 'over and above' ($\pi\alpha\rho\dot{\alpha}$) being is here supposed to add anything to the claim that unity is not something 'different' ($\ddot{\varepsilon}\tau\epsilon\rho\sigma\nu$) from being. The not- $\ddot{\varepsilon}\tau\epsilon\rho\sigma\nu$ claim goes no way towards determining *which* is the principle and cause of *which*; and we have seen that Aristotle's argument goes no way towards determining this. It would, therefore, be surprising if the not- $\pi\alpha\rho\dot{\alpha}$ claim added to the not- $\ddot{\varepsilon}\tau\epsilon\rho\sigma\nu$ claim that unity is not prior to being; for that would be to determine that being is the principle and cause of unity, or certainly that it is not the other way round. The safe reading, therefore, is that we do not here, in the sentence at 1003b31-32, have two claims, namely, that unity is not $\xi \tau \epsilon \rho \sigma \nu$ being and that unity is not $\pi \alpha \rho \dot{\alpha}$ being; we have simply one claim, that unity is not $\xi \tau \epsilon \rho \sigma \nu \pi \alpha \rho \dot{\alpha}$ being, and the phrase $\pi \alpha \rho \dot{\alpha} \tau \dot{\sigma} \sigma \dot{\nu}$ here means no more than $\tau \sigma \hat{\nu} \sigma \nu \tau \sigma \varsigma$.

The significance of this for the consideration of Aristotle's dialectical intentions is considerable. There is, Aristotle thinks, at least one philosopher who holds that all kinds, apparently even including that kind itself, *being*, are derivable from unity, unity being the kind that this philosopher considers the single ultimate first principle; namely, Speusippus (see Z 2, 1028b21-24; also N 5, 1092a11-17, though in this latter passage Speusippus is not mentioned by name). And, certainly in the Zeta passage, Aristotle presents this as one among the many views that need to be considered about what οὐσία may turn out to be. He does not present it as a view that may be ruled out in advance and on the basis of the very idea of a science of being *qua* being and of primary being, οὐσία. It would, therefore, be surprising if this view were ruled out in Gamma 1-2, where Aristotle's concern is not to establish what being *qua* being is, or what primary being, οὐσία, is, but rather to defend the possibility of a science of being *qua* being and to indicate in outline the nature and structure of this science, by introducing the idea of primary being, οὐσία.¹⁶

Aristotle adds a short second argument (b32-33): 'Further, the essence of each thing is unitary, and not incidentally; and likewise for the very thing that something is' ($\xi\tau\iota \delta' \dot{\eta} \dot{\epsilon} \varkappa \dot{\epsilon} \sigma \tau \upsilon$ où $\sigma i \alpha \xi \nu \dot{\epsilon} \sigma \tau \upsilon \circ \upsilon \varkappa \alpha \tau \dot{\alpha} \sigma \upsilon \mu \beta \epsilon \beta \eta \varkappa \dot{\delta} \varsigma$, $\dot{\delta} \mu \sigma i \omega \varsigma \delta \dot{\epsilon} \varkappa \alpha \dot{\epsilon} \sigma \delta \nu \tau \iota$). This argument makes clear that the kind, *unity*, belongs not only to substances, but also to essences, that is, the essence of a substance and in general of a thing (cf. $\dot{\epsilon} \varkappa \dot{\alpha} \sigma \tau \sigma \upsilon$). Read in context, this suggests the idea that a substance is unitary because, or in part because, its essence is unitary. If Aristotle intends this suggestion, then this argument is noteworthy also because it may be an argument that, in

¹⁶ A note on Speusippus. As Aristotle represents him, Speusippus thinks that '*unity itself* is not even a being' (ὥστε μηδὲ ὄν τι εἶναι τὸ ἓν αὐτό; N 5, 1092a11-17, and supposing that in this passage he has Speusippus in mind). It follows that Speusippus, as Aristotle understands him, rejects the claim that being and unity are co-extensive. How, then, can Aristotle include him as a dialectical partner in the search for being qua being? The following answer suggests itself. Aristotle may think that although Speusippus rejects the claim that unity-itself is co- extensive with being, he can accept that the unity that is true of something, even if this is not unity-itself but is rather unity-in-relation-to-other-things, will be true of exactly the things that *being* is true of; hence it will be co-extensive with being. The distinction between unity-itself and unityin-relation-to-other-things originates in a certain reading of the first two Hypotheses in the second part of Plato's Parmenides. On this reading, unity-itself is under consideration in the First Hypothesis whereas unity-in-relation-to-other-things is under consideration in the Second Hypothesis. In the N 5 passage Aristotle may have in mind Plato's Parmenides on such a reading of this important part of that dialogue; or he may have in mind Speusippus; or he may have in mind both, because he may think that this is how Speusippus read this part of the Parmenides, whether or not he thinks this is the right reading.

Aristotle's view, led some philosophers to the view that unity, that is, unity as a mark of essence, is the principle and cause of being and of substance.¹⁷

6.

We turn now to the short but very important passage, 1004a2-6; and being mindful of whether this passage is continuous with the previous passage (1003b19-1004a2) – the passage most of which has been thought by some critics to be out of place. The first two lines of this passage read as follows:

And [i] there are as many parts of φιλοσοφία as there are οὐσίαι; it follows that (ὥστε)
[ii] there must be, among them, a primary [φιλοσοφία] and one that comes after it. (1004a2-4)

At the opening of the second part of Gamma 2 (1003b21-22) Aristotle introduced the idea that that there may be more than one kind of being *qua* being; and that, if there is, then there will be a corresponding number of kinds, or parts, of the science of being *qua* being. And, at 1003b33-4, he indicated that there may be more than one kind of being, and he said that there will be as many kinds of being as there are kinds of unity. In our present passage (1004a2-4) the science in question is referred to as $\varphi i \lambda o \sigma o \varphi i \alpha$. We may suppose that this is, precisely, the science of being *qua* being. We may suppose this on the supposition that this passage picks up on 1003b21-22; it may even pick up on the opening of Gamma 1 and the famous original reference there to the science of being *qua* being. But the important move is *from* the claim (at 1003b21-22) that there may be more than one kind of being *qua* being, and the claim (at 1003b33-34) that there may be more than one kind of being *to* the claim here (at 1004a2-4, sentence [i]) that there may be more than one kind of o $\delta \sigma i \alpha$.

Aristotle infers, from the claim that [i] there are as many parts of $\varphi_i\lambda_0\sigma_0\varphi_i\alpha$ as there are oùoriai, that [ii] there is a primary $\varphi_i\lambda_0\sigma_0\varphi_i\alpha$ and a consequent ($\dot{\epsilon}\chi_0\mu\dot{\epsilon}\nu_\eta\nu$) $\varphi_i\lambda_0\sigma_0\varphi_i\alpha$. The validity of this inference, evidently, requires the, unstated, premise that there is more than one kind of oùoria; it also requires the supposition that a distinction between a primary $\varphi_i\lambda_0\sigma_0\varphi_i\alpha$ and a consequent $\varphi_i\lambda_0\sigma_0\varphi_i\alpha$ corresponds to, and is based on, a distinction between a primary oùoria and a consequent oùoria.

We may observe that the claim that there is more than one kind of $o\dot{v}\sigma\dot{\alpha}$ is thoroughly puzzling; it is puzzling especially if we suppose that the introduction in the first part of the chapter of the claim that being exhibits a category-based $\pi\rho\dot{c}\varsigma$ žv structure is sufficient to establish the possibility of a science of being *qua* being. For the claim that being exhibits a category-based $\pi\rho\dot{c}\varsigma$ žv structure may, if taken on its own and as doing all the work, be taken to imply that there is *just one* (cf. $\pi\rho\dot{c}\varsigma$ žv) kind of primary being, $o\dot{v}\sigma\dot{\alpha}$. If, therefore, the claim that there may be more than one kind of $o\dot{v}\sigma\dot{\alpha}$ comes from elsewhere in Gamma 1-2, then we

¹⁷ We are grateful to David Horan for this suggestion.

may suppose that it comes from the immediately preceding passage (1003b19-1004a2). We may suppose this because the claim here (1004a3-3) that there is more than one kind of $o\dot{v}\sigma\dot{\alpha}$ takes up, and takes a step further, the claim (at 1003b33-34) that there may be more than one kind of being and the claim (at 1003b21-22) that there may be more than one kind of being *qua* being.

We must, certainly, take note here of the very different conclusion that many critics have arrived at on the question of where the claim (at 1004a2-4) comes from which says that there is more than one kind of $o\dot{v}\sigma(\alpha)$. For they have supposed that it does not come from Gamma 1-2 at all, but rather from some other place or places in the *Metaphysics*; and that its purpose is to anticipate what Aristotle will say in these later places. In particular, critics have supposed that this claim serves to anticipate Aristotle's distinction, later in the *Metaphysics*, between moved and unmoved $o\dot{v}\sigma(\alpha)$; or his distinction between material $o\dot{v}\sigma(\alpha)$, immaterial separate $o\dot{v}\sigma(\alpha)$, and immaterial but non-separate $o\dot{v}\sigma(\alpha)$ (they include mathematical $o\dot{v}\sigma(\alpha)$).¹⁸ We would like to insist that such a hypothesis is at all plausible only if the presence of this claim here, at 1004a2-4, cannot be made sense of on the supposition that it comes from the immediate argumentative context. And we think that it *can* be made sense of on this supposition.

In the previous passage (1003b19-1004a2) Aristotle distinguished a plurality of kinds of being, such as identity and similarity, their opposites, and such opposites in general; and he argued that almost all of them ($\sigma \chi \epsilon \delta \delta \gamma \pi \alpha \tau \alpha$) are derivable from ($\dot{\alpha} \nu \alpha \gamma \epsilon \tau \alpha \epsilon i c$) a single principle (ἀρχή), namely, being and unity (see esp. 1003b33-1004a2). That this is, in the relevant sense, a single principle was argued on the grounds that being and unity are necessarily coextensive. He also claimed that the two elements in this principle, being and unity, are related to each other 'in the manner of principle and cause' ($\Im \sigma \pi \epsilon \rho \, d\rho \chi \dot{\gamma} \, \varkappa \alpha \dot{\imath} \, \alpha \ddot{\imath} \tau \iota \sigma \nu$), that is, the one is the principle and cause of the other; but he did not attempt to determine which is the principle and cause of which. This is precisely what we need to understand the present passage (1004a2-4), and to understand it from within its argumentative context; if, that is, we suppose that the two οὐσίαι mentioned at 1004a3-4 are, precisely, being and unity, and that it is of these that Aristotle says that the one is primary and the other consequent upon it. Compared to the *plurality of kinds of being* such as identity, similarity, and the like, the principle, being and unity, is an où $\sigma(\alpha)$, in the sense of primary being. For (as was claimed at 1003b36-1004a1) it is a principle ($\dot{\alpha} \rho \chi \dot{\eta}$) of each kind in this set, and all kinds in this set are derivable from *it*. However, because (as was claimed at 1003b23-24) being and unity are related to each other as principle and cause, it follows that, compared to each other, the two elements in this principle are related

¹⁸ Alexander, in Aristotelis Metaphysica commentaria, 251.24-38; Syrianus, in Aristotelis Metaphysica commentaria, 61.17-28; Schwegler (1847), 155; Bonitz (1859), 178; Natorp (1888), 48 f.; Ross (1924), 256; Kirwan (1993), 83. According to Natorp, Ross and Kirwan, the passage containing the distinction that, as they think, Aristotle is here alluding to is Metaphysics E 1026a6-32. What Aristotle says in the Epsilon passage is that there are several speculative (θεωρητικαί) sciences and that theology is the first of them because it is the only one that deals with substances that are χωριστά and ἀχίνητα. It is not clear to us, however, whether this amounts to distinguishing several kinds of οὐσίαι.

as primary and consequent. And because they are both $o\dot{v}\sigma(\alpha)$, in that *those* kinds of being are derivable from them, it follows that the one is primary $o\dot{v}\sigma(\alpha)$ and the other is consequent $o\dot{v}\sigma(\alpha)$.

The next two lines, 1004a4-6, are directly continuous:

For (γάρ) being and unity (τὸ ὄν καὶ τὸ ἕν) are¹⁹ directly (εὐθύς) in possession of kinds; and hence the sciences will follow these (ἀκολουθήσουσι τούτοις).

If the text we are reading has 'being and unity', $\tau \delta \delta v x \alpha i \tau \delta \xi v$, then these lines state the reason why ($\gamma \alpha \rho$), as was just asserted (1004a2-4), first, there are as many parts of $\varphi i \lambda o \sigma \phi \alpha \alpha$ as there are où $\sigma \alpha \alpha$, and, secondly, there is a distinction between primary où $\sigma \alpha$ and consequent où $\sigma \alpha \alpha$. The reason why there are as many parts of $\varphi i \lambda o \sigma \phi \alpha \alpha$ as there are où $\sigma \alpha \alpha$ is that, first, 'being and unity are directly in possession of kinds', that is, we may suppose, kinds such as identity, similarity, their opposites, and such opposites in general; and, secondly, as was argued at 1003b36-1004a1, these kinds are derivable from these two principles, or this single principle, being and unity, which, therefore, are primary beings, où $\sigma \alpha \alpha$, in relation to these kinds. And the reason why there is a distinction between primary où $\sigma \alpha$ and consequent où $\sigma \alpha \alpha$ (cf. $\dot{\alpha} x o \lambda o u \theta \dot{\eta} \sigma o u \sigma t \sigma o \dot{\tau} o \dot$

Why does Aristotle say that being and unity are *directly* ($\varepsilon \vartheta \theta \vartheta \varsigma$) in possession of kinds? The kinds he has in mind are, precisely, identity, similarity, their opposites, and such opposites in general. Those kinds, he has been arguing, are derivable from, precisely, these two kinds, being and unity. And it seems natural to understand this claim as implying that it is these two kinds, *and just these*, that those kinds are derivable from. In that case, therefore, those kinds will be *directly* derivable from these two kinds, being and unity, in the sense that no other kinds will be present in the base for that derivation.

 $7\cdot$

Notoriously, some critics have argued that we should read not $\tau \delta \delta \nu \underline{\varkappa \alpha} \tau \delta \overleftarrow{\varepsilon} \nu$, but only $\tau \delta \delta \nu$ at 1004a5.²⁰ This reading very much undermines the continuity between the present passage, 1004a2 ff., and the previous passage, 1003b22-1004a2. It goes, therefore, with the view that the previous passage, 1003b22-1004a2, is out of place here. And we have found serious reasons against this view. This alternative reading is clearly incompatible not only with our reading of

¹⁹ Reading ἔχοντα. Reading ἔχον is, however, compatible with our interpretation (see below).

²⁰ Natorp (1888), 44 f., n. 11; Ross (1924), 259: 'If we are right in supposing that 1004a2-9 should come before 1003b19-36, a reference to τὸ ἕν here is out of place and Natorp is right in excising it'; Jaeger, *ad loc.*; Kirwan, *ad loc.*; Dorion (2008), 330 ff.

this particular passage (1004a2-6) but also with our overall reading of the chapter. For a number of reasons we think that the case for the reading without $\kappa \alpha i$ to $\delta \nu$ is weak and that the case for reading to $\delta \nu \kappa \alpha i$ to $\delta \kappa \alpha i$ to $\delta \nu \kappa \alpha i$ to $\delta \kappa i$ to $\delta \kappa \alpha i$ to $\delta \kappa i$ to $\delta \kappa \alpha i$ to $\delta \kappa i$ to $\delta \kappa$

First, there is no manuscript that has only $\tau \circ \check{\sigma}v$. All manuscripts, as well as the indirect tradition (esp. Alexander), have either $\tau \circ \check{\sigma}v \varkappa a i \tau \circ \check{\varepsilon}v$ or $\tau \circ \check{\varepsilon}v \varkappa a i \tau \circ \check{\sigma}v$. Hence, reading only $\tau \circ \check{\sigma}v$ is an emendation. In particular, all alpha-manuscripts (that is, E, J and ten further manuscripts collated by Pantelis Golitsis at the Aristoteles- Archiv) have $\tau \circ \check{\sigma}v \varkappa a i \tau \circ \check{\varepsilon}v$; all beta-manuscripts (that is, Ab, Ambrosianus F 113 sup. [=M] and Vaticanus gr. 115 [=Vk]; the Taurinensis B.VII.23 [=C] is destroyed at this place) have $\tau \circ \check{\varepsilon}v \varkappa a i \tau \circ \check{\sigma}v$ (by 'all...', we mean, courtesy of Mr Golitsis, 'all independent manuscripts according to Harlfinger's stemma, 1979').²²

Secondly, the textual evidence there is for reading only τὸ ὄν is that the two main betamanuscripts (that is, Ab and M) have γένη ἔχον rather than γένη ἔχοντα; all alpha-manuscripts, as well as Vk (through contamination), have γένη ἔχοντα. However, it should be noted that γένη ἔχον is a *lectio difficilior* when compared with γένη ἔχοντα, generated by attraction to the plural of the preceding word (we are grateful to Mr Golitsis for this point).

Thirdly, even reading $\gamma \not\in \gamma \gamma$ $\not\in \chi_{0} \gamma$, it is arguable that the emendation is not required. To think that it is required is to suppose that Aristotle cannot use the singular $\not\in \chi_{0} \gamma$ to refer to being and unity. But this supposition is, we think, questionable, especially if we recall that Aristotle is here considering being and unity as a single principle – a principle that, at 1004ai, he referred to in the singular ($\dot{\eta} \not\in \chi \gamma$).

Fourthly, it is true that $\xi_{\chi0\nu}$ is as ancient as $\xi_{\chi0\nu\tau\alpha}$, for both are attested by Alexander, the earliest witness we have, when he says (251.22): $\gamma\rho\dot{\alpha}\phi\epsilon\tau\alpha\iota\,\kappa\alpha\iota\,\gamma\dot{\epsilon}\nu\eta\,\dot{\epsilon}\chi0\nu$.²³ It is not clear, however, whether he means that he is acquainted with a manuscript that has $\gamma\dot{\epsilon}\nu\eta\,\dot{\epsilon}\chi0\nu$, or he means that the manuscript with which he is acquainted, and which reads $\gamma\dot{\epsilon}\nu\eta\,\dot{\epsilon}\chi0\nu\tau\alpha$, has $\gamma\dot{\epsilon}\nu\eta\,\dot{\epsilon}\chi0\nu$ as a second hand. Alexander, moreover, does not appear to think that if we read $\gamma\dot{\epsilon}\nu\eta$ $\dot{\epsilon}\chi0\nu$, then we cannot read $\tau\dot{o}\,\partial\nu\,\kappa\alpha\iota\,\tau\dot{o}\,\dot{\epsilon}\nu$. What he says (see previous note) is that even if we read $\gamma\dot{\epsilon}\nu\eta\,\dot{\epsilon}\chi0\nu$, still we need not suppose that Aristotle means that $o\dot{v}\sigma\dot{\alpha}$ is a single $\gamma\dot{\epsilon}\nu0\varsigma$, rather we may suppose that he means that even $o\dot{v}\sigma\dot{\alpha}$ is in possession of a prior and a posterior $\gamma\dot{\epsilon}\nu0\varsigma$. If anything, what this says is that reading $\gamma\dot{\epsilon}\nu\eta\,\dot{\epsilon}\chi0\nu$ is compatible with reading

²¹ We note that this reading is adopted by Hecquet-Devienne in her 2008 edition of Gamma and is defended by Cassin and Narcy in their 1998 commentary. For a spirited defence of it, see also Leszl (1975), 257.

²² We are grateful to Pantelis Golitsis at the Aristoteles-Archiv in Berlin for his generous assistance

²³ γράφεται καὶ γένη ἔχον· εἰ δὲ τοῦτο, οὐκ ἂν εἴη ἕν γένος λέγων τὴν οὐσίαν, ἀλλὰ καὶ αὐτὴν ἔχειν τὸ πρότερον καὶ ὕστερον. (251.22 f.) 'There is also a reading 'having [with the participle in the singular] genera'. If this [is read], he would mean, not that substance is one genus, but rather that substance has prior and posterior.' (trans. Madigan)

τὸ ὄν καὶ τὸ ἕν, provided that we take τὸ ὄν καὶ τὸ ἕν to refer not to two distinct species, but rather to a single (ordered) pair of kinds.

8.

Here is what Aristotle says next (we supply what this greatly elliptical passage omits):

[i] It follows that, because unity is said in many ways, these <kinds> [i.e. identity, difference, their opposites, and such opposites in general] too will be said in many ways. However, it is the task of a single <science> to know them all. For it is not the case that if something is said in many ways, <then it is the task> of a different <science to consider each way>; rather, <this is the case> if the accounts of each way do not refer back ($dva\phi \epsilon \rho ov \tau \alpha t$) <to a single thing> either in a $\pi \rho \delta \varsigma \epsilon v$ manner or in a $\kappa \alpha \theta' \epsilon v$ manner. (1004a22-25)

[ii] But since all these <kinds> refer back to (ἀναφέρεται) a primary <kind>, for example all those that are said to be unitary (ἕν λέγεται) refer back to primary unity (τὸ πρῶτον ἕν), we must assert that the same is the case (ὡσαὑτως ἔχειν) with regard to identity and difference and the opposites. It follows that, once we have determined in how many ways each of these <kinds> is said, we must explain (ἀποδοτέον) in what way each <kind> is said in relation to (πρός) that which is primary in each predication (κατηγορία). For some will be said in virtue of possessing <that which is primary>, others will be said in virtue of producing <that which is primary>, and others again will be said in other such ways. (1004a25-31)

Let us begin with a comment about how this whole passage (i.e. [i] and [ii]) fits into our overall reading of the chapter. It is evident that in this passage Aristotle draws on the claim, introduced in the first part of the chapter, that being exhibits a category-based $\pi\rho\delta\varsigma$ $\xi\nu$ structure (we shall consider in a moment how he does this). It follows that, if this passage implies that the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\xi\nu$ structure *is necessary* for the resolution of the problem articulated and addressed in the second part of the chapter, then it casts serious doubt on our overall reading. However, it seems to us that what Aristotle argues for in the present passage is, rather, that the resolution of this problem *is consistent and coherent* with the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\xi\nu$ structure; his aim being to indicate that the resolutions of the two problems *can* – not *must* – be put together into a single, coherent theory.

This would be a reasonable way for him to proceed in the chapter: first (1003a33-b19) he articulates one problem, which is due to the theory of categories, and he defends a resolution that relies on the idea that being exhibits a $\pi\rho\delta\varsigma$ $\ddot{\epsilon}\nu$ structure and relies on the theory of categories; next (1003b19-1004a22) he articulates a different problem, which is not due to the theory of categories, and he defends a resolution that does not have to be associated with the

theory of categories or the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\xi\nu$ structure; finally (1004a22-31), he argues that this resolution *can be* put together with the theory of categories and the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\xi\nu$ structure, and he indicates how this can be done.

Let us now first comment on [i]. The first thing that Aristotle says here is that, first, unity is said in many ways, and secondly, if unity is said in many ways, then the other kinds, that is, identity, similarity, their opposites, and such opposites in general, are likewise said in many ways (1004a22-23). It seems clear that the claim that unity is said in many ways is associated here with the theory of categories; this seems clear both from the phrase itself, $\pi o \lambda \lambda \alpha \chi \hat{\omega} \zeta$ λέγεται, and from the fact that the notion of a category (χατηγορία), in the sense of a way in which one thing is true of another, as well as examples of categories (possessing, producing) are introduced in the following lines.²⁴ Where, in the present context, does the claim come from which says that unity is said in many ways? Some critics suppose that it comes from the claim that being is said in many ways in conjunction with the claim, to which these critics appeal, that unity is a *per se* attribute of being.²⁵ However, the claim that unity is a *per se* attribute of being is not stated anywhere in Gamma 1-2. And recourse to this claim is not necessary to account for the claim that unity is said in many ways. The claim that unity is said in many ways, we may suppose rather, is derived from the claim that being is said in many ways, which was stated and defended in the first part of the chapter, in conjunction with the claim that being and unity are necessarily co-extensive, which was stated and defended at 1003b22-32.

He goes on (1004a23-25) to clarify that the claim that being, unity, and the other pairs of kinds are all said in many ways does not present a problem for the possibility of a science of being *qua* being. It does not present a problem, because it was already argued (in the first part of the chapter) that a single science of the essence of a subject-matter does not require that this subject-matter exhibit a strict genus-species structure, here referred to as a $\kappa\alpha\theta'$ $\xi\nu$ structure (1004a24), and is likewise secured if the subject-matter exhibits a $\pi\rho\delta\varsigma$ $\xi\nu$ structure.

Let us now turn to [ii], and especially the opening sentence:

But since all these <kinds> refer back to ($\dot{\alpha}\nu\alpha\varphi\dot{\epsilon}\rho\epsilon\tau\alpha\iota$) a primary <kind>, for example all those that are said to be unitary ($\dot{\epsilon}\nu\lambda\dot{\epsilon}\gamma\epsilon\tau\alpha\iota$) refer back to primary unity ($\tau\dot{\sigma}\pi\rho\hat{\omega}\tau\sigma\nu\ddot{\epsilon}\nu$), we must assert that the same is the case ($\dot{\omega}\sigma\alpha\dot{\upsilon}\tau\omega\varsigma\ddot{\epsilon}\chi\epsilon\iota\nu$) with regard to identity and difference and the opposites. (1004a25-28)

²⁴ We recognize that some critics, e.g. Ross (1924), 260, who also refers to Bonitz for the same point, do not think that the notion of κατηγορία here is used in the sense of the *Categories*. It is, we think, difficult to tell. Irrespective of how the word κατηγορία is read here, it is clear that Aristotle is drawing on the theory of categories in this passage.

²⁵ See note 29 below.

It seems that this sentence adds a further claim; in addition, that is, to the immediately preceding claim (at 1004a22-23) which said,

CLAIM1 Unity is said in many ways, and that if unity is said in many ways, then the other kinds, that is, identity, similarity, their opposites, and such opposites in general, are likewise said in many ways.

Having argued (in 1004a22-23) that these opposites (i.e. identity, similarity, their opposites, etc.) derive from unity, he now adds that they too are said in many ways quite like being and unity (1004a25-28). This is the claim that

CLAIM₂ Identity, similarity, etc., will mean different things applied to different sorts of beings, that is, sorts of beings as distinguished by the theory of categories.

How is CLAIM₂ related to CLAIM₁? As far as we can see, there are two possible answers to this question. One option is to think that CLAIM₂ is simply supposed to follow from CLAIM₁; the other option is that CLAIM₂, even if it does follow from CLAIM₁, is also supposed to be credible independently of CLAIM₁. The important thing, it seems to us, is that CLAIM₂ is indeed supposed to follow from CLAIM₁; whether CLAIM₂ is argued for independently in the chapter, is an issue we may leave open. Let us simply emphasize that, for reasons that were spelled out earlier, it would be quite wrong to suppose that CLAIM₂ can stand on its own (i.e. without support from CLAIM₁) on the grounds that it is after all evident that these opposites are *per se* attributes of being *qua* being. For, as we have argued, this is not supposed to be evident in the chapter; rather, it is one of the principal claims for which Aristotle is arguing. And it certainly seems that CLAIM₁ is part of that argument.

9.

kinds of paired opposites – identity and difference, similarity and dissimilarity, and such opposites in general – they are all derivable from a single principle, being and unity; secondly, this implies that being and unity are prior to, and are oùoíat in relation to, these kinds; and thirdly, being and unity are themselves related to each other as primary oùoía and consequent oùoía. But Aristotle has been careful to leave open *which* of the two is the primary oùoía and *which* the consequent oùoía. He has been thus careful, apparently, in order to avoid begging any major questions at the beginning of his investigation and, in particular, the question that divides him from Speusippus.

He adds now (1004a33-34) that this problem – he formulates it here as being the problem whether it belongs to a single science, $\varphi i \lambda o \sigma o \varphi i \alpha$, to give an account *both* of the kinds that come in opposites (identity-difference, similarity-dissimilarity, etc.) *and* of $o \dot{o} \sigma i \alpha$ – was one of the questions posed in the book of *aporiai*. None of the *aporiai* in book Beta pose this question in quite these terms, and this makes it difficult to determine *which* aporia he is referring to. The Fourth Aporia (997a25-34) is a distinct possibility.²⁶ For it asks whether it belongs to the science that considers $o \dot{\sigma} \sigma i \alpha$ also to consider their (*per se*) attributes; and Aristotle will presently (1004b5-8) characterize the kinds that come in pairs of opposites as *per se* attributes of being *qua* being and unity *qua* unity. And if he is thinking of the Fourth Aporia, it is likely that he is thinking also of the Third Aporia (997a15-25), for similar reasons. We may note, however, that in neither of these two *aporiai* are these kinds (*identity, similarity*, etc.), or the elements to which he appeals in the resolution of the problem, namely, *being* and *unity*, mentioned.²⁷

²⁶ Ross (1924), 260 argues that this is the Aporia in question (he counts it as the Fifth).

²⁷ We note that they are indeed mentioned in the summary, at the opening of Beta, of the Fourth Aporia: 995b18-25.

true of all things and that, for this very reason, appear to be primary kinds ($\pi\rho\hat{\omega}\tau\alpha$ $\gamma\acute{\epsilon}\nu\eta$, see 998b15, b20, 999a22-3).

It may be said that Aristotle cannot have the Seventh in mind because, unlike the Third and Fourth, which are concerned with the possibility and nature of this science, $\sigma o \varphi i \alpha$ or $\varphi i \lambda o \sigma o \varphi i \alpha$, rather than with problems within the science, the Seventh is clearly concerned with a problem within the science. We think that, however plausible it may seem up to a point, this division of the *aporiai* in Beta, that is, into (as one might say) meta-metaphysical problems and metaphysical problems, may not do justice to how Aristotle sees things, and especially to the thought that, even if he makes a distinction between these two types of problems, he thinks that they are inseparably linked-up with each other. This is not the place, of course, to defend this claim regarding a distinction in Aristotle between meta-metaphysics and metaphysics, or the relation between the two. Our point is simply that, unless and until this issue is addressed, it would not be wise to exclude the Seventh.

The supposition that these kinds are true of all things is important for our understanding of why, in Gamma 2, being and unity, as well as, apparently, identity, similarity, their opposites, and such opposites in general, are considered as candidates of kinds of being *qua* being: because they are, by their nature, true of all things. Of course, that a kind is true of all things does not imply that it is a kind of being *qua* being; it only means that it is a candidate for a kind of being *qua* being, because, after all, only kinds that are true of all things can be kinds of being *qua* being. We may not, therefore, suppose that the supposition that these kinds are true of all things provides an additional argument, in the chapter, for the claim that these opposites (identity, similarity, their opposites, etc.) are kinds of being *qua* being; in addition, that is, to the argument which we have been spelling out and which relies on the issue of the derivability of these opposites from unity (and hence from being and unity).

Aristotle does not, in Gamma 2, expressly state that these kinds – being, unity, identity, similarity, etc. – are true of all things; perhaps he thinks this is too obvious to need stating. With regard to the one kind, being, it is immediately evident that this is true of all things. And since it is argued in Gamma 2 that being and unity are necessarily co-extensive, it follows directly that unity likewise is true of all things. It would have assisted the reader, for the reader's understanding of why the other kinds in question – identity, similarity, their opposites, and such opposites in general – are considered as candidates of kinds of being *qua* being, if Aristotle had made explicit that each of these kinds is true of all things. On the other hand, he does perhaps indicate as much – though in a passage in which the point is easily passed over and overlooked. For when, later in the chapter, he brings up the comparison between the practice of the philosopher and the practice of the sophist (1004b17-26), he indicates directly that this comparison is based on the fact that both the sophist and the philosopher argue about all things (cf. $\delta i\alpha \lambda \dot{\epsilon} \gamma \circ \tau \alpha i \pi \epsilon \rho i \dot{\alpha} \pi \dot{\alpha} \tau \omega v, \kappaoivòv \delta \dot{\epsilon} \pi \dot{\alpha} \sigma i \tau \dot{o} \check{ov} \dot{\epsilon} \sigma \tau v, 1004b20$).

The next few lines (1004b1-4) offer confirmation that it does indeed belong to the science of the philosopher, τοῦ φιλοσόφου, to consider such concepts as identity and oppositeness (ἐναντιότης), by pointing out that there are problems that appear to be rooted in such concepts. They include the problem whether Socrates *is identical with* the sitting Socrates. This problem, therefore, is primarily about identity and not primarily about substances *versus* accidental compounds. They include also the problem whether each opposite stands in opposition to precisely one opposite. This additional argument for the claim that φιλοσοφία is concerned with such kinds as identity and oppositeness is of particular interest, because it by-passes issues concerning the status of such kinds – whether they are primary or, on the contrary, derivable from more primary kinds, such as being and unity – and argues for the claim that a concept is the province of φιλοσοφία simply on the grounds that there are problems that appear to be rooted in that concept. Aristotle adds that if the investigation of such problems is not the task of the philosopher, then it is not at all clear *whose* task it will be (εἰ γὰρ μὴ τοῦ φιλοσόφου, τίς ἔσται ὁ ἐπισκεψόμενος εἰ ταὐτὸ Σωκράτης καὶ Σωκράτης καθήμενος ...).

10.

Aristotle now, at long last, claims that these kinds – identity, similarity, equality, oppositeness – are *per se* attributes ($\kappa\alpha\theta'$ αὐτά πάθη, 1004b5-6; [$\kappa\alpha\theta'$ αὐτά] συμβεβηκότα, b7-8; ἴδια, b16) of being *qua* being and unity *qua* unity:

Since, then $(\dot{\epsilon}\pi\epsilon\dot{\iota}\circ\dot{\upsilon}\nu)$, these [i.e. identity, similarity, etc.] are *per se* features ($\varkappa\alpha\theta'$ $\alpha\dot{\upsilon}\tau\dot{\alpha}$ $\pi\dot{\alpha}\theta\eta$) of unity *qua* unity and being *qua* being, and not *qua* numbers or lines or fire, it is clear that it belongs to that science [i.e. $\varphi\iota\lambda\sigma\sigma\varphi\dot{\alpha}$] to know both *what* these [i.e. being and unity] are and their *<per se>* attributes. (1004b5-8)

Whereas this claim may come as no surprise, it is remarkable that it comes only at this very advanced stage of his argument. Where does the claim come from, which says that identity, similarity, etc., are *per se* attributes of unity *qua* unity and being *qua* being? It is demonstrably wrong, we think, to suppose that it comes from the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\ddot{\epsilon}v$ structure, or that it is related to that claim or to the theory of categories. If the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\ddot{\epsilon}v$ structure were behind the present claim, then the claim would have to say that unity, identity, similarity, etc., are *per se* attributes of being *qua* being; whereas what it actually says is that identity, similarity, etc. are *per se* attributes of unity *qua* unity and being *qua* being. Aristotle does not include unity under the *per se* attributes of being; on the contrary, he includes unity as the subject and basis, *on a par with being*, of such *per se* attributes as identity, similarity, etc.²⁸

²⁸ Ross (1924), lxxviii has this passage say just that which it does *not* say and that which is incompatible with what it actually says; and he characterizes the whole subject of metaphysics accordingly: 'To the causes of the real Γ adds another subject of metaphysical study – the essential attributes of the real, [he refers to '1003a21'] by which he means such relations as

On our reading, the claim that identity, similarity, etc. are *per se* attributes of unity *qua* unity and being *qua* being is a consequence of the claim that these kinds are derivable from (ἀνάγεται εἰς) being and unity as from their principle. This is consonant with the ἐπεὶ οὖν ('since, then,') that introduces the claim here; for the our indicates that the claim is a consequence of something in what immediately precedes. If the claim that these kinds are derivable from being and unity is understood to mean that they are derivable from the essence of being and of unity - and this is a plausible understanding - then it follows directly that these kinds are per se attributes of being and of unity; and indeed of the essence of being and of unity, and hence of being qua being and unity qua unity. For this is just what a per se attribute of X is, for Aristotle; it is an attribute of X that need not be part of the essence of X but whose belonging to X is derivable from the essence of X (or, from the essence of X in conjunction with other relevant necessary truths).²⁹ Aristotle may now conclude definitively ('it is clear that', $\delta \eta \lambda_{0V} \omega \zeta$, 1004b6-7) that these kinds – identity, similarity, etc. – are the province of the same science as are being and unity. For, as he has indicated from the first line of book Gamma, the science that considers the essence of X will also consider the per se attributes of X. He spells out the point here (1004b10-17) by appealing, once again, to the analogy with mathematics: just as it is familiar that numbers have peculiar features ($i\delta \alpha \pi \alpha \theta \eta$), such as evenness, oddness, commensurability, equality, excess and deficiency - we are expected to notice that evenness, etc. need not be part of the essence of number and need not

²⁹ In the *Posterior Analytics* (73a34 f.) Aristotle allows that a *per se* attribute of X can be part of the essence of X. In the present case, however, it seems clear that the *per se* attributes in question, that is, the kinds such as identity, similarity, their opposites, and such opposites in general, are *not* part of the essence of X. For the X here is, precisely, being and unity; and Aristotle has been arguing that the kinds such as identity, etc., are derivable from being and unity and from the essence of being and of unity.

those of sameness, contrariety, otherness, genus and species, whole and part, and such attributes as perfection and unity.' (emphasis added) More than a generation later, Owen (1960, 169-70, emphasis added) does the same, when he writes: 'This [i.e. the pros hen structure of 'being'] is the pattern of reductive translation that Aristotle later [i.e. later in *Met.* Gamma 2] applies to 'being' and to those other expressions, such as 'one' and 'same' and 'opposite', which have a use in all categories but a primary use in the first [he refers here to: '1004a22-31']'. For it is clear (also from his note 6 on page 169) that by 'in the first [i.e. the first category]', Owen is here referring to the first category of to on. This mistake by two formidable critics, which depends on having Aristotle say here that unity, identity, similarity, etc., are per se attributes of being qua being whereas what he actually says is that identity, similarity, etc. are per se attributes of unity qua unity and being qua being, has not, to our knowledge, been pointed out. We do note, though, that some critics are more careful and do not make the same mistake. Thus Loux (2003), 166 says: 'As Aristotle sees it, a discipline that seeks to understand being will deal as well with any concept necessarily coextensive with being. Unity is such a concept, so it too provides material for this discipline; and like being, it takes different categorical forms – unity in substance or sameness, unity in quality or similarity, unity in quantity or equality - so these notions too will fall under the science that studies being (1003b33-5). And since one and the same science studies opposites, this science will deal with notions like nonbeing, multiplicity, difference, dissimilarity, and inequality (1004a9 ff.).'

figure in the account of what number is - so too being *qua* being has such peculiar features, and it will be the task of the philosopher to investigate the truth about these.

Of particular interest here is the sentence at 1004b8-10, which says that:

And those who investigate these are at fault not because they are not philosophizing, but because οὐσία, about which they have no comprehension, is prior (ὅτι πρότερον ἡ οὐσία).

The 'these' ($\pi\epsilon\rho$ ì $\alpha\dot{\upsilon}\tau\hat{\omega}\nu$) does not refer to 'the questions', that is, such questions as whether Socrates is identical with the sitting Socrates; it refers, rather, to what is referred to by the term a few words earlier, 'the [*per se*] attributes of these' ($\tau\dot{\alpha}$ $\sigma\upsilon\mu\beta\epsilon\beta\eta\varkappa\dot{\sigma}\tau'$ $\alpha\dot{\upsilon}\tau\sigma\hat{\varsigma}$), that is, of unity and being. It refers, therefore, to identity, similarity, etc. It is in relation to these, precisely, that $\sigma\dot{\upsilon}\sigma(\alpha)$ is prior ($\pi\rho\dot{\sigma}\tau\epsilon\rho\sigma\nu$). And we recall that earlier (1004a2-6) it was implied that being and unity are $\sigma\dot{\upsilon}\sigma(\alpha)$ in relation to these kinds. What Aristotle is saying here, therefore, is that, first, there are thinkers that investigate such kinds as identity, similarity, difference, dissimilarity, etc.; secondly, such thinkers are indeed engaged in $\varphi\iota\lambda\sigma\sigma\sigma\varphi(\alpha)$, in the sense of the science of being *qua* being; and, thirdly, such thinkers are at fault ($\dot{\alpha}\mu\alpha\rho\tau\dot{\alpha}\nu\sigma\upsilon\sigma\nu$) in that they do not recognize that these kinds are not primary and that there is something, $\sigma\dot{\upsilon}\sigma(\alpha)$, that is prior to them. According to Aristotle, then, the philosophers that investigate such kinds as identity, similarity, etc., are at fault in that they think that such kinds are primary, whereas, as he argues, they are not in fact primary.

We want to suggest that the philosophers that Aristotle is thinking of here not only include Plato, but that Plato's *Sophist* is among his primary targets. He goes on at considerable length (1004b17-26) to compare the practice of the philosopher with the practice of the sophist; and in doing so he characterizes the sophist as one who takes on the guise ($\dot{\upsilon}\pi\sigma\delta\dot{\upsilon}\sigma\tau\alpha\tau$ $\sigma\chi\hat{\eta}\mu\alpha$) of the philosopher, and he characterizes the practice of the sophist ($\dot{\eta}$ $\sigma\phi\eta\sigma\tau\iota\kappa\dot{\eta}$) as the mere appearance of wisdom ($\phi\alpha\iota\nu\circ\mu\dot{\epsilon}\nu\eta$ $\mu\dot{\circ}\nu\circ\nu$ $\sigma\circ\phi\dot{\iota}\alpha$). This is a deliberate and conspicuous recollection of Plato's *Sophist*. And even if we suppose that Aristotle has a substantial interest here, as part of his defence of the possibility of a science of being *qua* being, in distinguishing philosophy from sophistry, especially since, as he points out, both the sophist and the philosopher argue about all things (cf. $\delta\iota\alpha\lambda\dot{\epsilon}\gamma\circ\nu\tau\alpha\iota$ $\pi\epsilon\rho\dot{\iota}\dot{\alpha}\pi\dot{\alpha}\nu\tau\omega\nu$, $\kappa\circ\iota\nu\dot{\nu}\nu$ $\delta\dot{\epsilon}$ $\pi\hat{\alpha}\sigma\iota$ $\tau\dot{\circ}$ $\dot{\epsilon}\sigma\tau\iota\nu$, 1004b20), the extended recollection of the *Sophist* indicates that this is a primary target.

In the subsequent lines (1004b27-29), indeed, Aristotle indicates what this target is; for he includes motion and rest (κ ($\nu\eta\sigma$ IG and $\sigma\tau$ $\dot{\alpha}\sigma$ IG), two of Plato's five μ $\dot{\epsilon}\gamma$ ($\sigma\tau\alpha$ γ $\dot{\epsilon}\nu\eta$ in the *Sophist*, under the kinds that, according to his own view, are derivable from ($\dot{\alpha}\nu\dot{\alpha}\gamma$ $\epsilon\tau\alpha$ IC) to 4b28; also 1004b34 & 1005a1) being in conjunction with its opposite, not-being, and from unity in conjunction with its opposite, multiplicity. This shows that Aristotle's complaint, or charge, is directed in large part against Plato's *Sophist* and in particular against the theory of the μ $\dot{\epsilon}\gamma$ IGTA γ $\dot{\epsilon}\nu\eta$. The complaint, remarkably, is that Plato is defending an account of being in terms of a plurality of kinds, such as motion and rest and identity and difference, and likewise in terms of

the interrelations among these kinds – what Plato in the *Sophist* calls $\sigma \upsilon \mu \pi \lambda \circ \varkappa \eta$ είδών – but without seeking to derive this plurality of kinds from a single, ultimate principle of being – from οὐσία.

We may note that, on Aristotle's reading of the *Sophist* and the theory of the $\mu \epsilon \gamma \iota \sigma \tau \alpha \gamma \epsilon \nu \eta$, Plato is defending an account not simply of what there is, but of what being is: of the essence of being and of being *qua* being. As Aristotle reads this dialogue, Plato is engaged in the very science in which he, Aristotle, is engaged, the science of being *qua* being. We may also note that the complaint is not that Plato gives a wrong account of the single, ultimate principle of being, $o \upsilon \sigma i \alpha$ – Aristotle is after all going to dedicate several books to determining what is the right account of $o \upsilon \sigma i \alpha$ – but that Plato does not recognize that there must be a single principle and that he is content to give an account of what being is in terms of a plurality of kinds, and in terms of their interrelations, that are of equal status and that do not exhibit a hierarchy.

11.

Aristotle has argued that kinds such as identity, similarity, their opposites, and such opposites in general are derivable from being and unity as from their principle; and he has concluded on this basis that the investigation of such kinds belongs to this very science, $\varphi i \lambda o \sigma o \varphi i \alpha$, conceived as the science of being *qua* being. He now goes on to situate the view that such kinds are derivable from being and unity as from their principle, in relation to the views of a variety of other thinkers. He does so, apparently, for the purpose of showing that this is a view that they are able to accommodate their views to; and he concludes on this basis that, also from the perspective of a variety of other thinkers, the investigation of such kinds – identity, similarity, etc. – belongs to the science of being *qua* being.

Further, the one side in the row of opposites is privative, and all <opposites> are derivable from ($\dot{\alpha}\nu\dot{\alpha}\gamma\epsilon\tau\alpha\iota\,\epsilon i\varsigma$) being and not-being and from unity and multiplicity; for example, rest ($\sigma\tau\dot{\alpha}\sigma\iota\varsigma$) belongs to unity and motion ($\varkappa(\nu\eta\sigma\iota\varsigma)$) to multiplicity. And practically all <philosophers> agree <with each other> that the things that are and $\sigma\dot{\nu}\sigmai\alpha$ are constituted out of opposites. Certainly all <philosophers> designate opposites as their principles; some designating odd and even, others the hot and the cold, others limit and unlimited, others again friendship and enmity. It is apparent that all the other opposites, too, are derivable from unity and multiplicity – for we may take this derivation for granted – and that, altogether, the principles of the other <philosophers> fall under these kinds [i.e. under being and unity]. It is evident, then, from these considerations too ($\varkappa\alpha$ i ἐ \varkappa τούτων), that it belongs to a single science to consider being *qua* being. For all things are either themselves opposites or constituted out of opposites; and unity and multiplicity are the principles of these opposites. (1004b27-1005a5)

It is a good question whom exactly he has in mind as the philosophers that think that being and οὐσία are constituted out of (συγκεῖσθαι ἐκ) opposites. Plato and the *Sophist* are a certainty, as is shown not only by the mention of στάσις and κίνησις as such apparently primary opposites, but also by the extended comparison between the philosopher and the sophist upon which this passage directly follows. The mention of friendship and enmity as such apparently primary opposites appears to be a reference to Empedocles; that of odd and even to a Pythagorean view; that of limit and unlimited may be a reference to Plato and the *Philebus*; alternatively, it may be a reference to a view by Philolaos;³⁰ and that of the hot and the cold is a reference to certain naturalists. It seems that Aristotle may be taking over from, precisely, Plato's *Sophist* at least some of these references, and is using for this purpose the famous *Sophist* passage (242c ff.) in which Plato gives a summary account of a comprehensive variety of answers to the question 'What is there?' (*not* 'What is being?') put forward by earlier thinkers, and does so in preparation for giving his own account of what there is and also, according to Aristotle's reading at any rate, of what being is. This passage is taken up in Iota 2; and that passage provides useful assistance in determining whom Aristotle has in mind as holding each of these different views.

What is the relation between the claim that Aristotle has previously defended, namely, that kinds such as identity, similarity, their opposites, and such opposites in general are derivable from being and unity as from their principle, and the present view, which he ascribes to a wide variety of other thinkers and which says that 'what there is and οὐσία are constituted out of <such> opposites' (τὰ δ' ὄντα καὶ τὴν οὐσίαν ὁμολογοῦσιν ἐξ ἐναντίων σχεδὸν ἄπαντες συγχε $i\sigma\theta$ αι, 1004b29-30)? It is not plausible, we think, to assume that these are supposed to be one and the same view, or that they are supposed to be equivalent; as would be the case if 'being derivable from' (ἀνάγεσθαι εἰς) and 'being constituted out of' (συγκεῖσθαι ἐκ), as used here, were supposed to be either synonymous or equivalent. This is not plausible because Aristotle has just asserted (1004b8-10) that the thinkers that investigate such opposites are at fault in not recognizing that there is something prior to them ($\pi\rho \circ \tau \epsilon \rho \circ \nu$), namely, $\circ \upsilon \sigma \circ \alpha$. This means that they are at fault in that they think that these opposites are themselves primary, and, therefore, themselves oudata. The view which says that these thinkers hold that these opposites are themselves primary and are oudíal is consonant with the statement which says that these thinkers hold that the things that are, and οὐσία, are constituted out of such opposites; indeed, it seems that the latter statement implies the former view. These thinkers, Aristotle says, agree with each other (ὁμολογοῦσιν) that the things that are, and οὐσία, are constituted out of such opposites. But Aristotle does not agree with this view, at least not as it stands and in general; he only agrees with a particular version of it, namely, the version which says that there is a relation of priority and posteriority between, on the one hand, two particular pairs of such opposites – namely, being and not-being and unity and multiplicity – and, on the other hand, any other pair of such opposites (identity, similarity, etc.).

This, we may note, also explains why, when Aristotle initially (at 1003b36-1004a1) asserted that such kinds, which come in paired opposites, are derivable from being and unity, he said

³⁰ See DK 44 B1 and DK 44 B 6.

that 'almost all' (σχεδὸν πάντα) such kinds are thus derivable. Because, as has now emerged, Aristotle is happy to grant that unity too has an opposite, multiplicity; indeed, he is prepared to grant that being too has an opposite, not-being. But, according to Aristotle, these two pairs of opposites, far from being derivable from οὐσία, themselves constitute οὐσία.

How significant is this lack of fit, indeed lack of full and proper agreement, between Aristotle and the other thinkers on this issue? This is the issue whether any such pair of opposites, or indeed a plurality of such pairs, may be considered as primary, or co-primary (this being the view that he ascribes to the other thinkers), OR, on the contrary, only one such pair, or a compound of two such pairs, must be considered as primary (this being his own view). In itself this issue is most certainly significant and amounts to a considerable disagreement. It will need to be taken up and resolved eventually and in the course of Aristotle's extended search for what being *qua* being is and what oùotía is, the search that takes up the bulk of the *Metaphysics*.

We want to suggest that it is this issue that Aristotle is pointing to, when he says: 'for we may take this derivation for granted' ($\epsilon i\lambda\dot{\eta}\phi\theta\omega$ $\gamma\dot{\alpha}\rho$ $\dot{\eta}$ $\dot{\alpha}\nu\alpha\gamma\omega\gamma\dot{\eta}$ $\dot{\eta}\mu\hat{\nu}\nu$, 1004b34-1005a1). What this points out is that it is not part of his present task to argue for the supposition (originally asserted at 1003b36-1004a2) that such opposites – identity-difference, similarity-dissimilarity, etc. – are derivable from being and unity as from their principle; on the contrary, 'we may', he says, 'take this derivation for granted'. The derivability claim may be taken for granted because Aristotle's present task is not to establish what being *qua* being is, or what $\alpha\dot{\sigma}\sigma\dot{\alpha}$ is. The task is a preliminary and more moderate one, namely, to provide for the possibility of a science of being *qua* being and to resolve, or at any rate indicate a resolution of, certain basic problems about the possibility of such a science. And the supposition that such opposites are derivable from being and unity – for at this point this is no more than a supposition – contributes crucially to this task.

12.

The following lines, 1005a5 f., begin to prepare for the conclusion stated in the final five lines – the conclusion to the chapter as a whole. Remarkably, Aristotle says that 'it belongs to a single science to consider these [i.e. the kinds that come in pairs of opposites], *irrespective of whether they are said* kath' hen *or they are not said* kath' hen (εἴτε $\kappa\alpha\theta$ ' ἕν λέγεται εἴτε μή) – albeit the latter is perhaps the truth' (1005a5-6). That the latter is indeed the truth was argued in the first part of the chapter, where it was argued that being is said in many ways, and that therefore it is not said $\kappa\alpha\theta$ ' ἕν, and exhibits, rather, a category-based πρòς ἕν structure. The 'perhaps' need not, however, be read as rhetorical; for Aristotle may not think that the argument in the first part of the chapter has been conclusive, or conclusively defended. The remarkable clause, 'irrespective of whether these [i.e. the kinds that come in opposites] are said $\kappa\alpha\theta$ ' ἕν or they are

not said $\kappa\alpha\beta$ ' $\epsilon\nu$ ', corroborates what we have been at pains to argue in this paper; namely, that Aristotle does not think that the possibility of a science of being *qua* being is premised on a commitment to the claim that being exhibits a category-based $\pi\rho\delta\varsigma$ $\epsilon\nu$ structure. From his own perspective, the possibility of a science of being *qua* being is premised on this claim; for this claim is the basis of his resolution of a problem about the possibility of such a science which has its source in his own theory of categories. But from the perspective of the other thinkers, it is not so premised, because they are not committed to the theory of categories. And Aristotle, we have seen, wants to characterize the science of being *qua* being in such a way that these thinkers, too, can be enlisted as dialectical partners in the search for being *qua* being.

He adds (1005a6-8):

Nevertheless, however, even if unity is said in many ways ($\epsilon i \, \varkappa \alpha i \, \pi o \lambda \lambda \alpha \chi \hat{\omega} \varsigma \, \lambda \epsilon \gamma \epsilon \tau \alpha i \, \tau \delta \epsilon \nu$), the other kinds [i.e. identity, similarity, etc.], that is ($\varkappa \alpha i$), the opposites, will in a similar manner ($\delta \mu o (\omega \varsigma)$) be said with reference to ($\pi \rho \delta \varsigma$) the primary <unity>.

The 'even if' locution serves to make room for the possibility that other thinkers may not share the view that unity is said in many ways. This passage refers back to 1004a22, when it was first asserted that unity is said in many ways.

We may pass over without particular comment the intervening lines, before the summary conclusion to the whole chapter. Aristotle throws in here (1005a8-11), apparently as an afterthought, certain further questions about the status of being and unity; in particular, the question whether being and unity are universals ($\kappa\alpha\theta\delta\lambda\sigma\nu$), that is ($\kappa\alpha\ell$), the-same-over-all ($\tau\alpha\dot{\nu}\tau\dot{\sigma}\dot{\epsilon}\pi\dot{\epsilon}\pi\dot{\epsilon}\pi\dot{\alpha}\tau\omega\nu$, which we may understand as a variant on 'one-over-many'), and the question whether they are separable ($\chi\omega\rho\iota\sigma\tau\delta\nu$). But he does not take up these questions here.

He adds (1005a11-13), as the last point before the summary conclusion, that whereas geometers may base their inquiries on claims about what opposition is, or what perfection is, or what being is, or what unity is, or what identity is, or what difference is, they only do so $\xi \dot{\xi}$ $\dot{\tau}\pi 0\theta \dot{\xi}\sigma \varepsilon \omega \zeta$; that is, such claims have within geometry the status of assumptions. What Aristotle is saying is that it is not the province of geometers to consider these $\tau \dot{\ell} \dot{\xi}\sigma \tau \iota$ questions, but rather, he implies, the province of philosophers. No doubt his choice to set the philosopher against the geometer, and his claim that the very things that the philosopher properly inquires into, the geometer makes use of as assumptions, is meant to recall Plato's famous distinction between the philosopher and the geometer in the *Republic* (509d-511e).

We need not comment on the concluding five lines of the chapter, except for observing that they are the conclusion to the chapter as a whole, indeed to Gamma 1-2 as a whole:

It is thus clear that (ὅτι μἐν οὖν ... δῆλον) it belongs to a single science to consider being *qua* being and its attributes (τὰ ὑπάρχοντα αὐτῷ) *qua* being; and <it is likewise clear> that the same <science> considers not only the οὐσίαι but also the attributes – both those <attributes> that we have mentioned and those that concern priority and posteriority, genus and species, whole and part, and the other things of that sort (1005a13-18).

13.

We have argued that Aristotle's defence, in *Metaphysics* Gamma 2, of the possibility of a science of being *qua* being is addressed to *two* problems, not one problem, about this possibility; and that both the problems that he addresses and the resolutions that he defends are independent of each other. The first problem and resolution have, of course, been the subject of uninterrupted critical attention for a very long time (and especially since Owen's 1960 paper); and it has not been part of our aim to add to this. The second problem and resolution, however, have received hardly any attention.

The significance of the fact that Aristotle addresses, and defends a resolution of, two problems, not one, is very considerable, because of the difference between the two problems. Whereas the first problem and its resolution are premised on Aristotle's view that there is a plurality of categories (categories, in the sense of ways in which one thing is true of another, as defended in the *Categories*), the second problem is premised on the apparent fact that there is a plurality of kinds – unity, identity, similarity, their opposites, and such opposites in general – that are true of *all things*. This apparent fact is compatible with Aristotle's views, but it is not specific to them. On the contrary, the second problem is a problem for any thinker who wants to inquire into *all things* conceived as a single kind.

If the first problem, and the resolution in terms of the claim that being exhibits a category-based $\pi\rho\delta\varsigma\ \check{\epsilon}\nu$ structure, had been all there is to Aristotle's defence of the possibility of a science of being *qua* being, it is hard to see how, later in the *Metaphysics*, Aristotle could have thought of the search for being *qua* being and for primary being, $\sigma\delta\sigma(\alpha)$, as a joint inquiry in which he enlists such different thinkers as: himself; Pythagoreans; naturalists; as well as Plato and Platonists including Speusippus. None of these thinkers hold, or would accept if they were asked, the theory of categories or the claim that being exhibits a category-based $\pi\rho\delta\varsigma\ \check{\epsilon}\nu$ structure. We have seen that this conception of $\varphi\iota\lambda\sigma\sigma\sigma\varphi(\alpha)$, the science of being *qua* being, as a joint inquiry, is present already in Gamma 2, when, towards the end of the chapter, Aristotle says that the science of being *qua* being, as he has been conceiving of it and defending it, is open to a variety of other thinkers, whom he expressly honours with the title of $\varphi\iota\lambda\sigma\sigma\sigma\varphi(\alpha)$ and of whom he expressly says that they, too, are engaged in $\varphi\iota\lambda\sigma\sigma\sigma\varphi(\alpha)$. And while he does not mention any of them by name, he refers to a wide variety of their views, and, especially prominently, the theory of the $\mu\epsilon\gamma\iota\sigma\tau\alpha\gamma\epsilon\nu\eta$ from Plato's *Sophist*.

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