

Aristotle's *Metaphysics Z* as First Philosophy

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Abstract: Discussions of Aristotle's *Metaphysics Z* tend to treat it either as an independent treatise on substance and essence or as preliminary to the main conclusions of the *Metaphysics*. I argue instead that *Z* is central to Aristotle's project of first philosophy in the *Metaphysics*: the first philosopher seeks the first causes of being qua being, especially substances, and in *Z*, Aristotle establishes that essences or forms are the first causes of being of perceptible substances. I also argue that the centrality of *Z* to first philosophy is compatible with its status as theology.

Key words: Aristotle; first philosophy; essence; theology

Aristotle's *Metaphysics Z* has suffered a curious fate. On the one hand, *Z* is subject to a sprawling literature that treats it as a virtually independent, and mature, treatise on substance.¹ On the other hand, those scholars who read *Z* in the context of the entire *Metaphysics* tend to think that *Z* is preliminary to Aristotle's main conclusions, often taken to concern immaterial substance.² But *prima facie*, neither view seems plausible. For *Z* features some of the most famous claims of the *Metaphysics*, for example that the definition of a substance states its essence (*Z*.5, 1031a11–14), that the essence of a (composite) substance is its form (*Z*.11, 1037a26–30), or that no universal is a substance (*Z*.13, 1038b8–9). But if *Z* presents such core Aristotelian tenets, one might expect *Z* to have more than preliminary import for the *Metaphysics* as a whole. Conversely, it would be surprising if we could understand *Z* without regard to the *Metaphysics* at large. In this paper, then, I will oppose the two prevailing trends and argue instead that *Z* is a central, positive contribution to the overall project of the *Metaphysics*.

¹ This practice is sometimes called 'zetology'. On zetological views, as I understand the term, *Z* is a largely self-contained enquiry, the main aim of which is to establish that form is primary substance. For book-length treatments with a zetological bend, see, e.g., Loux 1991; Wedin 2000 (also covering the *Categories*); Lewis 2013; Dahl 2019.

² For instance, Burnyeat (2001, 3) holds that the conclusion of *Z*, namely 'that substantial being is form', is preliminary to claims about substantial being in *Meta*. Θ and Λ. Similarly, Owens (1951/78), Patzig (1960), and Frede (1987; 2000) think that *Z* is a preliminary step towards establishing the immaterial first cause of being qua being in Λ. According to Gill (1989; 2006), *Z* fails to find primary substance, and composite substance turns out to be primary in Θ. Menn (manuscript) argues that *Z* gives a negative account of how one *cannot* reach the first cause of being qua being, which is reached only in Λ. The subordination of *Z* to Λ is motivated partly by Aristotle's description of first philosophy as 'theology' (*Meta*. E.1, 1026a19) which prompted already ancient commentators to consider the *Metaphysics* a theological treatise (Alexander, 1881, 18.9–11; 171.5–7; Syrianus 1902, 80.17; Asclepius 1888, 1.7–8). I discuss the status of first philosophy as theology in section 6.

This project is the project of ‘wisdom’ (see, e.g., *Meta.* A.2, 982a1–3) or ‘first philosophy’ (see, e.g., E.1, 1026a24), as Aristotle calls it, in contrast with natural science or ‘second philosophy’ (*Meta.* Z.11, 1037a14–16).³ The goal of first philosophy is to grasp the principles and first causes of ‘being qua being’ or of things insofar as they *are* (*Meta.* Γ.1, 1003a21–2). Moreover, to reach the first causes of being qua being, the first philosopher must grasp the principles and causes of substances (*Meta.* B.1, 995b6–8; B.2, 996b13–14; Γ.2, 1003b17–19). I will argue that Z is a central, positive contribution to first philosophy because it establishes what I call the first ‘ontological’ cause of being of perceptible substance: the cause that explains why a perceptible substance is what it is. For Z is designed to show that the *essence or form* of a perceptible substance is its first ontological cause of being.

It is key for my reading of Z to understand its governing question ‘What is substance?’ (τίς ἡ οὐσία) (Z.1, 1028b4; cf. Z.2, 1028b32; Z.17, 1041a6). Often, the question is given an identificatory reading: Aristotle wishes to identify primary substance. By contrast, I will defend a causal-explanatory reading: Aristotle seeks the ontological cause of being of substance. But it is not sufficient to observe that ‘What is substance?’ is a causal question, as others have done before (Ross 1924 II, 222; Witt 1989; Bolton 1995; Code 1997; Burnyeat 2001; Menn, manuscript). We should also appreciate the consequences of this observation. In particular, against the ‘Code-Burnyeat view’, I will argue that the search for the cause of substance does not serve the ulterior purpose of identifying primary substance. Establishing the first ontological cause of being of perceptible substance is itself the ultimate goal of Z.

Moreover, I will resist Menn’s (2001; 2011; manuscript) aporetic reading of Z, and all interpretations that cast Z as dependent on the account of immaterial substance in *Meta.* Λ (see, e.g., Owens 1951/78; Patzig 1960; Frede 1987). To this purpose, it will be important to distinguish between an *ontological* and an *existential* cause of being. While the former explains why something is *what it is*, the latter

³ Sometimes, ‘wisdom’ seems synonymous with ‘philosophy’. For instance, in Γ.3, Aristotle says that physics is wisdom ‘but not first [wisdom]’ (1005b1–2), just as he calls physics ‘second philosophy’ in Z.11 (see also Γ.2, 1004b17–26). But usually, wisdom is *first* philosophy (see, e.g., B.1, 995b12–13; B.2, 996b9; Λ.10, 1075b29).

explains why it *exists*. I will argue that Z itself completes the account of the first ontological cause of being of perceptible substance, without aid from Λ. Indeed, Z and Λ play independent, complementary roles: Z establishes the first ontological causes of being of perceptible substances, and Λ establishes their first existential cause of being, namely, the prime mover.

In the following, I begin my defence of the centrality of Z to first philosophy with the causal-explanatory reading of the question ‘What is substance?’ (sections 1–2). I argue next that Aristotle answers the question in Z.17 by establishing that the essence or form of a perceptible substance is its first ontological cause of being (section 3). Moreover, I offer a sketch of *Meta. ZH* that fits my reading of Z.17 (section 4). My interpretation suggests that Z is central to first philosophy. For first philosophy seeks the first causes of substance, and Z establishes the first ontological cause of being of perceptible substance. I then bolster the centrality thesis by confronting a cluster of objections. First, I explain how Z can be central to first philosophy despite its focus on perceptible substance (section 5). Second, I reconcile the centrality of Z to first philosophy with its status as theology (section 6). Finally, I close with some thoughts on the unity of first philosophy (section 7).

1. ‘What is Substance?’

Metaphysics Z opens with the famous claim that ‘being (τὸ ὄν) is said in many ways’ (Z.1, 1028a10). Aristotle refers us to *Meta. Δ.7* where he distinguishes four ways in which being is said (categorical being, accidental being, potential and actual being, and being as truth), as well as different ways in which *categorical* being is said: as substance (τί ἐστί), quality, quantity, and so forth for each category (1017a24–7).⁴ In Z.1, Aristotle revisits the latter distinction to argue that substance is first among

⁴ For a discussion of *Meta. Δ.7* which connects the chapter with the causal enquiry of the *Metaphysics*, see Menn 2021.

categorial entities (1028a10–31). Hence, the central question to be investigated in *Z* is ‘What is substance?’ (1028b2–7). Let us call this the *substance question*. Here and in the next section, I will defend a causal-explanatory reading of the substance question: ‘What is substance?’ seeks the first cause of being of substance, or more precisely, its first *ontological* cause of being: the cause that explains why a substance is what it is. The causal-explanatory reading will be the first step towards my defence of the centrality of *Z* to first philosophy.

In *Z.1*, the route to the substance question leads through the focal analysis of being. This analysis is spelled out in greatest detail in *Meta. Γ.2*. Aristotle argues that, while (categorial) being is said in many ways, it is said ‘towards one thing (πρὸς ἓν) and some one nature, and not homonymously’ (1003a33–4). As anything healthy is healthy because it is related to health, for instance, because it is productive of health (1003a34–b4), all categorial entities are said to be ‘things that are’ (ὄντα) because they are substances or are related to substance, for instance, as affections (πάθη) of substance (1003b6–10). Hence, they are not mere homonyms, that is, they do not merely share a name. Rather, they are related to a single ‘nature’ or ‘principle’ (ἀρχή, 1003b6) which explains why they are things that are – and this principle is substance. Thus, as I will put it, being has a ‘towards one’ or *pros hen* structure (see, e.g., Owen 1960; Shields 1998; Ward 2010 for a detailed treatment).

Similarly, in *Z.1*, Aristotle claims that ‘the others are said to be things that are by being quantities of what is in this way [i.e., substance], or qualities, or affections, or some other such thing’ (1028a18–20). Hence, ‘each of those [i.e., non-substantial entities], too, is because of this [i.e., substance], such that what is primarily (πρώτως), that is, not some being but being simply, would be substance’ (1028a29–31). More precisely, substance is first in three ways. It is first in account because ‘it is necessary that the account of the substance is present in the account of each thing’ (1028a35–6). Substance is first in knowledge (γνώσει) because ‘we think that we know each thing most of all then when we grasp what

the human being or fire is' (1028a36–7). Moreover, substance is first in time (1028a33), although this claim does not seem to be explicated further (see Sattler 2021 for a discussion).

The focal analysis of being allows Aristotle to conclude that 'what has been sought in the past and now and always and has always been puzzled about, namely, "What is being?", this is (τοῦτό ἐστι) "What is substance?"' (1028b2–4). This need not imply that 'What is being?' is *reduced* to 'What is substance?'. After all, not all entities are substances. More plausibly, for Aristotle, 'What is substance?' is the central question if one wishes to answer, 'What is being?', given the *pros hen* structure of being (Gill 1989, 13; Bostock 1994, 65). How, then, should we understand this central question? The answer depends on how one understands 'substance' in 'What is substance?'.

In *Meta. Δ.8*, Aristotle distinguishes two senses of 'substance'. In the first sense, familiar from the *Categories* (e.g., *Cat. 5*, 2a11–14), a substance is an ultimate subject (ὑποκείμενον) of predication, in an ontological sense of 'predication' in which features are predicated of things: everything is predicated, in this ontological sense, of substance, and substance is not predicated of anything else (1017b13–14; 23–4). In the second sense, a substance is the substance *of* a substance in the first sense: its 'cause of being' (1017b15) and essence (1017b21–3). For instance, an animal is a substance in the first sense, and its soul is the substance or essence of the animal (1017b10–16). For ease of exposition, I will call substance in the first sense 'substance₁' and substance in the second sense 'substance₂'.

The thought that a substance₂ is the 'cause of being' of a substance₁ is crucial. In the literature on ontological priority in Aristotle, scholars have disambiguated existential and essential senses of 'being': in the existential sense, for something to be is for it to exist, whereas in the essential sense, for something to be is for it to be what it is (Peramatzis 2011, 208–10; Katz 2017, 36–7).⁵ This helps us

⁵ For the full argument for this distinction, see the work by Peramatzis and Katz. But let me note one argument due to Katz (2017, 34) that I find especially convincing. In *Cat. 12*, Aristotle says that 'among the things that reciprocate according to the implication of being (κατὰ τὴν τοῦ εἶναι ἀκολουθήσιν), what is in any way the cause of being (αἴτιον τοῦ εἶναι) for the other might reasonably be called prior in nature' (14b11–13). Hence, two things can mutually imply that the other 'is', and yet, one of them is the cause of 'being' of the other, and hence prior to it in nature. This suggests that priority in being need not be priority in existence. For example, the soul is the cause of being of the living body (*DA II.4*, 415b12–14) but not prior

distinguish two sorts of cause of being. In *De caelo* I.12, for instance, Aristotle says that ‘matter is a cause of being and not being’ (283b3–4), that is, presumably, a cause of existence and non-existence (Meadows, forthcoming, 18). I call this an *existential cause of being*. But in *Meta.* Δ.8, a cause of being explains *what* an entity *is*. For substance₂ is the essence (1017b21–3) and form (1017b25–6) of substance₁, and an essence explains what something is. For example, the soul explains what the living body or animal is (*Meta.* Δ.8, 1017b14–16; cf. *DA* II.4, 415b12–14). I call this an *ontological cause of being*.⁶ According to Δ.8, then, substance₂ is the ontological cause of being of substance₁.

In *Meta.* Z.1, we find both senses of ‘substance’ from Δ.8. For instance, Aristotle has in mind substance₂ or essence when he says of ‘the what it is’ that it ‘signifies substance’ (σημαίνει τὴν οὐσίαν, 1028a14–15), or when he claims that substance is first in account (1028a35–6) and knowledge (1028a36–7; cf. 1028a15–18). But when he says about walking, being healthy, and sitting that ‘there is some definite subject (ὑποκείμενον) for them (and that is the substance and the particular)’ (1028a25–6), he seems to assume the first sense of ‘substance’. In principle, then, ‘What is substance?’ could be a question about substance₁ or substance₂ – or both.

Frede-Patzig (1988 I, 37) choose the last option. They think that, in Z, the two senses of ‘substance’ from Δ.8 are fused into a single sense, and whatever entity is substance in this fused sense is primary substance. Similarly, Owen (1978–9) argues that Z displays a ‘pincer-movement’: the entity that is both an ultimate subject of predication and a ‘what it is’ is primary substance (cf. Tugendhat 1958). By contrast, scholars like Code (1997), Wedin (2000, 157–66), and Burnyeat (2001) argue that, in Z, Aristotle seeks to identify the (ontological) cause of being of substance₁, and thus substance₂. Finally, Menn (2001, 94; manuscript, IIα2c) agrees that Aristotle aims to identify substance₂ but thinks, with Frede-Patzig, that this substance₂ is itself a substance₁ and hence a substance in both senses from Δ.8.

to it in existence: The soul and the living body mutually imply that the other ‘is’, in the sense that it *exists*, but the soul is the cause of being of the living body because it is the substance of the living body that explains *what it is*.

⁶ More precisely, given the disambiguation of senses of ‘to be’, one could speak of a ‘cause of existence’ and a ‘cause of being what it is’. I choose the expressions ‘existential’ and ‘ontological cause of being’ for the sake of convenience.

Despite their disagreements, all these interpreters assume that the substance question is *identificatory*: Aristotle seeks to identify primary substance (see also Gill 1989, 13–15; Loux 1991, 5; Bostock 1994, 65; Lewis 2013, 12; Dahl 2019, 63–4).⁷ This is also true of *causal versions* of the identificatory reading, such as the view advocated by Code and Burnyeat. For while they emphasize that Aristotle seeks the (ontological) cause of being of substance, they think that the purpose of finding this cause is to identify primary substance (see section 3). Similarly, Menn thinks that the ultimate goal of the causal enquiry is to identify primary substance, although he does not think that Z achieves this (see section 6).

However, there is an alternative *causal-explanatory* reading of the substance question, to be defended in this paper (cf. Witt 1989, 34–7; Bolton 1995). On the causal-explanatory reading, as on causal versions of the identificatory reading, Aristotle seeks the ontological cause of being of substance. But the search for this cause is *not* subordinated to the identification of primary substance. Rather, the discovery of the ontological cause of being of substance is itself the terminus of the search. Moreover, the substance question is taken to be explicitly about *substance*₁, not *substance*₂, although *substance*₂ is invoked in response to the substance question as the ontological cause of being of *substance*₁.

In support of the causal-explanatory reading, consider how the substance question is introduced:⁸

Indeed, what has been sought in the past and now and always and has always been puzzled about, namely, ‘What is being?’, this is ‘What is substance?’ (for this is what some say is one, and others more than one, and some finite in number, others infinite), which is why we, too, have to investigate most of all and primarily and, so to speak, only concerning what is in this way what it is.

καὶ δὴ καὶ τὸ πάλαι τε καὶ νῦν καὶ ἀεὶ ζητούμενον καὶ ἀεὶ ἀπορούμενον, τί τὸ ὄν, τοῦτό ἐστι τίς ἢ οὐσία (τοῦτο γὰρ οἱ μὲν ἔν εἶναι φασιν οἱ δὲ πλείω ἢ ἓν, καὶ οἱ μὲν πεπερασμένα οἱ δὲ ἄπειρα), διὸ καὶ ἡμῖν καὶ μάλιστα καὶ πρῶτον καὶ μόνον ὡς εἰπεῖν περὶ τοῦ οὕτως ὄντος θεωρητέον τί ἐστιν. (Z.1, 1028b2–7)

⁷ The identification could be extensional or intensional (defining substance). Some scholars take the substance question to be intensional, albeit with extensional consequences (see, e.g., Witt 1989, 7–9). Others think that, in Z.1, the substance question is neutral between the extensional and intensional readings (Frede-Patzig 1988 II, 24; Burnyeat 2001, 12–13).

⁸ All translations are mine. I generally follow the EJ text (for the manuscripts of the *Metaphysics*, see Primavesi 2012; Fazzo 2016; Golitsis 2016).

Aristotle says that we should investigate ‘concerning what is in this way [i.e., substance] what it is (τί ἐστίν)’ 1028b7; cf. Z.2, 1028b32). This suggests that ‘What is substance?’ (τίς ἡ οὐσία) is a ‘What is it?’ (τί ἐστίν) question about substance. Earlier, Aristotle asked a specific question of this form: ‘What is the human being?’ (1028a37). Here, he seems to raise a ‘What is it?’ question about substance as such. As we will see in Z.17, since the what it is (τί ἐστί) and why it is (διὰ τί ἐστί) are the same (*APo* B.2, 90a14–15), ‘What is it?’ questions seek the *cause* that explains why something is what it is, that is, its ontological cause of being. Thus, just as ‘What is the human being?’ seeks the ontological cause of being of the human being, ‘What is substance?’ seeks the ontological cause of being of substance.

Moreover, ‘substance’ in ‘What is substance?’ seems to refer to *substance*₁. For we saw in *Meta.* Δ.8 that a *substance*₁, such as an animal, *has* a cause of being (whereas its *substance*₂ *is* the cause of being). On a natural reading, then, Aristotle asks a ‘What is it?’ question about *substance*₁ that seeks its ontological cause of being.⁹ The context supports this verdict: Aristotle says about substance that some take ‘this’ to be one, others many, and among the latter, some finite in number, others infinite (1028b4–6). These options seem to concern *substance*₁, as set out in the ensuing *Meta.* Z.2: whether (only) ‘bodies’, and hence animals, plants and the physical elements are substances (1028b8–11), or whether their boundaries are (1028b16–18), and whether there are eternal entities (1028b18–19), and if so, how many and in what order of fundamentality (1028b18–27).

As I will argue in section 3, only the *answer* to the substance question brings in *substance*₂: essence or form is the first ontological cause of being of perceptible *substance*₁ which explains why it is the sort of substance it is. But this is not a roundabout way of admitting a causal version of the identificatory reading. For on the causal-explanatory reading, the claim that essence or form is the first ontological cause of being of perceptible *substance*₁ *is* the final answer. No ulterior claim, for instance that form is

⁹ If the *substance*₂ of a *substance*₁ is itself a *substance*₁ (see, e.g., Menn 2001, 94; 2011, 168), the substance question will concern the latter *substance*₁ as well. I will remain neutral on such cases. But I will argue that the focus of Z is on the first (ontological) causes of being of *substances*₁ that are not also *substances*₂, namely, perceptible composites.

primary substance, is needed to answer the substance question. I will now offer further support for the causal-explanatory reading based on Aristotle's account of a science of being qua being in *Meta.* Γ.1–2.

2. The Substance Question and the Science of Being qua Being

In *Meta.* Γ.1, Aristotle declares that 'there is some science that investigates what is insofar as it is (τὸ ὄν ἢ ὅν) and the things that belong to that by itself (καθ' αὐτό)' (1003a21–2). This science, which I will call *first philosophy*,¹⁰ 'inspects universally what is insofar as it is' (1003a23–4), and not just a part of being and its attributes in the manner of partial sciences such as mathematics (1003a24–6; cf. E.1, 1025b3–18). The expression 'τὸ ὄν ἢ ὅν' is often rendered as 'being qua being', and I will usually follow that convention. But more literally, as I just put it, the expression means 'what is insofar as it is'. What is at stake, then, is a study of some entity insofar as it is.

What is it to study an entity insofar as it is? To begin with, it is *not* to study it insofar as it is movable, as in physics, or insofar as it is an extended magnitude or indivisible, in the manner of the geometer and arithmetician respectively (*Phys.* II.2, 193b31–5; *Meta.* M.3, 1077b22–34). At Γ.3, 1005b6–7, Aristotle says that the philosopher studies every substance 'insofar as it is' (ἢ πέφυκε) which might suggest that first philosophy studies each entity insofar as it is *tout court*. But as Leszl (1975, 175) and Bolton (1995, 427) have argued convincingly, since there is no genus of being for Aristotle (see below), there is no blanket sense of 'being' that would allow for a study of an entity insofar as it is *tout court*. More plausibly, the first philosopher studies a substance insofar as it is a substance, a quality insofar as it is a quality of a substance, and so forth for each category (cf. Décarie 1972, 102).

¹⁰ For now, I use 'first philosophy' as a label for the science pursued in the *Metaphysics*. In section 6, I will argue that first philosophy is both the science of being qua being and theology.

As the first line of $\Gamma.1$ makes clear, one task of first philosophy is to establish the *per se* ($\kappa\alpha\theta'$ αὐτό) attributes of being qua being such as unity (see Shields 2012 for an extensive discussion). But the central goal of first philosophy is to ‘grasp the first causes of being qua being’ (1003a31–2). This causal characterization of first philosophy matches Aristotle’s remarks at the outset of the *Metaphysics* where he says that ‘wisdom is a science concerning some principles and causes’ (A.1, 982a2), namely, ‘the *first* causes and the principles’ (981b28–9; cf. A.2, 982b2). Moreover, as I am about to show, Aristotle will retain his causal focus in $\Gamma.2$ as well as in later programmatic remarks in *Meta. E*. None of this is surprising if we bear in mind that, for Aristotle, *any* science is a causal investigation (*APo* II.2, 71b9–16; *Phys.* I.1, 184a10–16; cf. Bolton 1995; Code 1997). Hence, if there is a science of being qua being, its primary task is to seek the first causes of being qua being.

By Aristotle’s lights, the more surprising claim is that there can be a science of being qua being. For a science concerns a single genus (1003a23–5; *APo* I.10, 76b11–16; I.7; I.28; *Meta.* E.1, 1025b7–9), and there is no genus of being, according to Aristotle (*APo* II.7, 92b13; *Meta.* B.2, 998b22). In $\Gamma.2$, he addresses this problem with the focal analysis of being. Although there is no genus of being, there can be a single science of being because of the *pros hen* structure of being: ‘For not only the investigation of things said in accordance with one ($\kappa\alpha\theta'$ ἓν) is the task of one science but also the investigation of things said towards one nature ($\pi\rho\delta\varsigma$ μίαν φύσιν); for in a way these, too, are said in accordance with one’ (1003b12–15). There is a sense in which a science is ‘in accordance with one’ which does not require that it study a single genus, namely, if the science is of something that has a *pros hen* structure.

As we saw, the ‘one nature’ or ‘principle’ (1003b6) towards which being is oriented is substance. Since ‘everywhere the science is chiefly of the first thing, that is, that on which the others depend and on account of which they are said’ (1003b16–17), Aristotle can conclude: ‘If that, then, is substance, the philosopher would have to grasp the principles and the causes of substances’ (1003b17–19). This claim does not come out of the blue. For several of the *aporiai* in *Meta. B* presuppose that first philosophy seeks the causes of substances, for instance, *aporia* 2 which assumes, on the initial

formulation, that ‘it is the task of the science to see (ἰδεῖν) the first causes of substance’ (B.1, 995b7–8). The achievement of Γ.1–2 is to show that, given the focal analysis of being, the search for the first causes of being qua being can be narrowed down to a search for the first causes of substance.

This sketch of Aristotle’s account of the science of being qua being in Γ.1–2 suggests a strategy for connecting that science with the study of substance, as we find it in Z. On one view, there is no such relation, or no such relation was intended by Aristotle.¹¹ But we have seen that, in Γ.2 and elsewhere, Aristotle argues that the central task of the science of being qua being is to seek the first causes of *substance*. Prima facie, then, we should expect that there is an (intended) relation between the study of substance in the central books and the science of being qua being.

This impression can be fortified. For in *Meta.* E.4, the chapter that precedes Z.1, Aristotle explicitly refers to the science of being qua being (cf. Code 1997, 368–9). At the end of E.4, Aristotle issues an exhortation: ‘Let us investigate (σκεπτέον) the causes and the principles of what is itself insofar as it is’ (1028a3–4). This exhortation picks up on the beginning of E.1 where Aristotle stated, in line with Γ.1, that ‘the principles and the causes are sought of things that are (τῶν ὄντων), and it is clear that [they are sought of things that are] insofar as they are (ἢ ὄντα)’ (1025b3–4), and on the end of E.1 where he said that ‘it would be the task of this science to investigate, concerning what is insofar as it is, both what it is and the things that belong [to it] insofar as it is’ (1026a31–2). The last claim is part of a controversial passage that involves the appellation of first philosophy as ‘theology’ (1026a19); we will return to it in section 6. For now, it suffices to note that *Meta.* E.4 seems to set up Z as part of an investigation into the principles and causes of being qua being (cf. Menn, manuscript, IIα).¹²

¹¹ For instance, Leszl (1975, 453) says that ‘we do not find any indication as to how the study of substance (*ousia*) is related to this study’, i.e., the science of being qua being. This view goes back to Jaeger (1955, 211; cf. 1912, 169–70) who divides the text into an ‘older introduction’ (A–E.1) and a ‘new main part’ (Z–Θ, I, M).

¹² According to some scholars, Z.1 cannot directly continue the discussion from E.4 since there is no connecting particle in the first sentence of Z.1 (Frede-Patzig 1988 II, 10; Burnyeat 2001, 11). But this is surely not conclusive evidence. For, in general terms, ZHΘ go on to do precisely what we should expect given E. Having discussed accidental being and being as truth in E.2–4, Aristotle moves on to the third and fourth senses of being from E.2, 1026a33–b2: categorial being in Z and potential and actual being in Θ.1–9 (and again being as truth in Θ.10).

Aristotle's reasoning in E.4–Z.1 closely resembles his reasoning in Γ.1–2. At the end of Γ.1, just as in E.4, Aristotle offered an exhortation that ‘we should grasp (ἡμῶν ... ληπτέον) the first causes of being qua being’ (1003a31–2). In Γ.2, Aristotle continues to narrow down the search for the causes of being qua being to a search for the causes of substance, via the focal analysis of being. In Z.1, as discussed, he proceeds analogously: he offers a focal analysis of being (1028a10–20), and then uses that analysis to narrow down the question ‘What is being?’ to the question ‘What is substance?’ (1028b4). I suggest that this parallel between Γ.1–2 and E.4–Z.1 supports the causal-explanatory reading of the substance question in Z.1.

For it is natural to suppose that the parallel between Γ.1–2 and E.4–Z.1 extends to the end point of Aristotle's reasoning. After all, he relies not only on the same starting point, that is, the search for the first causes of being qua being, but also on the same method to connect this search with the study of substance (namely, the focal analysis of being). Hence, one might expect the outcome of his reasoning to be the same as well: the central task of the science of being qua being is to seek the causes of substance. In Γ.2, this point is expressed explicitly. But I have already argued that a causal-explanatory reading of the substance question in Z.1 is available, according to which Aristotle seeks the (first) ontological cause of being of substance. Given this availability, and because the parallel with Γ.1–2 makes us expect a causal question precisely where we find the substance question in Z.1, we have good reason to accept the causal-explanatory reading.

Moreover, at the beginning of *Meta. H*, Aristotle says: ‘From what has been said, we have to draw conclusions and, summing up the chief point, to complete the picture. It has been said, then, that the causes, the principles, and the elements of substances are sought’ (H.1, 1042a3–6). H.1 summarizes material from Z. For instance, Aristotle recalls the discussion of the parts of definition and substance from Z.10–11 (1042a17–21) and sums up the conclusion of Z.13–16 that the universal and the genus is not a substance (1042a21–2). Plausibly, then, the claim that the causes and principles of substances are

sought also characterizes the preceding discussion in Z. This further increases the pressure to read the substance question in Z in continuity with the search for the causes of being qua being.

Overall, then, the context in which we find the substance question in Z.1 favours the causal-explanatory reading: no less than the claim that ‘the philosopher would have to grasp the principles and the causes of substances’ in Γ.2 (1003b18–19), ‘What is substance?’ is a call to seek the causes of substance. Let me emphasize again that this causal-explanatory reading differs from the causal versions of the identificatory reading mentioned earlier. According to the latter, Aristotle seeks the ontological cause of being of substance₁ *in order to* identify primary substance. By contrast, the causal-explanatory reading says that he seeks the ontological cause of being of substance₁, and this is itself the ultimate goal of the enquiry. The parallel with Γ.1–2 supports the causal-explanatory reading rather than causal versions of the identificatory reading. For the task of the philosopher, according to Γ.1–2, was not to identify (primary) substance but to grasp the first causes of substance.

3. Meta. Z.17 and First Philosophy

My aim here is to argue that, in Z.17, Aristotle answers the substance question by showing that the essence or form of a perceptible substance is its first ontological cause of being. This reading of Z.17 not only fortifies the causal-explanatory reading of the substance question but goes a long way towards establishing the centrality of Z to first philosophy. Since Z.17 is a rich chapter, I cannot address all the issues arising from it. Instead, I will focus on two questions: what is the explanandum in Z.17, and which conclusion does Z.17 drive at? I will argue that Aristotle seeks a cause that explains why some matter constitutes a substance of a certain sort. Moreover, the claim that this cause is the essence or form of the substance is his answer to the substance question and thus the conclusion of Z.17.

i) *An Outline of Z.17*

In Z.17, Aristotle returns to the substance question from Z.1 on the assumption that ‘substance is some principle and cause’ (1041a9–10). As several scholars have argued, Z.17 applies the causal model of explanation from the *Posterior Analytics* to substance (Charles 2000, 11.3; Wedin 2000, 10.3; Lewis 2013, 5.11; Ferejohn 2013, 6.3; Sirkel 2018, 103–10). In Angioni’s (2018) terms, this model is ‘triadic’: the middle term in a demonstration explains why a subject has some attribute. Similarly, according to Z.17, why-questions should be formulated in line with the triadic model: ‘The why (τὸ διὰ τί) is always sought in this way: why does one thing belong to another (διὰ τί ἄλλο ἄλλῳ τινὶ ὑπάρχει)?’ (1041a10–11). For ‘one seeks why something is predicated of something (τὶ ἄρα κατὰ τινοῦ ζητεῖ διὰ τί ὑπάρχει)’ (1041a23). For example, a correct formulation of the question ‘Why does it thunder?’ is ‘Why does noise come about in the clouds?’ (1041a24–5). For, ‘what is sought is always [said] in this way one of another (ἄλλο κατ’ ἄλλου)’ (1041a25–6). I will call this the ‘*allo kat’ allou* constraint’: when we ask why an attribute belongs to a subject, the attribute must differ from the subject.¹³ Moreover, in response to a why-question, one will cite the cause (αἴτιον) which explains why, for instance, noise belongs to the clouds (1041a25–6). Thus, an explanation involves three different entities: a subject, an attribute, and a cause which explains why the subject has that attribute.

It is a fraught issue how exactly the triadic model of explanation is applied to substance.¹⁴ But it seems quite clear that the application requires the hylomorphic analysis of substance. According to Aristotle, it is vain to ask, for instance, ‘Why is the human human?’ (1041a17–18) because in such

¹³ How should we understand the *allo kat’ allou* constraint? It would be too demanding to say without qualification that the attribute must not be the same in number as the subject. For a species and its proprium are the same in number (*Top.* I.7, 103a27–9), and one can demonstrate that a species has a proprium. It is better, then, to interpret the *allo kat’ allou* constraint in terms of *strict* sameness in number which implies sameness in essence or definition (see, e.g., *Top.* I.7, 103a25–7; *SE* 24, 179a37–9): the subject and attribute must not be strictly the same in number.

¹⁴ It has been doubted that there are *APo*-style demonstrative explanations of substances (Wedin 2000, 415; Lewis 2013, 287). For us, it suffices to note that Aristotle draws on *APo* to motivate the triadic model of explanation for substance.

cases the *allo kat' allou* constraint on why-questions has not been heeded ('to seek why something is itself is to seek nothing', 1041a14–15). Instead, he recommends the following:¹⁵

What is sought is hidden most of all in cases where things are not said of others, e.g., it is sought what a human being is because one speaks simply but does not distinguish that these or this [are a human]. But we must conduct our search having corrected [the expression]. Or else, there turns out to be no difference between seeking nothing and seeking something. And since one must grasp the existence [of an entity], and it must be there already, it is therefore clear that one seeks concerning the matter why it is, e.g., why are these things here a house? Because what it is to be a house belongs to these things here. And why is this one here, or this body in this state here, a human? Thus, the cause of the matter is sought; and this is the form by which it is something; and this is the substance.

λανθάνει δὲ μάλιστα τὸ ζητούμενον ἐν τοῖς μὴ κατ' ἄλλων λεγομένοις, οἷον ἄνθρωπος τί ἐστι ζητεῖται διὰ τὸ ἀπλῶς λέγεσθαι ἀλλὰ μὴ διορίζειν ὅτι τάδε ἢ τόδε. ἀλλὰ δεῖ διορθώσαντας ζητεῖν· εἰ δὲ μὴ, κοινὸν τοῦ μὴθὲν ζητεῖν καὶ τοῦ ζητεῖν τι γίγνεται. ἐπεὶ δὲ δεῖ ἔχειν τε καὶ ὑπάρχειν τὸ εἶναι, δῆλον δὲ ὅτι τὴν ὕλην ζητεῖ διὰ τί ἐστίν· οἷον οἰκία ταδὶ διὰ τί; ὅτι ταδὶ ὑπάρχει ὃ ἦν οἰκία εἶναι. καὶ ἄνθρωπος ὁδὶ, ἢ τὸ σῶμα τοῦτο τοδὶ ἔχον. ὥστε τὸ αἴτιον ζητεῖται τῆς ὕλης· τοῦτο δ' ἐστὶ τὸ εἶδος ᾧ τί ἐστίν· τοῦτο δ' ἡ οὐσία. (1041a32–b9)

First, Aristotle recalls the *allo kat' allou* constraint: what is sought is hidden most of all in cases where things are not said 'of others' (κατ' ἄλλων). In such cases, we should first correct (διορθώσαντας) our why-question in conformity with the *allo kat' allou* constraint. For instance, given the question 'What is a human?', one should distinguish the components involved in the question, namely that 'these things or this thing' (τάδε ἢ τόδε) are a human (1041b2).¹⁶

Similarly, as we saw earlier (1041a26–7), instead of asking why a house is a house, we should ask why bricks and stones are a house. Thus, the *allo kat' allou* constraint has been heeded. For we are asking why house belongs to bricks and stones. More generally, we should ask why *matter* is or constitutes an entity of some sort (1041b5). Aristotle applies this point to the human being: we should

¹⁵ For *Meta. Z.17*, I follow the text in Fazzo (2022), based on EJ.

¹⁶ Manuscript A^b has 'τάδε τόδε': why 'these things are this'. But the same sense is yielded by the EJ reading 'τάδε ἢ τόδε' if we supply the predicate: why 'these things or this thing' are something, e.g., a human being.

ask not ‘What is (a) human?’ or ‘Why is the human human?’ (1041a22) but why ‘this one here’ or ‘this body in this state here’ is human – where the body is the matter of the human being.¹⁷

Once why-questions about substance have been set up in this way, it becomes clear that (ὅσπερ, 1041b7) ‘the cause of matter is sought, and this is the form by which it is something; and this is the substance’ (1041b7–8). That is, the essence or form of the composite is the cause of matter constituting a substance of a certain sort.¹⁸ In keeping with the triadic model of explanation, then, three entities are required to set up the explanation of substance: matter, essence or form, and the sort of substance constituted by the matter.

In the second part of Z.17 (1041b11–33), Aristotle goes on to argue that ‘what is composed from something in such a way that the total is one, but not like a heap but like the syllable’ (1041b11–12) consists not only of (material) ‘elements’ (στοιχεῖα) but also of ‘something else’ (1041b17) which is not a further element but a ‘principle’ (1041b31) and ‘first cause of being’ (1041b28). For example, the syllable BA consists not only of the ‘letters’ or ‘elements’ (στοιχεῖα) B and A but also of an arrangement in virtue of which B and A compose the syllable BA rather than, say, the syllable AB (1041b12–17; cf. H.2, 1042b11–25).

Some scholars have argued that Aristotle’s main concern in this part of Z.17 is the *unity* of composites: the substance of a composite unifies its material elements and the composite (Witt 1989, 112–21; Wedin 2000, 430–1; Mann 2011). However, it seems to me that the question of unity comes to the fore only in *Meta. H* (see section 4). In its immediate context, the passage in Z.17 is better read as elaborating on the application of the triadic model of explanation to substance: material elements ‘are’ or compose a substance of a certain sort in virtue of the essence or form.

¹⁷ With Ross (in Barnes 1984), and contra Frede-Patzig 1988 I, 121, I take it that there are not two questions (‘Why is this one here a human?’ and ‘Why is this body something that is in this state?’) but one question, where ‘this body in this state’ explicates ‘this one here’ (ὅδι): ‘why is this one here, i.e., this body in this state, a human?’

¹⁸ Peramatzis (2011, 184–5) argues that Aristotle seeks to explain why matter is essentially the (type of) matter it is. But Aristotle’s examples in Z.17 suggest that what is at stake is why, e.g., bricks constitute a *house*, not why bricks are the type of *matter* that can constitute a house (Frede & Patzig 1988 II, 317–18; Sirkel 2018, 107–10).

Thus, the focus of Z.17 is not on the cause of unity but on the cause of *being*, or more precisely, the *ontological* cause of being which explains why something is what it is. This emerges clearly in the final paragraph of Z.17:

This, then, would seem to be something and an element, or rather, a cause of this here being flesh, and this here being a syllable, and similarly in the other cases. And this is the substance of each thing; for this is a first cause of being. Since some things are not substances, but those that are substances are constituted according to nature and by nature, this nature would appear to some to be substance, which is not an element but a principle (an element is that into which [a thing] is divided, and which is present in [it] as matter, e.g., the A and the B of the syllable).

δόξειε δ' ἂν εἶναι τὶ τοῦτο καὶ στοιχεῖον, καὶ αἰτιὸν γε τοῦ εἶναι τοδὶ μὲν σάρκα τοδὶ δὲ συλλαβὴν, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. οὐσία δὲ ἐκάστου μὲν τοῦτο· τοῦτο γὰρ αἰτιὸν πρῶτον τοῦ εἶναι· ἐπεὶ δ' ἓνια οὐκ οὐσίαι τῶν πραγμάτων, ἀλλ' ὅσαι οὐσίαι, κατὰ φύσιν καὶ φύσει συνεστήκασι, φανείη ἂν τισὶ αὐτῆ ἢ φύσις οὐσία, ἢ ἐστὶν οὐ στοιχεῖον ἀλλ' ἀρχή· στοιχεῖον δ' ἐστὶν εἰς ὃ διαιρεῖται ἐνυπάρχον ὡς ὕλην, οἷον τῆς συλλαβῆς τὸ α καὶ τὸ β. (1041b25–33)

Aristotle's first 'this' at 1041b25 refers to the 'something else' from earlier (1041b17, 19). It is not another element but a 'first cause of being' (αἰτιὸν πρῶτον τοῦ εἶναι) (1041b28), which is identified with the substance or essence of each thing, that is, in the case of a natural thing, its nature.¹⁹ The essence is the cause of some matter 'being' or constituting a substance of a certain sort. Thus, the cause of being at stake is an ontological cause: a cause that explains why something is what it is.

This reading of Z.17 has the further advantage that it makes sense of Aristotle's earlier claim that, 'in the case of being' (ἐπὶ τοῦ εἶναι), only the final cause is sought, while the efficient cause is reserved for the case of coming to be and perishing (1041a31–2). As Frede-Patzig (1988 II, 313) point out, it seems implausible that, for Aristotle, we cannot enquire into the efficient cause of an existing thing.²⁰ But if a cause of being in Z.17 is specifically an *ontological* cause of being, his claim is less surprising. We can

¹⁹ If we follow the EJ text, there is no 'οὐ' at 1041b25. That is, Aristotle does not say that 'this something' is not an element but rather that it *is* an element. Prima facie, this reading is difficult, since he clearly thinks that the entity in question is not an element (1041b31). But if 'καὶ αἰτιὸν γε τοῦ εἶναι' (1041b26) is a corrective explication, the text makes sense: Aristotle says that 'this something' is an element, *or rather* a cause of being (cf. Fazzo's (2022, 70) 'o comunque').

²⁰ Their solution is to take 'θάτερον' at 1041a32 to refer to essence at 1041a28, but more plausibly, it refers to the final cause just contrasted with the efficient cause (1041a31–2).

enquire into the efficient cause of an entity as the cause of its coming to be and perishing, and thus as its existential cause of being. But to explain why something is *what* it is, we should cite its formal or final cause. Hence, the efficient cause is not a cause of being in the sense relevant for Z.17 because it is not an ontological cause.²¹ We will encounter a case in point soon: the prime mover is the first cause of motion of perceptible substances, and thus their first existential cause of being. But the prime mover is not their ontological cause of being, and hence not a cause of being in the sense required by Z.17.

ii) The Conclusion of Z.17

With this sketch of Z.17, we can return to our two questions from earlier: what is the explanandum of Aristotle's causal claims, and which overall conclusion does he pursue in Z.17? As for the first question, I have assumed that the explanandum is why some matter constitutes a substance *of a certain sort*, for instance, why bricks constitute a house (see also Code 1997, 370–1; Burnyeat 2001, 59–61; Koslicki 2014). But one might hold instead that the explanandum is why some matter constitutes a substance *tout court* – rather than a sort of substance (Bolton 1995, 455–6). For instance, the explanandum is not why bricks constitute a house but why they constitute a substance at all. Which interpretation is preferable?

The textual evidence favours the former reading. For throughout Z.17, Aristotle raises *specific* questions like ‘Why are these things here a house?’ (1041b5–6). And when he draws conclusions about the cause of being in Z.17, he speaks of ‘the cause (αἴτιον) of this here being flesh, and this here being a syllable’ (1041b26–7). Similarly, in H.2, he says that ‘substance is the cause of being *each thing* (τοῦ εἶναι ἕκαστον)’ (1043a2–3). By contrast, the only passages that might support the alternative reading

²¹ *Pace* Ross 1924 II, 223, Aristotle need not reduce the formal cause to the final and efficient causes at 1041a28–9 but merely claim that *in certain cases*, the essence or formal cause is the efficient or final cause. For instance, the essence of a house is its final cause; it is defined as a shelter for goods (*Meta.* H.2, 1043a16–18; H.3, 1043a33). See Rosen 2014 for criticisms of Ross. In the case of (living) natural things, in which Aristotle is interested at the end of Z.17, their nature or soul is the formal, efficient, and final cause (*DA* II.4, 415b8–28).

are claims such as that ‘the cause of matter is sought ... by which it is something ($\tau\iota$)’ (1041b7–8; cf. 1041b2; 1041b5). For one could argue that to ask why matter is ‘something’ ($\tau\iota$) is to ask why it is a substance (Bolton 1995, 455). But this counterevidence is weak. For ‘something’ ($\tau\iota$) could also refer to some sort of substance. Indeed, in the vicinity, Aristotle cites specific questions such as why the body is a human being (1041b7). It seems more natural, then, to read these claims as schematic versions of Aristotle’s examples: we can ask, in any given case, why some matter constitutes some sort of substance, for instance, why bricks constitute a house.

Despite the textual evidence, one might object to this reading for systematic reasons. For to explain why something is human, or a house, seems to belong to natural science, not first philosophy (Bolton 1995, 454–5). But the evidence we just surveyed makes it hard to deny that Aristotle himself is interested in explaining why some matter constitutes a substance of a certain sort. To my mind, then, the serious worry is not whether my reading corresponds to Aristotle’s intentions in Z.17, but rather whether, given this reading, Z.17 can be part of first philosophy. I will respond to this objection in sections 5–6. For now, given the textual evidence, I will continue to assume that the explanandum in Z.17 is why some matter constitutes a substance of a certain sort.

Let us turn to our second question: what is the conclusion of Z.17? On a prominent view defended by Code (1997) and Burnyeat (2001), Z.17 sets a constraint on primary substance, namely that it be a principle or cause. More precisely, substance ought to be an ontological cause of being which explains why something is what it is. Since only form (but not matter or the matter-form composite) meets this constraint, Aristotle can infer that form is primary substance – and the latter claim is the conclusion of Z.17 (Code 1997, 359; Burnyeat 2001, 57; see also Ross 1924 II, 224; Morrison 1996; Lewis 2013, 291; Fazzo 2022, 80). As I mentioned, the Code-Burnyeat view is an instance of the causal version of

the identificatory reading of the substance question: the purpose of the search for substance as cause is to identify primary substance (where form turns out to be primary substance).²²

Crucially, the Code-Burnyeat view presupposes that the causal constraint on primary substance is formulated in non-hylomorphic terms, namely, ‘general-essentialist’ (Code 1997, 360) or ‘logical’ terms (Burnyeat 2001, 6). But our reading of Z.17 casts doubt on this assumption and hence on the Code-Burnyeat view. For we have seen that, on the triadic model of explanation, the supposed causal constraint on primary substance cannot be spelled out without recourse to hylomorphism. After all, in isolation from hylomorphism, one cannot formulate what it is for substance to be a cause of being. This is because, given the triadic model, the claim that substance is a cause of being says that substance is the principle or cause of *matter* constituting a substance of a certain sort. Hence, Z.17 cannot offer a non-hylomorphic causal constraint on primary substance.

Similarly, the view that matter, form, and the composite are tested against a causal constraint on primary substance, where form emerges triumphant, is hardly plausible. For it is part and parcel of the supposed constraint that the cause, and hence the substance, in question is form. Indeed, Aristotle says as much at 1041b8, and even if one follows Christ in excising this reference to form, it is implied by the contrast of substance with matter (1041a28). Thus, contra Code and Burnyeat, the identification of form as substance seems to be assumed, not argued for in Z.17 (cf. Menn 2011, 171).

What else, then, could the conclusion of Z.17 be? Menn (2001, 131) has argued that Z.17 is intended to show that ‘the οὐσία [i.e., substance] of a thing is a kind of cause and (broadly) ἀρχή [i.e., principle] which is not a στοιχεῖον [i.e., element] nor out-of-στοιχεῖα’. But this description seems too general. For Aristotle does not just show that the substance of an entity is a principle and cause. Rather, he shows that the substance or essence of a composite is its *first ontological cause of being*, namely, the cause of some matter ‘being’ (or constituting) a substance of a certain sort.

²² Morrison (1996, 199) expresses this view especially clearly: ‘I have claimed that Aristotle’s answer in Z 17 to the question, “What is substance?” is, “Substance is form.”’

I suggest, then, that the conclusion of Z.17 is what the Code-Burnyeat view casts as a constraint on primary substance. That is, the conclusion is that substance or essence is the first ontological cause of being of the perceptible composite. This is not a constraint on primary substance which yields an ulterior conclusion but *itself* the central conclusion of Z.17. The identification of essence and form, in turn, is assumed along the way to this conclusion. Hence, the full conclusion of Z.17 is that the essence *or form* of a perceptible substance is its first ontological cause of being, or more precisely: essence or form is the first cause of some matter constituting a composite substance of a certain sort. Thus, Z.17 does not just reiterate the general claim that essence or form is an ontological cause of being (as stated in, e.g., *Meta.* Δ.8, 1017b15) but provides a specific account of *how* essence or form is an ontological cause of being, in line with the triadic model of explanation.

My proposal has two major consequences. First, it reinforces the causal-explanatory reading of the substance question against the identificatory reading. For the response to the substance question (as restated at Z.17, 1041a6) consists in a claim about the first ontological cause of being of perceptible substance, not in the identification of primary substance. Second, my interpretation of the substance question and Z.17 suggests that Z is a central, positive contribution to first philosophy. For the first philosopher seeks the causes of substance, and Z establishes the first ontological cause of perceptible substance. In the remainder of this paper, I will fortify the second claim. First, I will sketch a reading of *Metaphysics* ZH that fits my interpretation of Z.17. Later, I will defend the centrality of Z to first philosophy despite its focus on perceptible substance and the status of first philosophy as theology.

4. The Contours of *Metaphysics* ZH

Metaphysics ZH is often treated as a unit, although the exact relationship between the two books is contested (see, e.g., Bostock 1994, 287–90; Devereux 2003; Morel 2015, 41–7). On my view, Aristotle

offers an answer to the substance question in Z.17: the essence or form of a composite substance is its first ontological cause of being. But if he gives this response already in Z.17, one might wonder what the point of the ensuing *Meta. H* is. From a different viewpoint, one may be concerned about the role of Z.3–16. For if Aristotle formulates the substance question in Z.1–2 and answers it in Z.17, what is achieved in the intervening chapters? I will first respond to the latter query and then say more about H.

Several interpretations of Z are compatible with my reading of Z.17. For example, one could argue that Z.3–16 is aporetic, and the positive response to the substance question begins only in Z.17 (Gill 2006). Or one could argue that *Meta. Z* is non-linear and divides into independent sections, each of which arrives at the same conclusion as Z.17 (Burnyeat 2001, 4–6). But my preferred interpretation is linear and non-aporetic: in Z.3–16, Aristotle builds up towards the conclusion of Z.17. In the following, I will give a sketch of such an interpretation of Z. My goal is not to defend the sketch itself, but rather to show that there is an avenue for integrating my reading of Z.17 with an interpretation of Z.

In Z.3, Aristotle lists four entities that are said to be substance: essence, universal, genus, and subject (1028b33–6). Most of Z.3 is concerned with substance as an ultimate subject of predication (what I called ‘substance₁’ above). But towards the end of Z.3, Aristotle says that ‘separation (τὸ χωριστόν) and the this something (τὸ τόδε τι) seem to belong to substance most of all’ (1029a27–8). Here, he invokes another sense of ‘substance’ from *Meta. Δ.8*, in which a substance is ‘that which, being a this something, is also separate; the form and the shape of each thing is such’ (1017b24–6). As the example of the form suggests, this sense of ‘substance’ subsumes the sense in which an essence is the substance of something (1017b21–6), that is, in my earlier terms, substance₂.

The claim that separation and the ‘this something’ belong to substance is controversial. In a later passage in *Meta. H.1*, it seems that a substance can be ‘separate’ either ‘in account’ or ‘simply’ (1042a28–31),²³ where the latter is often construed as existential separation (see, e.g., Gill 1989, 36;

²³ I follow Morrison (1985) in translating χωριστός as ‘separate’, but I will leave open whether ‘separation’ could ultimately be understood in terms of a capacity to be separate, as Fine (1984) has argued.

Wedin 2000, 173). Thus, both the matter-form composite and the form are separate – the former in existence and the latter in definition.²⁴ Moreover, both the composite and the form are a ‘this something’ (Z.3, 1029a27–30). Some scholars take this to imply that they are both *individuals* (see, e.g., Frede-Patzig 1988 II, 52), while others have argued that a ‘this something’ can be *determinate* without being an individual (see, e.g., Gill 1989, 31–4). We do not have to enter this debate (for more, see Corkum 2019). But minimally, if being an individual is one way of being determinate, Aristotle claims that composites and forms are determinate entities, unlike matter which is ‘indeterminate’ (ἄοριστον) (see, e.g., Z.11, 1037a27), and only potentially a ‘this something’ (H.1, 1042a27–8).

Part of the point of Z.3 is to stress that substance as an ultimate subject of predication cannot be the *only* relevant sense for thinking about substance. For if it were, it would turn out that (only) matter is substance – but the composite and the form are also substances (1029a16–30). One could argue further that Aristotle refines the sense in which a subject of predication is substance by building in separation and ‘this something’ conditions (Gill 1989, 30), or even that he sets aside this sense of ‘substance’ in Z. But for us, it suffices to note that Aristotle motivates the introduction of the sense of ‘substance’ in which it is a ‘this something’ and separate. Since, as I mentioned, this sense of ‘substance’ subsumes the sense in which essence is a substance, namely, the substance₂ of something else, that move by itself is important. For it prepares the ensuing discussion of essence in the crucial section Z.4–11.

It is often thought that the conclusion of Z.4–11 is that form is primary substance. For Aristotle explicitly claims at the end of Z.11 that ‘substance is the immanent form’ (1037a29). I do not wish to dispute here that this may be *a* conclusion of Z.4–11. Indeed, if Aristotle argues there that form is (primary) substance, this may explain why, as I have argued against the Code-Burnyeat view, that

²⁴ Katz (2017, 48–9) argues that H.1 allows that the form, too, is ‘simply’ separate and also that ‘simple’ separation should not be understood in merely existential terms. Regardless of one’s verdict on this issue, there is at least some sense in which both the composite and the form are separate, according to ZH.

identificatory claim is assumed, not argued for, in Z.17. But Aristotle also draws another, equally interesting conclusion concerning the explanatory priority of essence over the composite substance.

In context, the claim that substance is immanent form reads as follows:

[It has been said] also that the parts in this way, i.e., as matter, will not be in the account of the substance – for they are not parts of that substance but of the whole substance, and of this [i.e., the whole substance], there is an account in some sense, and there is not. For there is no [account] with the matter (for it is indefinite), but in accordance with primary substance there is, e.g., of human being the account of the soul; for the substance is the immanent form from which and the matter the whole substance is said to be, e.g., concavity.

(...) καὶ ὅτι ἐν μὲν τῷ τῆς οὐσίας λόγῳ τὰ οὕτω μέρη ὡς ὕλη οὐκ ἐνέσται—οὐδὲ γὰρ ἔστιν ἐκείνης μέρη τῆς οὐσίας ἀλλὰ τῆς συνόλου, ταύτης δὲ γ' ἔστι πως λόγος καὶ οὐκ ἔστιν· μετὰ μὲν γὰρ τῆς ὕλης οὐκ ἔστιν (ἀόριστον γάρ) κατὰ τὴν πρώτην δ' οὐσίαν ἔστιν, οἷον ἀνθρώπου ὁ τῆς ψυχῆς λόγος· ἢ γὰρ οὐσία ἐστὶ τὸ εἶδος τὸ ἐνόν, ἐξ οὗ καὶ τῆς ὕλης ἢ σύνολος λέγεται οὐσία, οἷον ἢ κοιλότης (...) (Z.11, 1037a24–30)

The focus of Aristotle's attention here seems to be on a definitional claim, namely that the composite should be defined with reference to its substance or essence. The identification of substance with form, in turn, appears to serve the clarification of that definitional claim: the substance in accordance with which the composite is to be defined is its form.

If this is right, the main achievement of Z.11 is to push the conclusion from Z.4–5 that 'definition is an account of the essence' (Z.5, 1031a12) a step further. In Z.4–5, Aristotle proceeded 'λογικῶς' (Z.4, 1030a25), and hence without reference to matter or form. In Z.11, Aristotle reframes the conclusion of Z.4–5 in hylomorphic terms: since the essence of a matter-form composite is its form, the composite should be defined with reference to its form. This claim implies the explanatory priority of essence or form over the composite and constitutes an important step towards the conclusion in Z.17: once the

explanatory priority of essence or form over the composite has been secured, Aristotle can argue further that the essence or form of the composite is its first ontological cause of being.²⁵

The chapters that follow, Z.13–16, also fit the proposed interpretation of Z.17. In these chapters, Aristotle argues that ‘none of the things said universally is a substance, nor does any substance consist of substances’ (Z.16, 1041a3–5). The motivation for the discussion of universals is stated in causal terms: ‘For some think both that the universal is a cause most of all, and that the universal is a principle’ (Z.13, 1038b6–8). Hence, it seems that the goal of the argument that universals are not substances is to rule out the view that universals are the principles and causes sought by the first philosopher. Since the universal is not the substance of each thing (1038b8–12), it does not have the sort of explanatory priority that essence has over the composite substance. Thus, in Z.13–16, Aristotle clears the way for his own positive proposal in Z.17 that the essence of a composite substance is its first ontological cause of being.²⁶

Much more could be said about Z. But I hope to have indicated a way of integrating my reading of the substance question, and of Aristotle’s answer to it, with the rest of Z. All of Z builds up towards the response in Z.17 to the causal-explanatory substance question from Z.1, most crucially by securing the explanatory priority of essence or form over the composite. But another objection may arise. If Z.17 is integrated with Z in roughly the way suggested, why does Aristotle say in Z.17 that he is ‘making another beginning’ (1041a7)? And what is the purpose of the ensuing discussion of *Meta. H*? Those questions tend to arise in tandem because scholars who emphasize that Z.17 makes another beginning usually read Z.17–H.6 as a unit that takes us beyond the enquiry pursued in the earlier books of Z.²⁷

²⁵ My reading of Z.4–11 is neutral on the so-called ‘purity’ of forms: regardless of whether forms are defined with reference to the matter of the composite, i.e., ‘impure’, or not, i.e., ‘pure’, they are explanatorily prior to the composite. For a recent impurist reading of Z.10–11, see Charles 2021, ch. 2. I defend a purist interpretation in Meister 2020.

²⁶ This conclusion holds regardless of whether it implies the individuality of essence (see, e.g., Frede-Patzig 1988 I, 36–42), or rules out merely that species and genera are substances (see, e.g., Wedin 2000, ch. 9).

²⁷ See, e.g., Gill (2006). Similarly, Burnyeat (2001, 71) says that ‘H.6 is the crowning moment of ZH’, and already Jaeger (1912, 170) characterized H as the ‘Krönung’ of the discussion of substance begun in Z.

My response draws on my claim that Z.17 establishes not that the essence or form of a composite is its cause of unity but rather that it is its first ontological cause of *being*. This does not imply that Z.17 has *nothing* to do with the unity of substance. After all, Aristotle is interested in establishing the cause of being of unified compounds which are not mere heaps (1041b11–12). But I have argued that the *main* concern of Z.17 is the cause of being of composites, not their cause of unity. This yields a natural reading of H: in Z.17, Aristotle argues that the essence or form of a composite is its first ontological cause of being, and in H, he adds that essence or form is the cause of unity of the composite.

In *Meta. H*, the issue of the unity of definition is stated first in H.3 (1043b32–44a11), and again in H.6: ‘about the puzzle that was mentioned concerning definitions and concerning numbers: what is the cause of their being one?’ (1045a7–8). Aristotle’s first move is to argue that the unity of definition depends on the unity of the substance of which it is a definition (1045a12–14). It is controversial whether the ensuing discussion aims to secure primarily the unity of the composite substance (Ross 1924 II, 238; Gill 1989, 139–44; Lewis 1994), or of the form (Harte 1996; Keeling 2012). Nonetheless, it is generally accepted that Aristotle’s concern in H.6 is with the *unity* of substance and definition.

Thus, *Meta. H* culminates in an account of the unity of substance. This is not to say that the topic of the ontological cause of being is forgotten in H. For example, in section 3.ii), I mentioned a passage in H.2 where Aristotle argues that ‘substance is the cause of being each thing’ (1043a2–3). Aristotle may, of course, return to the account of the cause of being given earlier in Z.17. I have argued merely that this account *has* been given in Z.17. Moreover, I have suggested a way of reading H as pressing beyond Z, namely, by securing the unity of substance, which does not conflict with my conclusion that an adequate account of the first ontological cause of being was developed already in Z.

How, then, should we understand Aristotle’s call for ‘another beginning’ in Z.17? Typically, when he announces ‘another beginning’ (ἄλλην ἀρχήν), Aristotle broaches the next topic (*EN* VII.1, 1145a15; *Pol.* I.13, 1260b22) or tackles a problem from a new angle (*Phys.* I.9, 192b4; VIII.5, 257a32). Z.17 belongs to the latter group, with a qualification: Aristotle asks us to revisit the substance question ‘*as if*

again making another beginning' (πάλιν ἄλλην οἶον ἀρχὴν ποιησάμενοι) (1041a6–7). This weakening suggests that, in treating substance as cause, Aristotle does not start entirely afresh. Indeed, he has just discussed views that cast the universal as a principle and cause, and hence as substance (Z.13, 1038b1–8; cf. Z.16, 1040b18–24). The new beginning, then, does not rule out that Aristotle has pursued a causal question all along. Rather, the novelty of Z.17 lies in the fact that Aristotle states his answer to the substance question. This answer requires the thought that substance, namely, substance₂, is a cause – not because the enquiry is reconceived as causal but because Aristotle initiates his response to an enquiry that was causal from the start. The fresh beginning in Z.17 marks not the start of a new investigation but the start of the completion of the ongoing enquiry of Z.

5. Essence as a First Cause of Being

I have argued that Z establishes that the essence or form of a perceptible composite is its 'first cause of being' (αἴτιον πρῶτον τοῦ εἶναι, 1041b28), or more precisely, its first ontological cause of being: the cause that explains why a perceptible composite is what it is. Thus, Z responds directly to the search for the causes of being qua being, as set out in Γ.1–2. Indeed, my reading suggests that Z is *central* to first philosophy. For the first philosopher's task is to find the first causes of substance, and Z establishes the first ontological cause of being of perceptible substance.

This centrality thesis will encounter resistance. For in Z, Aristotle seems to claim that the first philosopher studies perceptible substance for the sake of non-perceptible entities (Z.3, 1029a33–4; Z.11, 1037a10–20; Z.17, 1041a7–9). Similarly, in *Meta.* E.1, he says that first philosophy is 'theology' (1026a19), concerned with 'separate and unmovable entities (χωριστά καὶ ἀκίνητα)' (1026a16). Hence, the study of perceptible substance in Z seems preliminary to, or a preliminary part of, first philosophy. In the remainder of this paper, I will defend the centrality thesis by responding to these worries.

Here, I confront the objection that *Z* targets the wrong *explanandum* because the first philosopher does not seek to explain facts about perceptible substances in their own right. Moreover, I respond to the worry that *Z* cites the wrong *explanans* because the essence or form of a perceptible substance is not eternal and existentially separate, nor therefore a *first* cause. In section 6, I address objections to the centrality thesis that hinge directly on the relation of *Z* to Aristotle's theology.

i) First Philosophy and Perceptible Substance

Towards the end of *Meta. Z.11*, Aristotle says (cf. *Phys. II.2*, 194b9–15):

But whether there is some other [matter] beyond the matter of such [i.e., perceptible] substances and one must seek some substance other than them, such as numbers or some such thing, must be examined later. For it is for the sake of this that we are trying to make determinations about perceptible substances, too, since in some sense, the investigation concerning the perceptible substances is the task of natural science and second philosophy. For the natural scientist should grasp not only matter but also [substance] in accordance with the account, and more so.

πότερον δὲ ἔστι παρὰ τὴν ὕλην τῶν τοιούτων οὐσιῶν τις ἄλλη, καὶ δεῖ ζητεῖν οὐσίαν αὐτῶν ἑτέραν τινὰ οἷον ἀριθμοὺς ἢ τι τοιοῦτον, σκεπτέον ὕστερον. τούτου γὰρ χάριν καὶ περὶ τῶν αἰσθητῶν οὐσιῶν πειρώμεθα διορίζειν, ἐπεὶ τρόπον τινὰ τῆς φυσικῆς καὶ δευτέρας φιλοσοφίας ἔργον ἢ περὶ τὰς αἰσθητὰς οὐσίας θεωρία· οὐ γὰρ μόνον περὶ τῆς ὕλης δεῖ γνωρίζειν τὸν φυσικὸν ἀλλὰ καὶ τῆς κατὰ τὸν λόγον, καὶ μᾶλλον. (1037a10–17)

One might infer that the study of perceptible substance belongs to natural science, and hence *Z* is preliminary to first philosophy proper, namely, the study of immaterial substance in *Meta. Λ* (see, e.g., Frede-Patzig 1988 II, 216; Burnyeat 2001, 129). We will encounter several iterations of this objection. Now, our concern is with the claim that *Z* cannot be central to first philosophy because *Z* targets the wrong explanandum: perceptible rather than immaterial substance.

First, note that Aristotle says only that, 'in some sense' (τρόπον τινά), the investigation of perceptible substances is the task of natural science. This need not imply that perceptible substance is not an explanandum of first philosophy. Indeed, from what we have seen so far, we should expect the account

of the first causes of perceptible substances to be a central piece of first philosophy. For the first philosopher should grasp the first causes of substances, and substances prominently include perceptible substances. Moreover, unlike natural science, first philosophy studies perceptible substance not *qua* movable but *qua* being (Destrée 1992; Gill 2006; Shields 2012). Thus, it remains the task of first philosophy to establish the causes of being of perceptible substance, including the ontological cause.²⁸

However, in the *Physics*, too, Aristotle shows interest in the ontological cause of being of perceptible substance. For instance, in *Phys.* I.7, he speaks of the ‘causes and principles of natural things from which they *are* and have come to be as from first things – not accidentally but each what it is said to be in accordance with substance’ (190b18–19, my italics). Similarly, in *Phys.* II, Aristotle argues that the physicist must grasp the essence or form of a natural thing (II.2, 194a9–15; II.7, 198a22–6). Thereby, the physicist seems to discover why a perceptible substance is the sort of substance it is, which is just what I took Aristotle to establish in *Z*. One might wonder, then, whether *Z*, as I construed it, adds anything distinctive and first-philosophical that goes beyond natural science (Bolton 1995, 454–5).

In response, I admit that many of the theoretical building-blocks employed in *Z* are present in the *Physics* and elsewhere. Still, the full account of the first ontological causes of being of perceptible substance requires the triadic model of explanation, and this account is presented only in *Meta. Z*. This seems sufficient to set *Z* apart from the *Physics*: *Z* contributes to first philosophy, and goes beyond natural science, because it responds in detail to the queries of first philosophy (cf. Code 1997, 378).

The mere fact, then, that the explanandum of *Z* is perceptible substance does not rule out that *Z* is part of first philosophy. But the objector can insist that *Z* is not *central* to first philosophy. In *Z*.11, Aristotle says that perceptible substances are studied for the sake of settling whether there is matter beyond perceptible matter and a substance beyond perceptible substances (1037a10–13). Similarly, at the beginning of *Z*.17, he claims that, from answering the substance question, ‘presumably there will be

²⁸ I say ‘including’ the ontological cause because, arguably, first philosophy also establishes the first existential cause of being of perceptible substances (see section 6). For now, we are concerned with the first ontological cause of being.

clarity also about that substance which is separated from the perceptible substances' (1041a7–9).

Hence, first philosophy seems interested in perceptible substance not for its own sake but because it leads to non-perceptible substance. According to the objector, then, the account of perceptible substance in *Z* is preliminary, not central, to first philosophy proper (see, e.g., Burnyeat 2001, 41).

But it is too strong to conclude that the *sole* purpose of *Z* is to help settle issues about non-perceptible entities. For although the question whether there are non-perceptible substances is among the *aporiai* in *Meta. B* (*aporia* 5; B.2, 997a34–b3), this is not the only, or central, problem of first philosophy. The philosopher's central task is to find the principles and causes of substance. This task may be *related* to the existence of non-perceptible substances, but the two issues are distinct. More plausibly, then, while *Z* helps answer questions about non-perceptible substance, it is not its sole purpose to do so. This fits *Z.17*, too, where Aristotle simply says that, from answering the substance question, there will be clarity 'also' (καί) about non-perceptible substance.

Still, one may wonder how, on my view, *Z* sheds *any* light on non-perceptible substance. As Aristotle says, the elucidation cannot consist in applying the triadic model of explanation to non-perceptible substances: 'it is clear, then, that in the case of simple things, there is no investigation (ζήτησις) or teaching, but there is a different mode of investigation for such things' (*Z.17*, 1041b9–11). For the application of the triadic model to substance requires the hylomorphic analysis of substances – and non-perceptible substances do not have matter.

Here my earlier remarks on *Z.13–16* help.²⁹ At the end of *Z.16*, Aristotle criticizes the Platonists for their account of eternal substances (1040b27–41a3). Instead of locating eternal substances among the heavenly bodies (and ultimately, the prime mover), they introduce Platonic forms, such as the 'human itself and horse itself' by 'attaching the word "itself" (τὸ αὐτό) to perceptible things' (1040b33–4). These criticisms are part of the larger argument of *Z.13–16* which, as suggested above, rules out that

²⁹ Many thanks to an anonymous referee for suggesting the following line of reasoning.

universals are the principles and causes of perceptible substances. In Z.17, Aristotle develops his own account of the principles and causes of perceptible substances on which (immanent) essences or forms are their first ontological causes of being. Thereby, Z.17 also sheds light on ‘that substance which is separated from the perceptible substances’ (1041a8–9). For it shows how this substance *cannot* be reached, namely, by seeking the ontological cause of being of perceptible substance. Instead, as will emerge in Λ, one needs an account of the cause of motion of perceptible substances which leads to their first *existential* cause of being (see section 6). Thus, Z simultaneously gives a positive account of the first causes of being of perceptible substances and yields insights into non-perceptible substances.

I have argued that Z may be central to first philosophy even though its explanandum is perceptible substance. But we should consider another objection that focusses on the *explanans* in Z.

ii) *Can Essence Be a First Cause of Being?*

On my view, the essence or form of a perceptible substance is its first ontological cause of being. This result may be greeted with scepticism. For on a well-known interpretation, only the divine prime mover can be a *first* cause of being. In section 6, we will encounter two versions of this view: one that denies that essence is a *first* ontological cause of being, and one that denies that the first cause of being is *ontological*. But first, we should consider a more general objection, namely that essence or form cannot be a first cause at all because it is neither eternal nor existentially separate.

Prima facie, there are good reasons to accept the claim that the form of a perceptible substance is its first ontological cause of being. For on a natural reading, a cause is first just in case there is no further cause in the same chain of causal explanation. Moreover, Aristotle holds that a form is the same as its own essence (*Meta.* Z.6, 1032a4–6; Z.10, 1036a1–2; Z.11, 1037a34–b4; see Meister 2021 for more detail). Thus, whereas we can appeal to the essence or form of a composite to explain why it is a

substance, there is no further essence which explains why the latter is a substance. The form of a composite is its first ontological cause of being.

However, Menn (manuscript, I α 3) has challenged this line of reasoning. He argues that it is not sufficient for a first cause to be first in some causal chain. Rather, a first cause must meet two additional conditions: it must be eternal and existentially separate. Since the form of a perceptible substance meets neither of those conditions, it cannot be a first cause, nor therefore a first ontological cause of being. But the evidence that supports Menn's objection seems weak to me.

Let us begin with the supposed eternity condition. According to Menn (manuscript, I α 3), Aristotle holds that principles or first causes are eternal. Since the forms of perceptible substances are not eternal, they cannot be first causes (Menn, manuscript, II α 2a). Menn's main support for the claim that first causes must be eternal is *aporia* 10 where Aristotle seems to commit himself to the view that the principles cannot be perishable (*Meta.* B.4, 1000b24–8). Relatedly, one may point to *Meta.* A.2 where Aristotle claims that wisdom is 'the most divine and honourable [science]' (983a5) and that 'god seems to be among the causes for everything and some principle' (983a8–9). If god is a cause to be studied by the first philosopher, she seems to seek eternal first causes.

But these passages do not rule out that forms could be first causes. The remark in A.2 implies merely that god is *among* the causes, not that all first causes must be divine. Moreover, Aristotle argues that, unlike composites, forms do not come to be or perish (Z.8, 1033b5–6; 16–19; Z.15, 1039b20–6; H.3, 1043b14–18). Hence, the claim in *aporia* 10 that principles are imperishable is compatible with the claim that forms are principles and first causes. *Pace* Menn, then, there is little evidence for an eternity condition that prevents forms from being the first ontological causes of being of perceptible substances.

As for the condition of existential separability, Menn (manuscript, I α 3) argues that first causes must not be existentially dependent on anything else. Since forms are separable merely in account and depend existentially on matter, forms cannot be first causes. In support of the condition, Menn cites *aporia* 7 where Aristotle says that 'the principle and the cause must be beyond (*παρά*) the things of

which it is a principle, and it must be capable of being in separation from them' (B.3, 999a17–19; cf. K.2, 1060a36–b3). But this passage is inconclusive.

Aporia 7 asks 'if the genera are principles most of all, whether one should consider the first of the kinds principles or the lowest ones predicated of the individuals' (998b14–16). Our passage of interest occurs towards the end of Aristotle's statement of the *aporia* where he concludes from the previous discussion that the kinds predicated of individuals, rather than the higher kinds, seem to be principles, and then raises a difficulty for this view, too (999a14–23). Since 'the principle and the cause must be beyond (παρά) the things of which it is a principle, and it must be capable of being in separation from them' (999a17–19), it is hard to see why one would accept such a principle except because it is universally predicated of all things – but then the higher kinds have a better claim for being principles after all.

Menn (manuscript, Iα3) assumes that Aristotle outright endorses the claim that the principle and cause of something must be existentially separable from it. This seems doubtful to me. For *prima facie*, it is a claim concerning *all* principles and causes. But *Z.17* has shown minimally that the form of a perceptible substance is *a* principle of it, and according to Menn, the form of a perceptible substance is not existentially separable from it. Even on Menn's view, then, Aristotle cannot unqualifiedly accept the claim that the principle and the cause of something is existentially separable from it.

One could respond that Aristotle's claim is restricted to *first* principles and causes since *aporia 7* asks which kinds are principles and causes 'most of all' (998b14). But this is not what the context suggests. For Aristotle questions why one would suppose that the lowest kind predicated of individuals is a principle and cause *at all* – not that it is a first principle and cause. Thus, the claim seems to apply to any principle or cause, and it remains hard to see how Aristotle could accept it unqualifiedly.

In another line of attack, the opponent could invoke the priority in substance (οὐσία) of eternal things over perishable ones from *Meta. Θ.8* (1050b6–8). This priority claim seems to suggest that only eternal substances can be truly *first*. However, on my view, the essence or form of a perceptible substance is its

first *ontological* cause of being. But scholars tend to agree that the claims about priority in substance in $\Theta.8$ do not imply that eternal substances are in the essence of perishable substances (Makin 2006, 192; Beere 2009, 294–5). Even Peramatzis (2011, 297) who argues that priority in substance is essential priority thinks that eternal substances merely determine ‘the generic identity of all sublunary species as species’. Hence, although much more could be said about *Meta. Θ* , especially in its connection with Λ , it seems that $\Theta.8$ does not conflict with the claim that the essence or form of a perceptible substance is its first cause of being, as this claim is intended in *Z.17*.

Nonetheless, one may still doubt the centrality of *Z* to first philosophy because the latter is *theology*.

6. *Metaphysics Z* and Theology

There are at least two ways in which the characterization of first philosophy as ‘theology’ (*Meta. E.1*, 1026a19) may be fashioned into an objection. On the first, the objector continues to push her resistance to the firstness of essence or form and argues that the account of the first causes of being of perceptible substances cannot be completed without appeal to immaterial substance – and therefore cannot be completed in *Z*. I will call this the *incompleteness objection*. The second, more direct route is to insist that Aristotle’s description of first philosophy as ‘theology’ in *Meta. E.1* itself undermines the purported centrality of *Z* to first philosophy. I will take those objections in turn.

i) The Incompleteness Objection

The incompleteness objection arises from two different views of the *Metaphysics*. On the first view, held by Owens (1951/78) and Frede (1987; 2000), one agrees that the first cause of being of a perceptible substance is an ontological cause of being: a cause which explains why a perceptible

substance is the sort of thing it is. But one thinks that essence cannot be a *first* cause of being because it depends essentially on immaterial substance. Hence, immaterial substance is the first ontological cause of being of perceptible substance, and the account of the ontological cause of being in Z is incomplete.

On the other view, developed by Menn (manuscript, IIIβ–γ), the first cause of being of perceptible substances is *not* an ontological cause of being. Rather, the first cause is merely a cause of motion, and hence an existential cause of being. Moreover, since the first cause of motion is the immaterial prime mover, the account of the first cause of being of perceptible substances is completed only in *Meta.* Λ.6–10. Z is a failed attempt at getting to the first cause of being.

The strength of these views, and hence the incompleteness objection, depends on delicate issues about the relation between Z and Λ, which I cannot address at length. But some observations may help to shore up my reading of Z. Aristotle makes clear in Λ.1 that he is still engaged in the project of first philosophy: ‘the principles and causes of substances are sought’ (1069a18–19). But what he will say in Λ is compatible with his conclusions from Z, as I read it. In Λ.2–5, Aristotle identifies matter, form, privation, and the moving cause as principles and causes of perceptible entities (Λ.5, 1071a34), and he concludes at the end of Λ.5: ‘it has been said, then, which are the principles of perceptible entities and how many, and how they are the same and how different’ (1071b1–2). The relationship between those chapters and Z is difficult (see Judson 2000; Crubellier 2016), but they do not introduce unmovable substances as causes of perceptible substances. In this respect, the first half of Λ neither progresses beyond nor undermines the account from Z, as presented here.

In Λ.6–10, by contrast, unmovable substances take centre stage. Aristotle argues that ‘there is some substance that is eternal, unmovable, and separated from perceptible entities’ (Λ.7, 1073a3–5), and he does so, roughly, on the grounds that a first unmoved mover is required to move the first heaven which in turn moves everything else (1072b3–4). Ultimately, then, the prime mover is responsible for the generation and perishing of perceptible substances (Λ.6, 1072a10–12). Hence, the prime mover is a first cause of motion of perceptible substances which explains their generation and perishing (Gill

2006, 368–9; Menn, manuscript, IIIβ2a).³⁰ But this claim does not conflict with Z. For both the explananda and the sorts of explanation given in Z and Λ.6–10 differ. In Z, Aristotle explains why a perceptible substance is the sort of thing it is by appeal to its first ontological cause of being, whereas in Λ.6–10, he explains why it comes to be and perishes by appeal to its first existential cause of being.

Both of my opponents accept this schematic reading of Λ. That is, they accept the claim that, in Λ, all we get is an account of the prime unmoved mover as a first cause of motion, and thus a first existential cause of being of perceptible substances. Owens (1951/78) and Frede (2000) conclude that the extant Λ is a disappointment, and Owens (1951/78, ch. 19) even reconstructs a better Λ* that delivers an account of immaterial substances as ontological causes of being of perceptible substances. By contrast, Menn (manuscript: e.g., IIIβ2a), thinks that no positive account of the first ontological cause of being is given in the *Metaphysics*. But this is fine, on his view, because the account of the first existential cause of being in Λ suffices for Aristotle’s explanatory goals concerning perceptible substance.

Neither consequence seems appealing to me. For even if one rejects the details of my interpretation of Z, it seems hard to deny that, at least in Z.17, Aristotle recognizes the need for an account of the first ontological causes of being of perceptible substances. After all, he explicitly raises questions such as ‘What is a human being?’ and explains how we can correctly formulate, and answer, such questions. But if Aristotle recognizes that need, we might expect him to give a positive response to it somewhere in the extant *Metaphysics*. On my reading of Z, that expectation is met. For Aristotle gives a positive account of the first ontological causes of being of perceptible substances in Z.17. Since this account is not undermined by Λ, there is no reason to reject it. Indeed, we can not only answer the objection but turn the tables: if among the three views, only mine yields an account of the first ontological causes of being of perceptible substances in the extant *Metaphysics*, so much the better for my view.

³⁰ The prime mover moves as a final cause (Λ.7, 1072b1-4). Whether it is also (thereby) an efficient cause is a matter of controversy. See Miller, Jr. 2013 for an overview of options. I defer a discussion of this issue to another occasion.

Thus, only an innocuous version of the incompleteness objection is on target: Z does not offer a full account of the first causes of perceptible substances since we have to wait until Λ to learn about their first existential cause of being. Still, Z remains an independent and in itself complete contribution to first philosophy. For Z gives an account of the first ontological cause of being of perceptible substance which is not dependent on, or undermined by, the discussion in Λ . The version of the incompleteness objection that threatened my reading of Z seems disarmed.

ii) First Philosophy as Theology

At this point, the objector can shift her strategy and appeal directly to the characterization of first philosophy as ‘theology’ (*Meta.* E.1, 1026a19), concerned with ‘separate and unmovable entities ($\chi\omega\rho\iota\sigma\tau\acute{\alpha}$ καὶ ἀκίνητα)’ (1026a16). If first philosophy is theology, and Z is concerned only with perceptible substance, it may seem implausible that Z is central to first philosophy. However, I will argue that, properly understood, the characterization of first philosophy as ‘theology’ is compatible with the centrality of Z to first philosophy.

In *Meta.* E.1, Aristotle asks ‘whether first philosophy is universal or about some genus and some one nature’ (1026a23–5). Notoriously, Aristotle seems pulled in two directions. If first philosophy is a science of being qua being which studies any entity insofar as it is, it should be a universal science. But if first philosophy is theology, it seems to be a partial science with a single genus, namely, separate and unmovable substances. To understand the import of Aristotle’s characterization of first philosophy as ‘theology’, it is crucial to see how theology is connected with the science of being qua being.

Aristotle explains the connection in the final lines of E.1:

So, if there is not some other substance beyond the ones constituted by nature, natural science would be first science. But if there is some unmovable substance, this [science] is prior and first philosophy, and universal in this way because first. And it would be the task of this science to

investigate, concerning what is insofar as it is, both what it is and the things that belong [to it] insofar as it is.

εἰ μὲν οὖν μὴ ἔστι τις ἕτέρα οὐσία παρὰ τὰς φύσει συνεστηκυίας, ἢ φυσικὴ ἂν εἴη πρώτη ἐπιστήμη· εἰ δ' ἔστι τις οὐσία ἀκίνητος, αὕτη προτέρα καὶ φιλοσοφία πρώτη, καὶ καθόλου οὕτως ὅτι πρώτη· καὶ περὶ τοῦ ὄντος ἢ ὄν ταύτης ἂν εἴη θεωρῆσαι, καὶ τί ἐστὶ καὶ τὰ ὑπάρχοντα ἢ ὄν. (1026a27–32)

Although Aristotle seems to leave it open here whether there are unmovable substances, it is clear from *Meta. A* that, on his view, there are. Hence, not natural science but the science that studies unmovable substances, namely, theology, is first philosophy. Further, because theology is first philosophy, it is its task to investigate being qua being. How are we to understand this claim?

An influential line of interpretation emphasizes the expression ‘universal because first’ (1026a30–1): theology is the universal science of being qua being because, by studying the prime mover, theology studies the first cause of everything. On one version of this reading, the prime mover is the first cause of motion of everything (Asclepius 1888, 364.24–5; Bonitz 1848–9, 285; Reale 1961, 149–52; Décarie 1972, 120–1; Berti 1996, 2015, 23–4; Menn, manuscript, IyIa; for criticisms, see Thorp 1989). On another version, theology is the universal science of being qua being because it studies the first ontological cause of being of everything (Patzig 1960; Frede 1987). These views should sound familiar; I argued against them in my defence of the centrality of Z to first philosophy. Still, a fresh challenge arises from E.1: how can we understand the relation between theology and the science of being qua being without relying on the very interpretations that threatened the centrality thesis?³¹

In response, one could try to separate the science of being qua being from theology. On a radical, and desperate, version of this view, the description of first philosophy as ‘theology’ in *Meta. E.1* is spurious (Natorp 1888, 55). On more modest versions, Aristotle is concerned with two independent disciplines in the *Metaphysics* where the co-occurrence of the two disciplines is either explained away in

³¹ I bypass Merlan’s (1957) view that, for Aristotle, being qua being just is the prime mover. If the science of being qua being is a science of all entities insofar as they are, it is hardly promising to identify being qua being with the prime mover.

developmentalist terms (Jaeger 1912, 164–74; 1955, 200–36) or embraced as a philosophical position (Aubenque 1962, 368–411).³² But these suggestions are hard to maintain in the face of E.1 where Aristotle’s point is precisely that theology is the science that investigates being qua being.

Instead, Judson (2018, 264; 2019, 20) has argued that theology is a *part* of the science of being qua being (cf. Duarte 2007). For, on Judson’s view, theology helps establish the priority of actuality over potentiality. But Aristotle’s claim appears stronger: it is the task of theology, and theology alone, to study being qua being. Thus, theology just is the science of being qua being (not a part of it). Still, Judson (2018, 247–8) seems right to insist that the study of separate and unmovable substances is not the same as the study of being qua being.³³ This thought can be developed into a different reading.

My proposal is to loosen the tie between the universality of theology and its role as a science of being qua being. The universality of theology does not *consist in* its being the science of being qua being. Rather, theology is the universal science because all entities are in its domain, and *because* all entities are in its domain, it is the task of theology to study any entity insofar as it is, that is, being qua being (cf. Leszl 1975, 531–2). The claim that theology is ‘universal because first’ can be explained along the same lines. Theology is the first science because its domain, unlike the domain of natural science, is not restricted to unmovable entities but *also* contains the first unmovable substances. Because theology is first, then, all entities are in its domain, and hence theology, unlike natural science, is universal. But this is not to say that theology is universal because *only* unmovable substances are in its domain. It is universal because all entities, *including* unmovable substances, are in its domain.

One could object that the domain of theology does not include movable entities. For Aristotle says that ‘the first [science] is about entities that are both separate and unmovable’ (1026a15–16). But this

³² Jaeger thinks that, originally, Aristotle took first philosophy to be theology, and only later, with the insertion of the substance books ZHΘ, conceived of it differently, namely, as a universal science of being qua being (e.g., 1955, 215–16). For Aubenque, the science of being qua being and theology are different sciences that co-exist. In particular, the science of being qua being is restricted to the sensible world because there is no study of divine being *qua being* (1962, 404).

³³ Cf. Guyomarc’h 2014 who shows against Mansion 1958 that ‘first philosophy’ need not refer to the study of separate and unmovable substances.

remark need imply merely that it is characteristic of the first science that it studies separate and unmovable substances. As mentioned above, Aristotle goes on to argue that first philosophy is universal and *not* ‘about some genus and some one nature’ (1026a24–5). It does not seem plausible, then, that theology excludes the study of movable entities. Indeed, *Meta. Λ* is prominently concerned with motion, and not just with an account of unmoved movers but also with, for instance, the first heaven that is moved (Λ.7, 1072a19–27). Hence, unless one wants to claim that even most of Λ.6–10 is not theology because it includes a study of movable substances, the domain of that science should include both unmovable and movable entities.

One could also question my claim that unmovable entities are not in the domain of natural science. For in *Phys. VIII*, Aristotle argues that there is an unmoved mover and establishes, for instance, that it is partless and has no magnitude (266a10–11). But we saw in section 5.i) that, in the *Physics*, Aristotle may touch on topics that are, strictly speaking, first-philosophical. Moreover, just as the full account of the first ontological cause of being of perceptible substance is given only in *Meta. Z*, the full account of the unmoved mover and its role as the first existential cause of being is stated only in *Meta. Λ*. We do not need to suppose, then, that unmovable entities are in the domain of natural science, contrary to the explicit claim in *Meta. E.1* that natural science concerns things that are *not* unmovable (1026a13–14).

Finally, the proposed reading of *Meta. E.1* helps accommodate a consequence of my interpretation of *Z*. My view implies that *Z* is part of theology. This follows from the admission that first philosophy is theology, and my claim that *Z* is a piece of first philosophy. But in light of *E.1*, as I understand it, this implication is harmless. For we can understand Aristotle’s claim that theology is in charge of the study of being qua being without assuming that, therefore, first philosophy must always involve immaterial substance. Theology has the resources to give, for example, an account of the prime unmoved mover as a first existential cause of being. But this does not imply that the first philosopher or theologian is compelled to bring in immaterial substance at every juncture. On the view I have developed, the

account of the first ontological causes of being of perceptible substances is a central part of first philosophy that can be completed without reliance on immaterial substance.

7. Conclusion: the Unity of First Philosophy

I have argued that Z is a central, positive contribution to first philosophy. For first philosophy seeks the first causes of substance, and Z establishes the first ontological cause of being of perceptible substance. This is not to say that Aristotle completes the *entire* project of first philosophy in Z. As I have argued, Λ complements Z by establishing the first existential cause of being of perceptible substance. Further, if Aristotle is to establish the causes of being of *non-perceptible* substance, he must do so in Λ as well because Z is restricted to perceptible substance. But such additional results concerning non-perceptible substance would not undermine the account of perceptible substance in Z.

Still, given my reading of Z, one may be worried about the unity of first philosophy. If a perceptible substance has *two* first causes of being, namely, an ontological and an existential one, the first philosopher no longer seems engaged in a single explanatory project. In response, we should note first that Aristotle assigns a variety of tasks to first philosophy. For instance, one strand of first philosophy concerns not the *causes* of being qua being but its *per se* attributes. For first philosophy ‘investigates being qua being *and the things that belong to it by itself*’ (Γ.1, 1003a21–2, my italics). Similarly, it is the task of first philosophy, undertaken in Γ, to defend the common demonstrative principles, such as the principle of non-contradiction. It may be misguided, then, to expect first philosophy to be unified by a single explanatory task.

What is more, Aristotle regularly speaks of the ‘principles’ and ‘causes’ of being qua being and substance in the plural (*Meta.* A.1, 982a1–3; B.1, 995b6–8; Γ.1, 1003a31–2; Γ.2, 1003b18–19; E.1, 1025b3; E.4, 1028a3–4; H.1, 1042a4–6; Λ.1, 1069a18–19). It is not a shocking outcome, then, that

perceptible substances have both a first ontological and a first existential cause of being. But most importantly, although the two branches of first philosophy under discussion explain different facts about perceptible substance (why it is what it is in Z, and why it exists in Λ), they share a common explanatory concern with perceptible substance. Indeed, it seems that, for Aristotle, Z and Λ can only jointly explain all there is to explain about perceptible substance qua substance, namely, why it is the sort of substance it is, and why it is generated and perishes.³⁴

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