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PART IV

BEING AND BEINGS

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CHAPTER 14

BEING QUA BEING

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I. THREE PROBLEMS ABOUT THE SCIENCE OF BEING QUA BEING

'THERE is a science (*epistêmê*),' says Aristotle, 'which studies being *qua* being (to on $h\hat{e}(i)$ on), and the attributes belonging to it in its own right' (*Met.* 1003a21-22). This claim, which opens *Metaphysics* IV 1, is both surprising and unsettling—surprising because Aristotle seems elsewhere to deny the existence of any such science and unsettling because his denial seems very plausibly grounded. He claims that each science (*epistêmê*) studies a unified genus (*APo* 87a39-b1), but he denies that there is a single genus for all beings (*APo* 92b14; *Top.* 121a16, b7–9; cf. *Met.* 998b22). Evidently, his two claims conspire against the science he announces: if there is no genus of being and every science requires its own genus, then there is no science of being. This seems, moreover, to be precisely the conclusion drawn by Aristotle in his *Eudemian Ethics*, where he maintains that we should no more look for a general science of being than we should look for a general science of goodness: 'Just as being is not something single for the things mentioned [viz. items across the categories], neither is the good; nor is there a single science of being or of the good' (*EE* 1217b33-35).

How, then, does Aristotle come to speak of a science of being *qua* being? What is its defining genus? Or, to put the question more prosaically, just what does the science of being *qua* being study?

It is important to appreciate from the outset that these questions, however simple and straightforward, already mask considerable complexity, because they themselves admit of a variety of different understandings. Scholars see that there is a problem about the science of being in Aristotle, but when we examine carefully

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the problem they report seeing, we discover a family of discrete problems rather than a single, shared problem serving as the locus of all their concerns.¹ It accordingly behoves us to make some effort to bring the problems of the science of being *qua* being into sharper relief before proceeding. This is only to say, however, that we should apply to Aristotle an adage of his own making: those wishing to make progress in philosophy, he says, should take care to state their problems well (*Met.* 995a27). In one sense, as we shall find, stating well and clearly the problems pertaining to the science of being *qua* being proves to be at least half the battle. Fortunately, the effort is not wasted, since, as Aristotle also implies, solutions to our problems often lie latent in their most precise formulations.

That said, the first problem about the science of being *qua* being, already mooted, seems reasonably straightforward, at least in its initial formulation: every science is arrayed over a single genus; there is no genus of being; hence there is no science of being (*APo* 87a9-b31, 92b14; *Top.* 121a16, b7–9; EE cf. *Met.* 998b22). Let us call this the *Possibility Problem*. How, given Aristotle's strictures on science (*epistêmê*), can there be a science of being *qua* being?

There is an immediate and rather easy, if unduly deflationary response to this first problem, thus formulated: Aristotle never says that there is a science of being *(to on).*² What he says, rather, is that there is a science of being *qua* being *(to on hê(i) on)*. So, there is no contradiction introduced by the announcement of *Metaphysics* IV—at least not on the plausible assumption that a science of being need not be the same as a science of being *qua* being. So far, then, Aristotle is not immediately subject to the Possibility Problem.

That allowed, this easy response mainly serves only to focus our attention on a series of less easily addressed questions. How exactly might a science of being *qua* being differ from a science of being? How, if such a science is permissible, does the qualifier '*qua* being' circumvent the problem about there being no genus of being? Is the suggestion, then, that there is a genus of being *qua* being? What genus might that be? At first pass, any considerations militating against a genus of being tell equally against a genus of being *qua* being.³

When we explore questions of this sort, our first problem, the Possibility Problem, gives way to a second, namely the *Extension Problem*. What, precisely, does the science of being *qua* being take as its object of study? Immediately after introducing the science of being *qua* being, Aristotle highlights its complete generality:

This science is not the same as any of those called partial sciences; for none of those investigate universally concerning being *qua* being, but cut off some part of being and consider what coincides with it, as for instance the mathematical sciences do (*Met.* 1003a23–25).

The science of being *qua* being thus contrasts with the special sciences precisely in *not* cutting off any part of being; it considers not living beings, or mathematical beings, or beings subject to motion, but rather *all* beings, in so far as they are beings and not in so far as they move or live or exhibit quantitative features. Evidently,

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then, the science of being *qua* being examines everything there is. So, here too there seems an easy, deflationary answer, something in the manner of Quine:

A curious thing about the ontological problem is its simplicity. It can be put in three Anglo-Saxon monosyllables: 'What is there?' It can be answered, moreover, in a word—'Everything'—and everyone will accept this answer as true.⁴

So we might address our Extension Problem. Question: Precisely which beings does the science of being *qua* being study? Answer: All of them.

Here again, however, the deflationary answer is immediately unsatisfactory, in two distinct ways. The first is a point of language. Aristotle's locution 'being qua being' (to on $h\hat{e}(i)$ on) might be taken in various different ways. In Aristotle's Greek, the word *being* (to on) is a neuter participle, formed off the verb *einai*, to be. Like its English counterpart, being, to on may be used as a substantive, in a countnounish sort of way ('If there are a butcher, a baker, and a candle-stick maker in the room, then there are at least three beings in the room, unless, of course, one of them has two or more jobs.'). Or it may be used non-substantively, as an abstract participle which beings in the substantive sense might be said to have or share ('Everything which has being exists in space and time, and nothing lacking being exists; so, there are no abstract objects.'). This second notion of being treats being as a sort of property or at least as property-like. Here any question of how many beings there are seems ill-formed, on par with asking how many airs there are. Given this linguistic distinction, one must ask whether, when Aristotle insists that the science of being qua being does not cut off any part of being, he is thinking of being abstractly or substantively. That is, does the science of being *qua* being study being, that feature all and only beings have in common, or does it study, rather, all the beings there are, considered as beings, but in no other way?⁵

Secondly, and more importantly, Aristotle's actual procedure in the chapters following his introduction of a science of being *qua* being undercuts any easy suggestion that this science must be straightforwardly universal in scope. For, strikingly, his procedure in these chapters undermines any confidence we might have in the suggestion that the science of being *qua* being takes as its object *all of being* or even *all beings*. In these chapters, Aristotle focuses relentlessly on what seems to be but one kind of being, namely substantial being (*ousia*), and, ultimately, on just one substantial being, namely the unmoved mover of *Metaphysics* XII. Patzig has presented the problem trenchantly:

One of the most difficult problems of interpretation set by the *Metaphysics* lies in the fact that in book IV the 'sought-for science' is characterised very precisely as the science of 'being qua being'... Unlike the particular sciences, it does not deal with a particular area of being, but rather investigates everything that is, in its most general structural elements and principles....But, on the other hand, and startlingly, we also discover that in *Metaphysics* VI 1... Aristotle seems first to accept this opinion and then, immediately afterwards, to embrace its exact opposite. For in VI 1 we again find an analysis of the sciences designed to establish the proper place of 'first philosophy'. Here, however, Aristotle does not, as he did in book IV, distinguish the 'sought-for science' from all other sciences by its greater

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generality. First he divides philosophy into three parts: theoretical, practical, and productive; and then he splits theoretical philosophy into three disciplines. To each of these disciplines he entrusts well-defined areas as objects of research. The 'sought-for science', referred to in IV as the 'science of being qua being', he now calls 'first philosophy', and defines it as the science of what is 'changeless and self-subsistent (*akinêton kai chôriston*)'. He explicitly gives it the title of 'theology'. Physics and mathematics stand beside it as the two neighbouring disciplines in the field of theoretical philosophy.⁶

In brief, if being *qua* being studies all beings, then it is perfectly general and does not take as its object one kind of being (*ousia*, substance), or, worse, one entity within that kind, the unmoved mover; if, by contrast, it studies just one kind of being, substance, or even one substance in particular, then the science of being *qua* being is not general, but rather a special science, alongside other theoretical sciences like physics and mathematics.

So, we have a serious Extension Problem. Aristotle announces a perfectly general science, but then evidently proceeds to conduct a special science, an inquiry into one kind of being among others, namely substance—and at its extreme, one substance among others, namely the unmoved mover. In fact, Aristotle seems almost blithe on this point:

Indeed, what was sought of old and is sought at present and always, and what is always a matter of difficulty, namely *what is being*? (*ti to on*) is this: *what is substance*? (*tis hê ousia*) (*Met.* 1028b2-4).

In this single sentence, Aristotle seems to supplant his universal science of being with a special science of substance. Hence, the Extension Problem: what, precisely, does the science of being *qua* being study, everything or only some things?

The Extension Problem is well recognized and widely addressed; indeed, it is often treated as the defining problem of the science of being *qua* being. This is unfortunate, since another, less well recognized problem is in several ways more consequential than the Extension Problem.

This is the *Intension Problem*. If it is more consequential than the Extension Problem, the Intension Problem is also slightly harder to motivate. We can approach it by returning to the language of Aristotle's introduction of the science of being *qua* being. Four terms command our immediate attention: *science* (*epistêmê*); *being* (*to on*); *qua* ($h\hat{e}(i)$); and *in its own right* (*kath' hauto*). We have already briefly considered the first two. The Intension Problem arises in reference to the remaining two, and especially to the last.

Typically when Aristotle uses what we will call the *qua-locution*, that is, the dative $(h\hat{e}(i))$, which is traditionally rendered into Latin *qua*, after a substantive, he does so in order to qualify the term preceding it so as to direct attention to a subset of an entity's properties. For instance, when we say that we are considering surfaces *qua* coloured, we are focusing on the colour-features of a surface only, and ignoring, for instance, the question of whether the surface is smooth or rough, and also, indeed, any features which may be necessarily co-extensive with the surface's colour features, such as its being extended.

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One immediate question concerns why Aristotle so often finds it instructive to use this device. It will prove noteworthy that very often he uses the *qua*-locution as an analytical device in sophistic contexts, when he wishes to combat seductive but fallacious inferences by focusing on those properties relevant to an inference structure while setting aside those which are not. So, for example, consider the spurious inference from:

- (1) Socrates and Socrates seated are one and the same.
- (2) When seated-Socrates stands, seated-Socrates goes out of existence.

to

(3) So, when seated-Socrates stands, Socrates goes out of existence.⁷

Of course, (3) does not follow from (1) and (2). What is relevant in the present context is Aristotle's diagnosis of what has gone wrong. He thinks that Socrates and Socrates-seated are indeed one and the same, but only co-incidentally (*kata sumbebêkos*). That is, seated-Socrates and Socrates are one in the sense that they coincide. Socrates is not, then, seated *per se*, in his own right (*kath' hauto*); what he is in his own right includes what he is essentially, namely a human being, a rational animal. So, since he does not go out of existence in so far as he is a human being when he rises, Socrates persists when seated-Socrates rises.

Aristotle's habit of deploying the *qua*-locution in this context suggests that, in the case of being, he means to study beings precisely in so far as they are beings, and in no other way. If this is so, then when speaking of being *qua* being, Aristotle signals that he means to refrain from studying beings in so far as they are any particular kinds of beings. Even if it is true that every being is a being of some kind or other, a metaphysician will wish to reflect upon what it is for a being to be a being *before*, so to speak, it is this or that kind of being. Looked at this way, the *qua*-locution is a sort of a filter.⁸ In the phrase 'Socrates *qua* human being does not perish when Socrates *qua* seated does' the *qua*-locution filters so as to focus on one feature in the first occurrence while filtering to focus on a second, distinct feature in the second occurrence. So, by parity of reasoning, in the phrase 'being *qua* being' Aristotle means to filter out *all* features of beings beyond the bare fact of their being beings.

In focusing on beings just as beings, and in no other way, Aristotle seeks to study beings as they are in themselves, in their own (*kath' hauto*). In this respect, his science of being proves to be like other sciences; for studying the *per se* features of things is the business of science (*epistêmê*) in general, whatever the domain in question. A science seeks to capture the nature or essence of its object of study:

We think we understand a thing without qualification, and not in the sophistic, accidental way, whenever we think we know the cause in virtue of which something is—that it is the cause of that very thing—and also know that this cannot be otherwise. Clearly, science (*epistêmê*) is something of this sort. After all, both those in possession of science and those without it suppose that this is so—although only those in possession of science are actually in this condition. Hence, whatever is known without qualification cannot be otherwise (*APo* 71b9–16; cf. *APo* 71b33–72a5; *Top.* 141b3–14, *Phys.* 184a10–23; *Met.* 1029b3–13).

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Accordingly, assuming that the science of being *qua* being meets the requisites of science in general, we should expect it to exhibit the following three features: (i) it should take as its object being *qua* being (*to on hê(i) to on*); (ii) it should state the features belonging *per se* (*kath' hauto*) to being *qua* being; and (iii) it should state the causes (*aitia*) of being *qua* being.

This last requirement Aristotle fully appreciates and acknowledges. Indeed, it seems prominent in his mind when he introduces the science in *Metaphysics* IV: 'Hence, it is also necessary for us to find the first causes (*aitia*) of being *qua* being' (*Met.* 1003a31–2). This suggests, then, that when he introduces the science of being *qua* being, Aristotle expects it to conform to the strictures on science set forth in the *Posterior Analytics*.

With this in mind, we can understand the Problem of Intension more readily. This is because the Problem of Intension pertains to the second criterion of *epistêmê*, namely that the *epistêmê* of a given domain **D** must state those features belonging to the members of **D** *per se* (*kath' hauta*). As a first approximation, we might expect these features to be those belonging *essentially* to the members of **D**. Thus, for instance, a science of human beings will capture and exhibit the *nature* of human beings, which will involve capturing and stating the essence shared by all and only members of the species *human being*. Let us suppose, in line with Aristotle's suggestion in *Nicomachean Ethics* I 5, that the nature of human beings is *to be rational*. (One might dispute this claim in more or less radical ways—by contending that essentialism is false or by contending that this misidentifies the essence of humanity—but that is not our present concern. Let essentialism of an Aristotelian variety be accepted; then the science of human beings will focus on humans *qua* rational beings.) In general, if Φ is the essence of the members of some domain **D**, the science of **D** focuses on the members of **D** *qua* Φ .

With that accepted, we can put the Problem of Intension succinctly: what might Φ be for **D** when the domain is all beings? What is it, precisely, to study beings in so far as they are beings? Are beings essentially anything at all, as beings?

We immediately run up against the worry that beings have no essence in so far as they are beings. To begin, to state the essence of some **D** seems to involve *defining* that domain, which normally proceeds by distinguishing those features which are essential to members of **D** from those which are not; this activity, however, presupposes minimal complexity for those members. Thus, human beings all have skin, and this trait, according to Aristotle's approach, is universal without being essential; other traits are accidental, manifested by some humans at some times, and these too will trivially be discounted as contenders for Φ , precisely because 'whatever is known without qualification cannot be otherwise' (*APo* 71b16). Being *qua* being, however, does not manifest any immediately discernible complexity. As Aquinas has noted in a parallel context, when speaking of actuality: 'Simple notions cannot be defined, since an infinite regress in definitions is impossible. But actuality is one of those simple notions. Hence, it cannot be defined' (Aquinas, *Comm. in Aris. Meta.* IX. 5. 1826). One might well think the same of being, in which case there would no more be a science of being *qua* being than there would be a science of actuality.

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Further, recalling that Aristotle often deploys the *qua*-locution in anti-sophistic contexts, we can also raise the Problem of Intension from another angle. Both being-seated and being-human appear to be intrinsic features of Socrates. We can filter the intrinsic features of entities in various different ways by means of the *qua*locution, and one way, especially prevalent in anti-sophistic contexts concerned with change and generation is to filter them along the divide of what an entity is in its own right *versus* what it is co-incidentally. In this sense, the phrase *per se* (*kath' hauto*) is implicitly *contrastive*, selecting between different sets of an entity's intrinsic features. One is inclined to ask, then: which of being's intrinsic features belong to it merely co-incidentally (*kata sumbebêkos*)? What exact contrast does Aristotle take himself to be making in the case of being?

The Problem of Intension is thus continuous with but also crucially distinct from the other problems already introduced, the Extension Problem and the Possibility Problem. In brief, then, these three problems are:

- The Possibility Problem: Given Aristotle's express requirements for *epistêmê*, how is a science of being *qua* being possible?
- The Extension Problem: Presuming that it is possible, what precisely does the science of being *qua* being study?
- The Intension Problem: If a science seeks to state the essence Φ of its domain D, what might Φ be when D is the domain of all beings?

Though clearly distinct, these problems are also importantly related. In what follows, I urge the following crucial connection: by refining and answering the Intension Problem, we are afforded answers to both the Extension and Possibility Problems.

II. Addressing the Extension Problem First

Partly because they have paid little attention to the Intension Problem, commentators have often focused first on the Extension Problem, hoping thereby also to solve the Possibility Problem. This approach merits consideration, both because it is rooted in authentically Aristotelian doctrine and because it has dominated discussion of the science of being *qua* being over much of the latter half of the twentieth century. The most influential statement owes to Patzig,⁹ perhaps unsurprisingly since, as we have seen, so too does the clearest formulation of the Extension Problem in modern times.

The Extension Problem begins with a legitimate worry born of the observation that Aristotle first speaks of the science of being *qua* being quite generally, in universal terms, but then proceeds to execute it by concentrating on but one category

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of being, substance (*ousia*), and then ultimately on one substance, the divine substance. It would be wrong to proceed as if Aristotle himself were unaware of this concern, since he himself gives voice to what seems a nascent version of the Extension Problem in *Metaphysics* VI 1:

Someone might raise a problem as to whether first philosophy is universal and deals with a particular genus and one particular nature...If there is no other substance apart from those constituted by nature, then physics would be the first science. But if there is some changeless substance, this is prior and philosophy is the first science, and it would be universal in this way, because it is first; and it would fall to it to investigate concerning being *qua* being, both what it is and that which belongs to it *qua* being (*Met.* 1026a23–32).

Aristotle's remark, brief though it is, seems to imply that one studies being *qua* being *by* studying the changeless prime mover, and that by engaging in the study of this object, first philosophy qualifies as universal.

This suggestion, left undeveloped by Aristotle, has recommended a promising approach to the Extension Problem, especially when it is recalled that in the beginning of *Metaphysics* IV, Aristotle calls attention to his apparatus of *core-dependent homonymy* not long after introducing the science of being *qua* being.¹⁰ He says:

It falls to one science to study not only things that are spoken of in virtue of one thing, but also things that are called what they are relative to one nature (*Met.* 1003b12–14; cf. *Met.* 1004a24–15).

One might study being in general, then, by studying the nature of being, and this study it will undertake by turning to its primary instance. The primary kind of being is substance (*ousia*) and the primary substance is the unmoved mover. Hence, the primary focus of being *qua* being might well be this, the most exemplary being.

More precisely, one might suggest, following Patzig,¹¹ that all beings in nonsubstance categories depend upon substance for their existence. As Aristotle himself contends, 'if there were no primary substance, nothing else could exist' (*Cat.* 2a34). So, the suggestion runs, any account of a being in a non-substance category, say quality or relation, will ultimately require some appeal to substance. Hence, the study of being ultimately leads back to substance (*ousia*). Further, even within the category of substance, there is a still more ultimate priority, in that all substances, along with all other beings, finally depend upon the unmoved mover, which Aristotle identifies as the final cause of all existence (*Met.* 1071b1–3). This, then, would give some content to Aristotle's brief suggestion that the prime mover is 'universal because it is first' (*Met.* 1026a30–31): it is the core instance of being, and because *all* being ultimately depends upon it, the prime mover attains a kind of universality in its primacy. So, the science of being *qua* being, in the end, studies the primary being, as most fundamental.

If we are prepared to grant that much, we can see both promise and problem associated with the apparatus of core-dependent homonymy as regards the Extension Problem. The promise is plain: core-dependent homonymy offers a framework within which claims about dependence can be rendered precise. More

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exactly, it offers a framework within which claims about dependence can be made precise without adverting to external considerations of an efficient causal sort. This is desirable because mere efficient causal dependence does not bring with it the sort of unity needed for *epistêmê*. A ship might depend upon a group of men, some ship builders, in the sense that they are its efficient cause, but Aristotle rightly shows no tendency to suggest that this suffices for there to be an *epistêmê* of man-and-ship. Rather, there is a branch of natural science which studies humans and a branch of productive science which studies shipbuilding.

This approach is promising in yet another way: if it successfully solves the Extension Problem, then it simultaneously solves the Possibility Problem. This is because it in effect proceeds by relaxing Aristotle's condition on domain specification. When Aristotle says that a single science may study 'not only things that are spoken of in virtue of one thing, but also things that are called what they are relative to one nature' (*Met.* 1003b12–14; cf. *Met.* 1004a22–25), he seems to be allowing that core-dependent homonymy, though insufficient for sameness of genus, is none the less sufficient for the sort of unity required for *epistêmê*. If that is so, and if being is itself a core-dependent homonym, then the *epistêmê* of being *qua* being is at once possible and has a subject matter.

On this approach, Aristotle can, so to speak, have it both ways about the extension of the *epistêmê* of being *qua* being. He can think of the domain of the *epistêmê* of being *qua* being as all of being, cutting off no part of it, even though its execution ultimately focuses on just one being, the primary being. So, although one is forced by Aristotle's procedure in the *Metaphysics* to ask whether the *epistêmê* of being *qua* being studies all beings insofar as they are beings, or merely one category of being, substance, or even finally, just one member of that category, the divine being, according to the current approach to the Extension Problem, this question presents a false dichotomy. The science of being *qua* being studies all beings *by* studying substance, and studies substance, finally, *by* studying the divine being.

How, precisely, though, is this study, with this focus, to be effected? In addressing this question we encounter our first serious problem with this initially promising approach to the Extension Problem. This emerges quite clearly when we attempt to explicate the precise sense in which all beings *depend* upon substance and so ultimately upon the prime mover. In Aristotle's preferred illustrations of core-dependent homonymy, the kind of dependence envisaged is reasonably easy to state. It is *account-dependence*.¹² That is, any account of a non-core-dependent instance of Φ must appeal ineliminably and in an asymmetric way to the account of Φ as it occurs in the core instance. To illustrate, using Aristotle's own preferred illustration (*Met.* 1003a34-b6):

- 1. Socrates is healthy.
- 2. Socrates' diet is healthy.
- 3. Socrates' complexion is healthy.

We are meant to grasp three points directly, which may be most readily appreciated when stated in a semantic idiom (though, in the end, they concern essence-specifying

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rather than lexical definitions). First, the predicate 'is healthy' means different things in these instances. In (1), it means, let us say, 'flourishing physically'. But this could not be what it means in (2) or (3). That would yield nonsense, such as 'Socrates' diet is flourishing physically.' This lack of intersubstitutability is, Aristotle contends (Top. I 15), a clear indication that their meanings diverge. So, we have non-univocity across these instances. Second, we are meant to appreciate that, even so, these applications are related, and related in an intimate sort of way. They are not what Aristotle calls 'chance homonyms' (EN 1096b26–7), the sort we encounter in English in the case of '... is a bank', as it is applied to sides of rivers and monetary institutions. Still, third, and most crucially, the predicates in (2) and (3) are crucially related to the predicate in (1): they depend for their explications on the predicate in (1), though the converse does not hold. To explicate the predicate '... is healthy' in (3), for instance, would be to say that Socrates' complexion 'indicates that he is *flourishing physically*' where the italicized bit is just the account of '... is healthy' in (1). By contrast, that account, which explicates the predicate as it occurs in (1), makes no reference to the accounts of the occurrences in (2) or (3). Thus, the non-core instances are account-dependent on the core instance in an asymmetrical way.

Strictly, then, we should expect the accounts of being in non-substance categories to depend in an asymmetrical way on the account of being as it is applied to substance. Here some precision is required. The suggestion is not the various nonsubstantial categories themselves—*being a quality* or *being a quantity* or *being a location*—do not admit of different accounts; for plainly they do. Being a quantity is not the same thing as being a quality, and neither is the same thing as being a substance. Yet that is not what is at issue. What is needed to make good on the initial promise of this approach to the Extension Problem is rather the more extreme and difficult claim that *the being* of quantities and qualities and locations and substances all differ. Moreover, again on the current approach, the problem is not just inter-categorial but also intra-categorial, because we must explain not only how the being of substances is prior to the being of non-substances but also how the being of one substance, the divine substance, is distinct from and prior to the being of other substances.

One can see the great difficulty in this suggestion by substituting *being* for *is healthy* in Aristotle's preferred illustration of the philosophical phenomenon he is seeking to capture:

- 1. Socrates is.
- 2. Socrates' being in the agora is.
- 3. Socrates' weighing 14 stone is.
- 4. The unmoved mover is.

If the predicate '... is healthy' is to be our guide, then we should expect a three stage process in establishing that being is a core-dependent homonym. First, each of these predicates should admit of an account. Second, the accounts should prove to be non-univocal, for otherwise, we would have univocity and not homonymy, core-dependent or otherwise. Third, having proceeded that far, the accounts of (2)

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and (3) would need to be shown to exhibit asymmetrical, core-dependence on the account of (1), which would then in its turn need to be shown to exhibit the same form of asymmetrical core-dependence on the account of the predicate as it occurs in (4). The current approach to the Extension Problem founders at every stage. No account of this predicate has been offered; no attempt at establishing non-univocity for this predicate has been undertaken; and no ordering of these proscriptively distinct accounts in terms of core-dependence has been effected. This is perhaps unsurprising, because we are not given much to work with when we have only the predicate '...is'.

To be clear, one does not succeed in this endeavour, as many commentators seem to have supposed,¹³ merely by showing (if indeed it can be shown) that items in non-substance categories depend for their existence on substances. For, let that be so. This would do nothing to show that the predicate '...is', as it applies to these members of these various categories of being is anything but univocal. Nor does it suffice to appeal in a vague way to *ways of being* in this connection. Thus, for example, in an effort to explicate and expand the governing insight of Patzig's approach to the Extension Problem, Frede contends:

[L]et us try to understand how it is that theology is not concerned only with a particular kind of beings, but with a particular way of being, peculiar to its objects, and how it addresses itself to this way of being. By distinguishing a kind of beings and a way of being I mean to make a distinction of the following sort. Horses are a kind of beings, and camels are a different kind of beings, but neither horses nor camels have a distinctive way of being, peculiar to them; they both have the way of natural substances, as opposed to, e.g., numbers which have the way of magnitudes, or qualities which have yet a different way of being. The way magnitudes can be said to be is different from the way separate substances can be said to be. The claim, then, is that the way separate substances can be said to be is peculiar to separate substances.¹⁴

How many ways of being are there? It is noteworthy in this passage that we are told that there are not only distinct inter-categorial ways of being-the way of being of quantities differs from the way of being of qualities and these differ again from the way of being of substances—but also distinct intra-categorial ways of being-the way of being of natural substances differs from the way of being of separated substances. So, there are, then, at least eleven ways of being, one for each of the non-substance categories and two for the category of substance, depending on whether the substances in question are natural or separated. That there are 'at least' eleven ways of being marks the concern that we have not been given any indication how ways of being are to be generated or limited. Do the ways of being of discrete and continuous quantities come to the same, or do they differ? The ways of being of colours and sounds? Of thoughts and perceptions? Aristotle marks many different sorts of intra-categorial divisions in his *Categories.* Should we suppose, then, that the intra-categorial divisions regarding ways of being extend beyond the category of substance, that they range across all categories for which Aristotle marks intra-categorial divisions? If limited to

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substance, is there some principled reason why this should be so? What of actual versus potential being, a distinction Aristotle marks as fundamental but also as fundamentally distinct from his theory of categories (*Met.* 1045b26–1046a2)? Are these again still further and discrete ways of being? Because we are not yet in a position to answer these questions, we cannot say with assurance how many ways of being there are meant to be, or even if they are to be limited or rather openended in number. So, we have no ready way even to begin evaluating the proposal under consideration.

Be that as it may, we are meant according to the current proposal to agree that there are several *ways of being*, and that these ways of being are to be distinguished from *kinds of beings*, and that it is the divergence in ways of being rather than in kinds of beings that grounds a solution to the Extension Problem. To make good on this suggestion, then, we would expect the proponents of this approach to the Extension Problem to: (i) provide accounts of (at least) these eleven ways of being; (ii) to show that they are non-univocal; and (iii) to exhibit the core-dependencies obtaining between them. Unfortunately, a vague gesture in the direction of putatively distinct ways of being does not suffice in this regard. Nor indeed does this gesture resonate with any explicit or implicit distinction made anywhere in the Aristotelian corpus. Although he certainly thinks that being is a core-dependent homonym, Aristotle never says that he thinks this is due to the fact that different kinds of beings—or different kinds of the same kind of being in the case of substance—exhibit different ways of being.

So, we should not be sanguine that there is a defensible approach to the Extension Problem to be developed along these lines. That said, and to be clear, in raising this problem we do not establish that this approach to the Extension Problem has nothing to commend it. On the contrary, except for the foray into (putative) ways of being, it seems initially promising, not least because the basic suggestion that being is a core-dependent homonym is plainly connected in Aristotle's text to his introduction of an *epistêmê* of being *qua* being (*Met.* 1003a33-b12). That allowed, so far at least, this approach to the Extension Problem fails to deliver on its initial promise. The best that can be said at this juncture is that this approach is unfinished. There is, unfortunately, it must also be said, reason to doubt that this circumstance will be rectified.

III. Approaching the Intension Problem

If this initially promising approach to the Extension Problem stalls, that may seem especially unwelcome. The problem, as Patzig rightly observed, has been to show how Aristotle can first trumpet the generality, the universality, of an *epistêmê* of

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being *qua* being only to focus narrowly on just one category of being and then on just one being within that category. So far, the apparatus of core-dependent homonymy has not been deployed to good effect in addressing this problem.

This result recommends that we step back from the problem as we have been considering it, and that we take Aristotle's own advice and set out our problems well in order to approach the issue afresh. One point of entry, less explored than the Possibility and Extension Problems, is the Intension Problem. That problem, as we have characterized it, takes as its focal point Aristotle's contention that the *epistêmê* in question studies being *qua* being and 'the attributes belonging to it *in its own right (kath' hauto)*' (*Met.* 1003a21–22). As we have seen, it is not entirely clear which features belong to being *per se*.

We can see that there is some difficulty about this matter if we pause to consider the various ways in which Aristotle's translators have rendered this phrase into English, and, more importantly, how they have glossed their translations. A non-exhaustive list already contains the following:

- Owens: 'There is a science which considers Being *qua* Being, and what belongs to it *per se*.'¹⁵
- 'This science treats universally of Being as Being⁵¹⁶...'The short opening of Book IV is quite succinct. It must have required considerable amplification for the 'hearers' during an ensuing discussion in the Lyceum.⁵¹⁷

Owens's translation is duly cautious, and his remarks fair-minded and understated; but they do not specify which features belong to being *per se*.

- Ross: 'There is a science which investigates being as being and the attributes which belong to this in virtue of its own nature.'
- 'This description of metaphysics distinguishes it from other sciences not by its method but by its subject.'¹⁸

Ross's translation is surprising. In what follows, however, I shall suggest that it is essentially correct—if not as a translation, then as an appropriate paraphrase of what Aristotle intends by the language of this passage. Note, however, that his gloss does not specify precisely what the subject matter of metaphysics might be and so does not address the Extension Problem. Note also that his translation raises, in an especially pressing manner, the Intension Problem: What is the nature of being as being? How, indeed, is it to be conceived as having a nature?

- Irwin: 'There is a science which studies being *qua* being and its intrinsic properties.'
- 'The science of being studies not primarily a distinct class of objects, but a distinct property of objects.'19

Like Ross, Irwin offers an expansive translation, and, again, like Ross, his translation captures something important but also raises a question: which property is the property studied by the science of being *qua* being?

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- Apostle: 'There is a science which investigates being *qua* being and what belongs essentially to it.'
- 'The contrast between 'accidentally' and 'qua' seems to be that between an accidental cause and an essential cause.'20

Apostle, like Ross and Irwin, offers a translation which represents a decision about how best to understand the science of being *qua* being. Apostle ties Aristotle's remark to his theory of causation in his gloss. Again, this seems a reasonable suggestion, but it points to a direction of explication distinct from what either Ross or Irwin suggests.

- Kirwan: 'There is a discipline which studies that which is *qua* thing-that-is and those things that hold good of this in its own right.'
- "In its own right' is opposed to 'coincidentally'."

Finally, Kirwan offers a translation which takes a definite stand on the question mooted earlier regarding how to understand the neuter participle *to on*: he treats it as a substantive. His gloss, like Apostle's, ties Aristotle's remark to his theory of predication, again reasonably, though also again pointing towards an avenue of explication distinct from Aristotle's other expositors.

We review these various translations not to suggest that some one of them is clearly superior to the others, or still less that one of them gets Aristotle uniquely right while the others miss the mark. On the contrary, as a purely linguistic matter, none is to be wholly faulted; each is, in its own way, a fair representation of Aristotle's Greek, which, just as Owens says, requires 'considerable amplification'. Rather, the sheer number of acceptable translations, together with their various glosses, only serves to underscore the difficult urgency of the Intension Problem. The *epistêmê* announced studies being *qua* being and 'the attributes belonging to it *in its own right (kath' hauto)' (Met.* 1003a21–22). What might these be?

The glosses canvassed variously seek to illuminate Aristotle's point by way of contrast. As they note, his *epistêmê* does not concern itself with the attributes belonging to being in some way other than *in its own right* (*kath' hauto*). Yet they do not agree about the same contrast implied by his locution. According to these various renderings, the implied contrast might be a causal contrast, or a predictive contrast of one sort or another, a contrast between essence and accident, a contrast between that which does and does not pertain to something's nature, or it might, more generically, contrast the co-incidental and the non-co-incidental.

One way to approach Aristotle's probable meaning is to begin with an examination of his terminology. This is especially important because *in its own right (kath' hauto*), or, to use Owens's neutral Latin rendering, *per se*, is plainly a technical term for Aristotle.

In fact, the term is used widely by Aristotle, but, significantly for the current context, it features crucially in his theory of demonstration and science in the *Prior* and *Posterior Analytics*. At *Posterior Analytics* 73a34-b5, Aristotle distinguishes four different notions of *per se* predication, the second two of which cast some light on his procedure in the middle books of the *Metaphysics*. He distinguishes the following:

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• Φ is predicated *kath' hauto* of x if (a) Φ is predicated of x; and (b) Φ must be mentioned in an (essence-specifying) account of x.

Thus, animal is predicated *kath' hauto* of Alcibiades, since any essence-specifying account of him will be at best incomplete for failing to mention this property.

 Φ is predicated *kath' hauto* of x if (a) Φ is predicated of x; and (b) x must be mentioned in an (essence-specifying) account of Φ.

Thus, oddness is predicated of a given number; but any account of what oddness is will perforce advert to *number* in its *definiens*. In saying that oddness is predicated of number *kath' hauto* we are highlighting, then, a metaphysically binding reciprocity between subject and predicate, though we are not thereby indicating something *essential* to the subject.

This last point merits a brief explication, because it bears on the concern already mooted about how one might conceive the essence of *being*, as opposed, for instance, to the essence of *human beings*. Aristotle's theory of essence must be distinguished from those contemporary theories of essence which are *merely modal*. Merely modal essentialism holds:

• Φ is an essential property of x *iff* if x loses Φ , then x ceases to exist.

Aristotle regards this as incorrect because insufficient: some properties are such that the entity which possesses them goes out of existence with their loss even though they are inessential. These are *idia* (*Cat.* 3a21, 4a10; *Top.* 102a18–30, 134a5–135b6), including such properties as *being grammatical* for human beings. Aristotle thinks of *idia* as follows:

An *idion* is a property that does not reveal the essence (*to ti ên einai*), though it belongs only to that subject and is convertibly predicated of it. It is an *idion* of humans, for example, to be capable of grammatical knowledge; for if someone is a human, he is capable of knowledge, and if someone is capable of grammatical knowledge, he is a human. For no one counts something as an *idion* if it can belong to something else. For example, no one counts being asleep as an *idion* of humans, not even if at some time it should happen to belong only to humans (*Top.* 102a18–28).

Here Aristotle distinguishes two types of universally held properties which do not count as essential: those which are invariably predicated of a kind at a time, even though they need not have been (all humans at present have the property of living in a world where some humans have been to the moon), and those which are predicated of necessity, even though they are inessential, like being grammatical. This second type constitutes the class of *idia*. Thus, the Aristotelian essentialist holds:

• Φ is an essential property of x *iff* (i) if x loses Φ , then x ceases to exist; and

(ii) Φ is in an objective sense an explanatorily basic feature of *x*.

A property Φ qualifies as explanatorily basic in an objective sense when it asymmetrically explains other features of its bearer, including even those whose loss entails the non-existence of that bearer.

With that notion of essence in hand, we can see that Aristotle means to distinguish two importantly distinct kinds of *per se* predication, the second of which has direct application to his science of being *qua* being. According to the second notion of *per se* predication adumbrated, a given whole number has the property *being even* predicated of it. As Aristotle says, *being even* is predicated of this number *per se*, but that is because in order to explicate what it is for something to be even, it will be necessary along the way to specify that it is a number. To be even is simply to be a number divisible by two without remainder. Similarly, if one predicates grammaticality of a rational being, then, in order to provide an account of grammaticality, it will be necessary to specify that grammaticality is the ability to master and manipulate syntax in a rationally constrained manner. Similarly, in line with this same form of *per se* prediction, if Φ belongs to any random being of necessity, such that in order to explicate what Φ is we must acknowledge that it pertains to all beings just because they are beings, then we have identified a feature holding universally of beings simply because they are beings—that is, a feature of beings *qua* beings.

Given his distinction between types of *per se* predication, Aristotle is in a position to characterize all beings insofar as they are beings, by focusing on just those features beings manifest *per se*; and he may do so without thereby being constrained to treat being *qua* being as having an essence to be uncovered and displayed in the way, for instance, a science of human beings would display the essence of humanity, rationality let us say. Of every being, one must say that it is a being, of course. More importantly, of every being, one must say what features it manifests just as a being, and in virtue of no other feature it has. A human being is *per se* rational, according to Aristotle, that is, insofar as it is a human being, but merely insofar as it is a being? In order to answer this question, we will need to point to those features a human being has in common with all other beings, no matter what sort of beings they are and merely insofar as they are beings. These are the features that belong *per se* to human beings in common with all other beings simply as beings. These are, accordingly, the attributes considered by the *epistêmê* of being *qua* being.

IV. THE PER SE FEATURES OF BEING

Aristotle's actual practice in the *Metaphysics* makes good sense if we are expecting him to assay the features of being *qua* being by focusing on just those features of beings manifested *per se* but not essentially—not essentially, that is, in the Aristotelian and not merely modal sense of essentialism. This is why we should resist Apostle's otherwise understandable periphrastic translation, that 'There is a science which investigates being *qua* being and what belongs essentially to

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it.' This gives a misleading impression if we are thinking strictly of Aristotelian and not merely modal essentialism. The features Aristotle in fact discusses in the *Metaphysics* hold of being not essentially in his sense, but hold rather *per se* in the sense just explicated. They are not essential in the sense of being the intrinsic, explanatorily basic features of some internally complex sort of entity like a human being. Nor are they the sorts of features which hold universally but in a contingent manner, of the sort Aristotle identifies in the *Topics*, when he rightly observes that some features may simply happen to hold of all instances of a kind without their needing to do so (*Top.* 102a18–28). The *per se* features of beings are more than universal, belonging necessarily but not essentially.

What might these features be? In executing his science of being *qua* being, Aristotle focuses on three sets of *per se* features above all others:

- Beings are as beings logically circumscribed.
- Beings are as beings *categorially delineated*.
- Beings are as beings modally enmeshed.

Let us review each of these features in turn.

One of the first orders of business for Aristotle's *epistêmê* of being *qua* being is initially somewhat perplexing: he sets out to offer an indirect defense of the principle of non-contradiction. He contends in both *Metaphysics* IV 1 and 2 that the science of being *qua* being appropriately concerns itself with substance, but he does not investigate substance immediately. This is because, as he contends, any science which considers substance will clearly need to address itself to general axioms such as the principle of non-contradiction (*Met.* 1005a19-b12). He then offers an elenchtic defense of this principle, that is, a defense which does not undertake to prove the principle of non-contradiction directly, but instead purports to show that anyone engaged in even the most rudimentary activity presupposed by science—signifying individual things—implicitly commits himself to that principle (*Met.* 1005b35-1007a20).

The precise character of Aristotle's elenchtic defense of the principle of noncontradiction does not concern us at present; still less does its ultimate defensibility.²² Rather, in the present context, we need only appreciate why this discussion should occur where it does in Aristotle's program of scientific inquiry into being. It is not that according to Aristotle such a defense must be mounted as an indispensible preliminary to rational inquiry, although he does believe that is so. It is, rather, that a defense of the principle of non-contradiction *constitutes* the first activity of the science of being *qua* being. It belongs to all beings insofar as they are beings, he contends, to be subject to the principle of non-contradiction. The attribute *being subject to the principle of non-contradiction* belongs *per se* to all beings insofar as they are beings, and not insofar as they are this or that kind of being. It holds of human substances, of quantities of matter, of locations, and indeed all entities belonging in any arbitrarily chosen category of being. All beings, as beings, are *per se logically circumscribed*.

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If the principle of non-contradiction applies to any arbitrarily selected being belonging to any category whatsoever, then this is not because it is arbitrary that every being in fact belongs to some category or other; on the contrary, according to Aristotle, every being belongs to precisely the category it does given the kind of being it is. It is not arbitrary, but rather necessary, then, that every being belong to some category or other; consequently, this feature too belongs to all beings just insofar as they are beings, that every being be *categorially delineated*. Aristotle makes this point clearly, and in connection with the final *per se* attribute he investigates with great industry in the middle books of his *Metaphysics*, namely that all beings, as beings, are either in actuality or in potentiality. They must be in this way *modally enmeshed*:

Since being (*to on*) is said in one way with reference to what something is, or some quality or quantity, and in another way with respect to potentiality and actuality (*entelecheia*) and with respect to function, let us make determinations about potentiality and actuality—first about potentiality most properly so called, even though this is not the most useful for what we want now (*Met.* 1045b32–1046a1).

This passage, which introduces the subject matter of *Metaphysics* IX, yokes together two fundamental *per se* attributes of being, that all beings, as beings, answer first to the theory of categories and then also to the paired features of potentiality (being in *dunamei*) and actuality (being in *entelecheia(i)*).²³ His point here, as well as in the case of the principle of non-contradiction, is that it falls to the metaphysician to investigate these modalities not as propaideutic to the *epistêmê* of being *qua* being, but rather as constituting the very activity of this science. This is because every being, because it is a being and not because it is a being belonging to this or that category or because within a given category it belongs to this or that species or genus, but simply because it is a being, is something actual or potential. *Being modally enmeshed* belongs *per se* to every being, just as a being.

We can now appreciate how Ross's translation, if unduly periphrastic, is basically apt as a rudimentary interpretation of Aristotle's intended meaning: 'There is a science which investigates being as being and the attributes which belong to this in virtue of its own nature.²⁴ The *epistêmê* which studies being *qua* being considers not the essence of being, in the Aristotelian sense of essence, because beings as beings have no internal logical complexity. Rather this *epistêmê* explicates the nature of beings as beings. What it uncovers is this: all beings, insofar as they are beings, are logically circumscribed, categorially delineated, and modally enmeshed. Explaining what each of these features is falls to the metaphysician, and this is why Aristotle engages in just this sort of explanatory activity in the middle books of his *Metaphysics*. In explicating each feature, it inescapably emerges that each of these features is itself a being—which is to say that each fits perfectly the paradigm of the second form of *per se* predication identified by Aristotle in the *Posterior Analytics*.

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This, then, provides our approach to the Problem of Intension. One ancillary benefit of this approach is that it helps pave the way to a solution to the Possibility and Extension Problems as well. To begin, it recommends a useful articulation of the Possibility Problem along the following lines:

- 1. Every science is individuated by a domain unified by a property which is essential, invariant, and explanatorily basic.
- 2. A property Φ is essential, invariant, and explanatorily basic only if Φ is predicated *kath' hauto* of the members of some domain.
- 3. A property Φ is predicated *kath' hauto* of some domain only if Φ is or is subordinate to a generic property.
- 4. Being (to on) is not a genus; so, being is not a generic property.
- 5. Being (*to on*) is subordinate to nothing; so, being is not subordinate to a generic property.
- 6. Hence, there is no science of beings with being (*to on*) as its unifying essential, invariant, and explanatorily basic property.

Hence, according to this line of thought, no science is a science of being. Nor is there a science of being *qua* being (*to on hê(i) on*): the same argument may be formulated, with the same result, by substituting being *qua* being (*to on hê(i) on*) for being (*to on*).

By assessing in some depth how Aristotle conceives *per se* predication, we see that he rejects both (1) and (3), and with good reason. A feature may well be predicated of some domain necessarily and invariantly without its being essential to the members of that domain.

V. A Science of Causes

If we are prepared to understand Aristotle's attitude towards the Problem of Intension along these lines, then we can understand a fair bit of his actual procedure when he turns to execute his science of being *qua* being in the *Metaphysics*. Even granting that, one important matter remains crucially unexplained, namely his investigation into substance. This is to say, then, that even if we are prepared to go along with the suggested approach to the Intension and Possibility problems, so far there is no direct application to the Extension Problem. If we allow that the *per se* features of being involve being *logically circumscribed, categorially delineated*, and *modally enmeshed*, this by itself gives us no reason to expect an intensive investigation into the nature of substance; yet this is precisely what Aristotle says his science requires (*Met.* 1028b2–7). This requires some explication and defence, since it does not seem to be the case that *being a substance* or $(\mathbf{\Phi})$

even *being suitably related to a substance* qualifies as a *per se* feature of being. What, then, does our approach to the Intension Problem recommend as regards the Extension Problem?

The most promising avenue of investigation begins once again in a reconsideration of our statement of the problem, one directly commended by our approach to the Intension Problem. Once suitably reframed in light of that approach, the Extension Problem finds a promising resolution in one traditional treatment. Accordingly, this treatment, which takes seriously Aristotle's contention that *epistêmê* investigates the causes (*aitia*) of its special domain of inquiry, merits renewed and reinvigorated support.

Recall, then, that in contrasting genuine scientific knowledge with sophistic, Aristotle stressed awareness of causes as crucial: 'We think we understand a thing without qualification, and not in the sophistic, accidental way, whenever we think we know the cause in virtue of which something is—that it is the cause of that very thing' (*APo* 71b9–12; cf. *APo* 71b33–72a5; *Top*. 141b3–14; *Phys*. 184a10–23; *Met*. 1029b3–13). Accordingly, we should have some knowledge of being *qua* being just when, according to Aristotle, we can specify the causes of being *qua* being. So, if we find him studying the cause of being *qua* being in an effort to execute this science, we should find this unsurprising, as conforming to this scientific method, rather than as a problem about the domain of being *qua* being.

Let us, then, look afresh at the Extension Problem, in light of what we have seen about the Intension Problem. As formulated, the Extension Problem was to be a problem, effectively, about special versus general metaphysics: if perfectly general, then the science of being qua being would need to investigate all of being, and not just some part of being, or some particular beings to the exclusion of other beings; if specific, then this same science would need to focus exclusively on just certain privileged beings rather than being in its totality. In that case, however, it would be hard to appreciate how Aristotle could possibly characterize it as he does in the opening of *Metaphysics* IV 1, where he insists that his *epistêmê* is perfectly general, that it refrains from cutting off some part of being as do all other, more narrowly focused sciences. Then, in Metaphysics VI 1, Aristotle seems to startle his readers, just as Patzig indicates, by calling the science of being *qua* being 'first philosophy', before-again according to Patzig-he 'defines it as the science of what is 'changeless and self-subsistent'.' This science, named 'theology' by Aristotle, can hardly be co-extensive with the science of being qua being: one studies just one being while the other studies *all* of being.

One can thus helpfully formulate the Problem of Extension as an inconsistent triad of propositions: (i) the *epistêmê* of being *qua* being takes as its extension all beings; (ii) first philosophy, or theology, has as its extension just one being; (iii) the *epistêmê* of being *qua* being and first philosophy, or theology, are the same science.²⁵ In effect, the approach to the Extension problem advocated by Patzig and again, somewhat differently by Owen,²⁶ denies (ii): they in their different ways suppose that since (iii) is correct, then if (i) is correct, (ii) must be denied. On the

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approach urged, since theology *is* the *epistêmê* of being *qua* being, and that *epistêmê* studies all beings, so too must theology. It is just that the study of all beings leads us, in the normal way of core-dependent homonyms, to the core of being, divine being. We have seen, however, that this promising approach runs afoul of the clear need to specify the non-univocity of being required of all cases of core-dependent homonymy.

Even so, the general strategy embraced by this approach may yet prove fruitful, though from an altogether different angle. Their suggestion that one should maintain both (i) and (iii) while jettisoning (ii) is right-minded. The first clue as to why this is so, however, tells against the particular implementation of this general strategy embraced by Patzig. This comes to the fore when we consider more minutely his contention that in *Metaphysics* VII 1 Aristotle introduces first philosophy, or theology, and then '*defines* it as the science of what is "changeless and self-subsistent"' (my emphasis). For Aristotle does no such thing. What Aristotle actually says is this:

If there is no substance other than those which are constituted by nature, physics would be the first science (*protê epistêmê*); but if there is some other, immovable substance, the science of this will be prior and will be first philosophy—and universal in this way, because it is first. And it would belong to it to study being *qua* being—both what it is (*ti esti*) and the attributes belonging to it *qua* being (*Met*. 1026a27–33).

Aristotle does not in this passage *define* first philosophy as the subject which studies the unmovable substance; for indeed he does not define first philosophy at all, either here or elsewhere. Moreover, there is no claim even implicit in this passage to the effect that first philosophy studies *only* the divine being. Rather, Aristotle says merely that if there exists anything beyond substances constituted by nature—if there is some immovable substance (*ousia akinêtos*; *Met.* 1026a29), then its study will belong to first science, but that it will also 'belong to it [viz. this same first science] to study being *qua* being' (*peri tou ontos hê(i) on tautês an eiê theôrêsai*; *Met.* 1026a31).

Aristotle's phrasing here is a matter of some consequence. When he contends that the first philosophy is to study what is changeless and separate (as I would prefer to render *chôriston*), Aristotle does not thereby imply that this science studies *only* that being, or even that it takes it as its individuating object—as opposed to contending merely that the immovable substance is simply one particular object in its domain. Indeed, so far, at least, there is no reason to suppose that Aristotle thinks that being *qua* being must study this object insofar as it is any particular sort of being. That is, Aristotle gives in this passage no reason to conclude that being *qua* being studies the separate and unmovable substance insofar as it is a substance, or insofar as it is separate, or insofar as it is anything whatsoever other than a being. As a being, of course, the divine substance is an object of first philosophy along with every other being, insofar as it is a being and in no other way. Consequently, there is no reason to conclude that first philosophy studies this being exclusively. Still less, then, is there reason to suppose that first philosophy is defined as the study which considers this one being to the exclusion of all others.

This is fortunate, since Aristotle is adamant in the *Metaphysics* that being *qua* being is general rather than specific. Its being especially concerned with the features of some class of beings is, however, perfectly consonant with this generality—so long as Aristotle does not suggest that it studies these beings to the exclusion of other beings. He may yet draw special attention to some sub-class of beings if they are somehow primary as causes or principles of all beings. His doing so would be, in fact, in accord with his normal scientific procedure. So much, in fact, seems to be a consequence he envisages and hopes to implement successfully. That being *qua* being conforms to this general pattern of scientific inquiry Aristotle makes plain already in the first book of the *Metaphysics*:

It is evident that this (*sophia*) is a science (*epistêmê*) of certain principles and causes (*archai* and *aitiai*). But since this is the science we are seeking, this is what we must consider: of what sorts of principles and causes is wisdom (*sophia*) a science (*epistêmê*)? (*Met.* 982a1–6)

Thus, being *qua* being, like other sciences, pursues an explanation of the items in its domain by investigating their principles and causes (cf. *Met.* 983a29, 990a2, 1013a17, 1025b4, 1042a5, 1069a26). We should thus expect this most general science to focus on those principles and causes which are the principles and causes of all beings. We should, in fact, expect this science, if it is first philosophy, the first and most primary of the theoretical sciences, to focus on the *first* principles and causes of being *qua* being.

The point I am advancing just now is hardly original with me, but was widely and thoroughly appreciated by many of Aristotle's earlier commentators. It bears renewing, however, since it seems to have receded into the background of more recent scholarship on Aristotle.²⁷ Versions of it were expressed by Albertus Magnus²⁸ and Duns Scotus,²⁹ and also in a characteristically clear and compelling manner by Thomas Aquinas:

Although this science studies the three things mentioned earlier [*scil.*, first causes, maximally universal principles, and separate substances], it does not study any of them as its subject, but only being in general. For the subject of a science is the thing whose causes and attributes are studied; and it is not the very causes of the genus which are themselves under investigation. For cognition of the cause of some genus is the end which investigation in a science attains.³⁰

This is just so: Aristotle does not maintain that the science of being *qua* being studies the divine substance as its sole or exclusive object. Instead, the sole and exclusive object of inquiry for the science of first philosophy is being *qua* being. Even so, first philosophy might yet investigate the divine substance as a principle (*archê*) or cause (*aition*) of all beings in so far as they are beings—if, that is, the divine being is such a principle or cause.

So far, then, we have a sort of unfinished resolution to the Problem of Extension: (ii) is false, since first philosophy, or theology, does not have as its

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extension just one being. So, there is no inconsistent triad and so no Problem of Extension. Significantly, this solution makes no appeal to the homonymy of being, and so finds itself unsaddled with the difficulties attendant to that approach. Just as significantly, however, this resolution remains unfinished. This is because so far it leaves two crucial questions unanswered. First, *how* is the divine being a principle or cause of all beings just insofar as they are beings? Second, *how* is substance in general a principle or cause of all beings in non-substantial categories?

It is in response to these crucial questions that our resolution of the comparatively abstract and nebulous Problem of Intension provides some especially useful direction. All beings, just insofar as they are beings, are categorially delineated and modally enmeshed. Every being is a being in some category or other (or, in the case of certain kinds of complex cases, is a being analysable into beings situated in some category or other); and every being is a being in actuality or in potentiality. Notably, when Aristotle turns to consider these latter *per se* attributes of being, that is, potentiality and actuality, he makes a connection to their being principles and causes:

We have shown elsewhere that potentiality and being potential are spoken of in many ways (*legetai pollochôs*). Of these, those that are called in potentiality homonymously should be set aside (for some are so called because of some similarity, as in geometry and we speak of what is possible and impossible because things are or are not in a certain way); but those that relate to the same form (*to auto eidos*) are all sources (*archai*) and are spoken of with reference to the primary one [viz. the primary source (*archê*)], which is the source (*archê*) of change in something other than itself or in itself *qua* other (*Met.* 1046a4–11).

The passage presents some difficulties,³¹ but in the present context one feature is both reasonably clear and clearly relevant: the *per se* feature of being modally enmeshed pertains to beings which move because motion itself requires an explanation given in terms of suitable principles, where the relevant sense of principle (*archê*) plainly includes the sense in which a principle is a cause (*aition*) (cf. *Met.* 983a29, 990a2, 1013a17, 1025b4, 1042a5, 1069a26). This is a point emphasized in Aristotle's definition of motion in the *Physics* as 'actuality of what is in potentiality *qua* such' (*Phys.* 201a10–11; *hê tou dunamei ontos entelecheia hê(i) toiouton*). So, when we think of beings which move, we must seek their principles in part in the *per se* attributes of beings in potentiality and actuality.

Not all beings move, of course. So, no account of beings *qua* beings should focus on motion as a feature of all beings. On the contrary, motion is, instead, just as Aristotle suggests, the delimiting feature of those beings studied by *Physics*. At the same time, as Aristotle goes on to make clear in his account of the *per se* feature of being modally enmeshed, *all* beings, those which move, and those which do not, manifest a dependence on what is purely actual: 'For in some cases we have change (*kinêsis*) related to potentiality (*dunamis*), and in other cases substance (*ousia*) related to matter (*Met.* 1048a25-b9). It is the latter sort of case, where substance (*ousia*) is related to matter which makes explicit the connection

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between the *per se* feature of being modally enmeshed and the theory of categories, and so to the *per se* feature of being categorially delineated, and so, finally, to the category of substance (*ousia*). For every substance (*ousia*) is, as Aristotle repeatedly emphasises, an actuality (*Met.* 1042b11, 1043a24–35, 1044a7, 1050b2). This is because 'among all the other categories, nothing is separate (*chôriston*), but rather substance *alone*' (*Met.* 1028a33–34). If substance alone is separate, or self-subsistent, then every being is either a substance or requires the being of substance to underpin its own being. In this sense, contends Aristotle, the being of substance is a principle (*archê*) and cause (*aition*) of the being of all other beings. Inescapably, then, a science studying being as being will, in looking to its sources and causes, focus on substance (*ousia*). Far from studying substance to the exclusion of other categories of beings, according to Aristotle, the *episetêmê* of being *qua* being studies substance (*ousia*) because it is engaged in the activity of studying all beings as beings. Substance is a principle and cause of all other beings.

Since something may be a principle (*archê*) or cause (*aition*) of something else without its being the core of a core-dependent homonym, Aristotle need not appeal to the (putative) core homonymy of being in order to solve the Extension Problem. It is solved, rather, by the connection he draws between two *per se* features of beings insofar as they are beings, being modally enmeshed and being categorially delineated. All categorially delineated beings depend upon one category, substance (*ousia*), as their principle (*archê*) and cause (*aition*). The subject matter of first philosophy is, just as Aristotle says in introducing his science, being *qua* being. Still, because all beings, as beings and in no other way, have as a principle (*archê*) and cause (*aition*) substance (*ousia*), it falls to this same science to investigate substance.

Consequently, we may revisit afresh Aristotle's alignment of the science of being *qua* being with an investigation into *ousia*: 'Indeed, what was sought of old and is sought at present and always, and what is always a matter of difficulty, namely *what is being*? (*ti to on*) is this: *what is substance*? (*tis hê ousia*)' (*Met.* 1028b2–4). He does not here *supplant* general ontology with special ontology, but announces that he intends to pursue general ontology by conducting special ontology. If our resolution of the Problem of Intension points us in the right direction, his direction of inquiry here is non-negotiable and so, ultimately, unavoidable for the metaphysician. In order to investigate being *qua* being, the metaphysician *must* investigate its principles and causes (its *archai* and *aitia*), and so must follow the road to substance (*ousia*) (*Met.* 1003b6–7). When he does so, the metaphysician does not abandon all of being as an object of study, but instead offers a suitably scientific explanation of being *qua* being by investigating its primary causes and principles.

This direction of study Aristotle articulates rather plainly already in the first book of his *Metaphysics*: 'It (*sophia*) must be a science (*epistêmê*) of first principles and causes (*prôtai archai* and *aitiai*)' (*Met.* 982b9–10; cf. *Met.* 1003a31–2).

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VI. CONCLUSION

The *Metaphysics* announces Aristotle's *epistêmê* of being *qua* being in a self-conscious sort of way. Perhaps this science is not quite 'triumphantly affirmed and re-affirmed in the Metaphysics,³² but there certainly is an air of deliberate decision about Aristotle's introduction of it, as if he thought first philosophy required a justification, perhaps because it lacks the clear purposes and agenda we identify so readily in the other theoretical sciences, mathematics and physics. Indeed, Aristotle even speaks frequently of being *qua* being as a science *which must be* sought out (Met. 982a1-6, 1028b2-4), as if the business of first philosophy were somehow obscured from the honest inquirer's view, whereas the puzzles of natural philosophy need no seeking but simply thrust themselves upon us. If his concern is that first philosophy, because so highly abstract, has an elusive subject matter as its quarry, then Aristotle's concern here is entirely well-placed: the science of being qua being does need some special pleading—especially from Aristotle, who at some points in his career indicates grave reservations about the prospects of any perfectly general science. Aristotle is, of course, hardly alone in voicing such concerns, which are commonplace even among the friends of metaphysics. As we are aware from our own current remove, worries about the provenance and point of metaphysics have plagued philosophers from Aristotle right down to the present day.33

From this perspective, Aristotle's self-consciousness is entirely apposite: what is it, precisely, that the first philosopher undertakes to do? Aristotle asks a question of his own in response: 'If not the philosopher, then who will ask whether Socrates and Socrates seated are one and the same' (Met. 1004b1-3)? The person asking such a question may at first seem charmingly *dégagé*; ³⁴ in fact, though, this is an earnest question whose point is grasped when we appreciate that its answer implicates us in determining what it is *in general*, and not only for Socrates, for a being to be one and the same thing, what it is, then, for a being, simply insofar as it is a being, to be something definite and determinate, for it to be one kind of thing rather than some other kind of thing, and for it to be something real and actual as opposed to something which merely might be. This is just to ask, in our terminology, then, what it is for a being to be logically circumscribed, categorially delineated, and modally enmeshed. These are the sorts of questions the first philosopher addresses, as we glean from Aristotle's practice in the *Metaphysics*, and this is why the science of being qua being is not only possible, but also universal in extension and focused in intension. This is why, in short, Aristotle regards himself as not merely at liberty but in fact compelled to assert that 'There is a science (epistêmê) which studies being qua being, and the attributes belonging to this in its own right (kath' hauto)' (Met. 1003a21-2).35

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- 1. The large modern literature on this topic reflects the lively diversity in Aristotelian philosophical scholarship. Some especially noteworthy contributions: Brentano (1962/1975), Jaeger (1923/1948), Owens (1978), Leszl (1975), Ross (1924), Aubenque (1962), and Mansion (1976).
- 2. This is a point clearly made by Guthrie (1981, 206–207) in passing, and developed to good effect by Code (1996). As Guthrie suggests: 'The existence of a science of being *qua* being, or ontology, so triumphantly affirmed and re-affirmed in the *Metaphysics*, appears at first sight to be contradicted by a passage from the *Eudemian Ethics* [scilicet 1217b33ff.]....It may be significant that he says only that there is no single science of being (*to on*) not of being qua being (*to on hê(i) on*).'
- 3. Scholars have motivated Aristotle's reservations about there being a genus of being differently. One especially rich suggestion finds a full and philosophically adroit development in Loux (1973). See Shields (1999, Ch. Nine) for a different, more critical account of Aristotle's motivations.
- 4. Quine (1948, 21).
- 5. One might have thought the answer given in the fact that *to on* is singular, so that Aristotle is thinking of being, in general, and not of beings, however many they may be. In fact, however, the linguistic data is not decisive, since *to on*, again like *being* might be a singular distributive term (like 'trout' in 'The trout is a wily fish.'), so that Aristotle is suggesting that the science of being *qua* being studies what it is for any random being to be a being, as opposed to some particular kind of being, perhaps a mathematical or a physical or a living being. Heading in the opposite direction, however, we find Aristotle willing to speak of beings *qua* beings (*onta* $h\hat{e}(i)$ *onta*; *Met*. 1003b15–16), where, obviously, the clear suggestion seems to be that he is treating the term substantively, and so as a sort of count-noun. So, even at the linguistic level we are left unsure which object or objects Aristotle takes the science of being *qua* being to study.
- 6. Patzig (1960).
- 7. This inference is reconstructed from *Sophistical Refutations* 5 (SE 5 24 179a26-b6; cf. *Met.* 1015b17, 1017b31; *Top.* 103a30; *Phys.* 190a19–21; *EE* 1240b25–260.
- 8. Lear (1982, 168) puts the matter clearly, though I would myself dispense with his epistemic emphasis: 'Thus to use the *qua*-operator is to place ourselves behind a veil of ignorance: we allow ourselves to know only that *b* is *F* and then determine on the basis of that knowledge alone what other properties must hold of it. If, for example, *b* is a bronze isosceles triangle—Br(b) & Is(b) & Tr(b)—then to consider *b* as a triangle—*b qua Tr*—is to apply a predicate filter: it filters out the predicates like Br and Is that happen to be true of *b*, but are irrelevant to our current concern.'
- 9. Patzig (1960). See also Wedin (2009, 139–141) and Shields (1999, Ch. Nine).
- 10. The phrase 'core-dependent' derives from Shields (1999), which prefers this locution to other similar terms, including Owen's (1960) 'focal meaning' and Irwin's (1998) 'focal connexion'. These are all representations of Aristotle's device of *pros hen* homonymy. On the relative merits of these terms, see Shields (1999) and Ward (2007).

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- 11. Patzig (1960). Patzig's view was developed and defended by Frede (1987).
- 12. On account dependence, see Shields (2009, Chs. One and Four).
- 13. For a critical discussion, see Shields (1999, Ch. Nine).
- 14. Frede (1987, 87).
- 15. Owens (1978, 259).
- 16. Owens (1978, 259).

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- 17. Owens (1978, 262).
- 18. Ross (1924 vol. i, 251).
- 19. Irwin (1988, 169).
- 20. Apostle (1966, 282).
- 21. Kirwan (1971, 76).
- 22. For an informative discussion, see Wedin (2009).
- 23. For an approach to this complex distinction as it features in Aristotle's discussion of substance, see Shields (2009).
- 24. Ross (1924 vol. i, 251).
- 25. Aristotle also refers to this science as wisdom (*sophia*), for example at *Met.* 982a16–19, 982b9, 996b9, 1059a18–34, 1060a10, though he also uses this same term, *sophia*, more widely to include all theoretical sciences, so that it refers not only to first philosophy but also physics and mathematics (*Met.* 981a27, 1005b1; *EN* 1141b1).
- 26. Owen (1960).
- 27. It has not disappeared altogether, however. Some scholars who adopt this general orientation include: Décarie (1961), Follon (1992), and Duarte (2007).
- 28. Albertus Magnus, Comm. in Met. lib. 4, cap. 3.
- 29. Duns Scotus, *Exposito in Duodecim Libros Metaphysicorum Aristotelis*, lib. 4 summa prima, cap. 1.
- 30. (Aquinas, Comm. in Meta, prol.)
- 31. See Shields (2009).
- 32. See note 2 above.

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- 33. The discipline as it has developed today finds ample space for volumes treating topics in *meta*-metaphysics, volumes dedicated, that is, to questions about the possibility and point of the set of inquiries descended from the science Aristotle called first philosophy. See, e.g., the engaging volume of papers edited by Chalmers *et al.* (2009).
- 34. See Shields (forthcoming) for an exploration of the force of this question. It may seem as if Aristotle is asking a rhetorical question ('Who will ask this question if not the philosopher?') with the obvious answer: 'Nobody.' In fact, his worry is that someone other than the philosopher stands perfectly ready to answer it, and to deleterious consequences, namely *the sophist*.
- 35. The topics of this chapter formed the basis of two overlapping graduate seminars at the University of Oxford. I am grateful to the students on both occasions for their beneficial participation. I especially thank one member of those seminars, Thomas Ainsworth, who additionally read a draft of this chapter and offered numerous incisive criticisms and corrections. An earlier draft was presented to the Society for Ancient Greek Philosophy in New York in 2009; the current version benefits from the instructive reactions of members of that audience. Finally, I presented the main claims contained in this chapter to the Oxford Ancient Philosophy Workshop in 2008, where probing questions and criticisms were advanced by Lesley Brown, David Charles, and Terence Irwin. I thank them all for their astute assistance.

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