CHAPTER 1

Making Sense of Other Philosophers: Exegesis and Interpretation in Aristotle

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1 Introduction

In *Physics* I.2–3, Aristotle criticizes the Eleatic view that everything is one. Since the claim that everything is one implies a denial of the possibility of motion—a basic principle of physical science—, Aristotle acknowledges that a discussion of the Eleatic assumption is not part of physical science. Yet, he maintains that it still has a "philosophical point" (*Phys.* I.2, 185a20) and, subsequently, offers an extensive critique of Eleatic monism. Though commentators disagree on various points of detail, they unanimously agree that Aristotle relies on his own ontology in his critique of the Eleatics. This assumption seems justified, since, as one might say, Aristotle uses metaphysical claims, such as the claim that each qualitative property must inhere in a substrate.¹ However, if in *Physics* I.2–3 Aristotle employs his own metaphysical theory—a theory his opponents do not share and whose presuppositions they deny—how successful can his arguments be? Since he formulates Parmenides' position in terms of his own conceptual apparatus, which operates on principles that directly deny monism, Aristotle appears to distort Parmenides' doctrines.

In this paper, I will argue against this interpretation of Aristotle's argumentation. On my view, *Physics* I.2–3 contains what Aristotle calls a "logical examination." By this I mean that it provides a framework for explicating any theory that has metaphysical or physical content without itself being a theory with metaphysical or physical content. When Aristotle uses concepts like subject (*hupokeimenon*) or that which precisely is (*to hoper on*), he does not have a specific metaphysical approach in mind, for these terms are defined by a theory of predication which—from Aristotle's perspective—is not itself a substantive metaphysical theory, and thus does not involve ontological assumptions. Aristotle's "philosophical point" (*Phys.* I.2, 185a20) is that any theory must be such

¹ Although Clarke, Aristotle and the Eleatic One, also argues that it is the task of the dialectician to examine the Eleatics (15), he takes the specific claims, such as this one, to be metaphysical claims.

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as to allow for an explication within the confines of a general theory of predication. However, the Eleatics fail to offer a theory that meets this requirement; hence, they do not merely lack a competing theory but have no coherent theory at all. For this reason, Aristotle does not distort Parmenides' position but explicates what Parmenides must have meant if he is to be taken seriously as a philosopher.

2 Aristotle's Philosophical Doxography

Of course, Aristotle's critique of Eleatic monism reveals how he himself understood it. But to what extent does it give evidence about Eleatic monism itself? Can his critique be taken as a guide to the philosophical content of Eleatic monism? Following an influential line of interpretation, one ought to give a negative answer to these two questions. Aristotle, one might suppose, is not a reliable doxographer. As Harold Cherniss writes:

When Aristotle's references to Presocratic philosophy have been read in their contexts and when these references and criticisms have been studied as integral parts of the positive arguments in which they are set, it becomes clear that one cannot safely wrench them away to use as building-blocks for a history of Presocratic philosophy. There are no "doxographical" accounts in the works of Aristotle, because Aristotle was not a doxographer but a philosopher seeking to construct a complete and final philosophy. For him—as for every philosopher—the doctrines of his predecessors were materials to be remoulded for his own purpose; and in their new form they can be of use to the historian of philosophy only if Aristotle's process of interpretation can be reversed so as to regenerate them in the form they had before Aristotle employed them as his material.²

According to Cherniss, then, if the goal is to understand the philosophy of Parmenides or Melissus, we must not study them in the form in which Aristotle presented them to us; instead, we must seek to "reverse" Aristotle's interpretation.

There are many cases in which Cherniss's recommendation seems correct. For instance, in the discussion of the four causes in *Metaphysics* A.3, Aristotle not only points out that of those who have investigated what a cause is,

² Cherniss, Aristotle's Criticism of Presocratic Philosophy, 467.

some may have touched upon one, or even several, of his four causes, but also remarks that he alone has fully understood them. The doctrines of philosophers are, as Cherniss would say, "remoulded" to fit Aristotle's philosophical system, and Aristotle presents their theories in such a way that his account of the four causes emerges as the crowning achievement. This is obviously problematic: if Aristotle is relying on the peculiarities of his own philosophical system, his criticism of other philosophers is off the mark. Surely, if I were to criticize you on the basis of assumptions you do not share, you would not be particularly impressed.

In the following, I will argue that this is not what Aristotle is doing. Well, perhaps I should say that he is not doing it all the time, for I will focus on only one argument here, namely, his critique of Parmenides in *Physics* I.3. Aristotle's argument depends on assumptions about signification, essential predication, and his own theory of the categories. Since we find none of these, *expressis verbis*, in Parmenides, we must get clear about the status of these assumptions in order to determine whether Aristotle's criticism has any force against Parmenides. Taken together, I will argue for the following claims:

- (1) Aristotle's discussion of Parmenides in *Physics* I.3 is a logical discussion. It is not part of any science (including metaphysics) but provides a framework for explicating any theory that has metaphysical or physical content. In his discussion, Aristotle aims to show that monism conflicts with basic assumptions about predication which everybody must accept. Since monism therefore cannot be stated coherently, it is self-refuting.
- (2) The framework Aristotle uses is the theory of Natural Predication (NP), which he develops in the *Organon*. His use of concepts such as subject, accident, and essence relies on a theory of predication which, from his own perspective, is not itself a substantive metaphysical theory.³
- (3) In applying this framework, Aristotle correctly states what Parmenides must have meant, even though Parmenides did not explicitly say it. Aristotle's account of Parmenides' position is thus philosophically fair.

I submit that claims (1) to (3) embody fundamental principles of philosophical exegesis, and for reasons that will become clear soon, I will call claims (1) and (2) the "Carnapian principles" and claim (3) the "Lewisian principle." To repeat, the "philosophical point" (*Physics* I.2, 185a2o) is that since any theory must be explicated within the confines of a general theory of predication, the Eleatics not only do not have a competing theory but have no theory at all.

³ In this assumption, I am following Menn, "Metaphysics, Dialectic and the Categories"; Code, "Aristotle: Essence and Accident"; Burnyeat, A Map of Metaphysics Zeta, ch. 5.

3 Aristotle's Criticism of Parmenides

3.1 How to Criticize the Eleatics

Aristotle begins his criticism with two charges against Parmenides:

Parmenides is open to all these objections, besides others exclusive to himself. The answer to him is that he assumes what is not true and infers what does not follow. His false assumption is that things are said to be in only one way, when they are said to be in many. As for the invalidity, suppose we say that there are only pale things, and that "pale" signifies only one thing: the pale things will be none the less many and not just one. The pale will not be one in virtue of being continuous, nor will it be one in account. For the being of pale will be different from the being of that which has received it. By that I do not imply that anything can exist separately from the pale: it is not because they can exist separately, but because they differ in their being, that the pale and that to which it belongs are different.

Phys. 1.3, 186a22-324

According to Aristotle, the false assumption is that being is said synonymously; in truth it is said homonymously. Thus, both Socrates and pallor are, but what it is for each of them to be is different. In defining what being consists in for them, one should say that for pallor to be is to be a quality of a substance, while for Socrates to be is to be a kind of substance. However, even if we grant the assumption that being is said synonymously, Parmenides' reasoning will still involve a fallacy because of the rule that if Y is (accidentally) predicated of X, then what it is to be X must be different from what it is to be Y. Suppose that only Socrates and Callias, both of whom are pale, exist, and also that pallor signifies one thing.⁵ Monism still will not follow because what it is to be pale differs from what it is to be Socrates or Callias.⁶

⁴ Translations from the *Physics* are taken from Charlton, *Aristotle*: Physics *Books 1 and 11*, often modified.

⁵ Castelli, "Physics 1.3," 88–91 has a helpful discussion of what Aristotle means by signification in Physics 1.3, concluding that it is a deflationary conception on which X signifies Y, if X is true of Y.

⁶ By now, it is fairly well established how Aristotle's arguments in *Physics* I.2–3 proceed and I have little to add to the reconstruction by other scholars (except where noted). I will put my detailed reconstruction of the arguments in the appendix, below. Horstschäfer, *Über Prinzipien*; Quarantotto, "*Physics* I 3"; Clarke, *Aristotle and the Eleatic One*; Bostock, "Aristotle on the Eleatics in *Physics* I 2–3," provide comprehensive accounts of all individual arguments.

If this is the argument, what is its status? Are these metaphysical doctrines? I argue that for Aristotle they are not. Instead, they are logical (logikôs) principles, that is, they are topic-neutral principles in that they do not belong to a specific theory.8 They are principles to which any theory must conform and, for this reason, should be accepted by all parties in a dispute. In his study on Metaphysics Z, Myles Burnyeat has shown, in detail, how Aristotle uses these logical principles to establish different levels of discussion. For instance, Burnyeat argues that Aristotle, by characterizing essence in Z.4 in a logical way (Met. 1029b13), introduces a topic-neutral description of essence to which all parties should adhere, before he goes on to show, in Z.10-11, how his conception of form satisfies the logical conception of essence. Another example is found in the Posterior Analytics 1.20-23, where Aristotle argues that a scientific demonstration cannot have an infinite chain of premisses. He first gives a logical proof of it before turning to an analytical proof of it (APo I.22 84a7-11). Again, the distinction is between levels of arguments: the latter relies on specific lemmata about scientific proof, while the former does not. The logical level is the highest, so to speak, the level to which anyone proposing a more specific theory must conform.

For reasons of space, I cannot provide in this paper a detailed argument for this understanding of logical ($logik\hat{o}s$) but will rely on the findings of other scholars (see my fn. 8). My focus here is to offer evidence that the discussion in *Physics* I.2–3 is logical in the required sense. While the existence of the logical level of discussion in Aristotle is now widely accepted, no one has seen it as operative in *Physics* I.2–3. I provide three reasons for assuming that *Physics* I.2–3 is a logical investigation: First, although Aristotle does not use the word "logical" in *Physics* I.2–3, he elsewhere explicitly characterizes the principles of predication used here as "logical" in the sense defined above. Another sign that Aristotle's criticism is logical and topic-neutral is the absence in *Physics* I.2–3 of the form-matter distinction. Following Burnyeat, I take the form-matter

⁷ For the opposing view, see Bostock, "Aristotle on the Eleatics in *Physics* I 2–3"; Clarke, *Aristotle and the Eleatic One*, 29 on antirealism, 46 on Parmenides' metaphysical naivety, and 86 on ontological assumptions. But Clarke also thinks that the investigation of the Eleatics belongs to dialectic and, in this sense, his interpretation is close to the one offered here.

⁸ In my interpretation of *logikôs*, I follow Burnyeat, Code, Lewis, and Angioni, who, despite differences in detail, would all agree on my characterization: Burnyeat, *A Map of* Metaphysics *Zeta*; Angioni, "Definition and Essence in *Metaphysics* vii 4"; Code, "Aristotle: Essence and Accident"; Code, "Aristotle's Metaphysics as a Science of Principles"; Lewis, *How Aristotle gets by in* Metaphysics *Zeta*."

by in Metaphysics Zeta."

non-matching quotation mark

Cf. An. post. 1.21, 82b35; 1.22, 84a7. See also the related discussion in Met. Z.4, which is also explicitly characterized as "logical" (Metaph. Z.4, 1030a25).

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distinction—or perhaps better: a correct understanding of it—to be a part of Aristotle's distinctive partisan theory, and its absence to indicate a topic-neutral, non-partisan approach.

Finally, as Stephen Menn has convincingly demonstrated, a metaphysical inquiry is a *causal* inquiry, ¹⁰ and the *Organon*, where Aristotle often introduces these logical principles, is not causal in the required sense. A science concerns the principles and causes of a given domain, and the science of metaphysics is about the principles and causes of being. The *Organon* is not metaphysical in this sense, but provides a topic-neutral approach to logic, dialectic, and issues in the theory of predication. ¹¹ Again, the inquiry in *Physics* I.2–3 is not causal in the required way.

For these reasons, I submit that the criticism of the Eleatics is a logical $(logik\hat{o}s)$ investigation. It is topic-neutral and non-partisan because it does not belong to a specific science such as metaphysics or physics, nor does it presuppose a particular philosophical system such as Platonism, Eleatic monism, or Aristotelianism. Thus, although the principles on which Aristotle relies are his principles in that he formulates them and uses them, while his opponents might not, it is nevertheless the case that Aristotle believes that every philosophical theory must adhere to these principles. Aristotle does not think that these principles embody a substantive theory; instead, they provide the framework within which every substantive theory has to be explicated. In this sense, a logical investigation establishes a topic-neutral and non-partisan level of discussion. It sets the boundaries of intelligibility for any theory.

On the whole, my understanding of the discussion of *Physics* 1.3 is not novel. According to Simplicius, it had already been argued by Eudemus that the theorems in *Physics* 1.3 derive from logical or syllogistic theory. Moreover, modernday commentators have routinely noted the connection with logical and dialectical methods. However, no one seems to have grasped the implications this has for Aristotle's criticism of the Eleatics. Thus, while the structure of the individual arguments has been thoroughly studied, it remains unclear what

¹⁰ See Menn, "Metaphysics, Dialectic and the Categories."

For present purposes, we need not decide whether this is true of the *Organon* as a whole. Moreover, in saying that these principles are typically expounded in the *Organon*, I do not want to commit myself to the view that Aristotle sets the *Organon* apart from his other treatises and that he thought that logic was not a part but a *tool* of philosophy. This distinction might very well be post-Aristotelian. On this, see Barnes, "Peripatetic Logic: 100 BC-200 AD." My claim is only that Aristotle distinguishes levels of discussions in his treatises, whether they belong to the *Organon* or not, and that the logical level is the most general, relying on principles that, from Aristotle's perspective no one can deny. I would like to thank an anonymous referee for pointing to this possible ambiguity in my paper.

their status and kind are and what basis, if any, they have in Aristotle's broader philosophy.¹² However, unless these are made clear one cannot decide whether Aristotle's arguments against the Eleatics are successful.

According to my interpretation, Aristotle's critique does not presuppose any specific metaphysical theory of being at all. Consider the following passage: "The most pertinent question with which to begin will be this: In what sense is it asserted that all things are one? For 'is' is used in many ways. Do they mean that all things are substance or quantities or qualities?" (*Phys.* 1.2, 185a20–27). Rather than presupposing his own account of substances and accidents—in light of which monism would be obviously false—he is rather asking the Eleatics to elaborate on what they mean when they say that "all things are one." On its own, this statement has no determinate meaning at all. It may mean that all things are quantities, or that all are qualities, or that all are substances. Unless the Eleatics make their statement more determinate, they are not stating any meaningful philosophical doctrine at all. This point is crucial, for it explains why the Eleatics cannot refuse to answer. If Aristotle had asked the Eleatics how, for example, they can account for the distinction between form and matter if all things are one, then they would have been justified in shrugging the question off. However, the homonymy of being is not a metaphysical or physical claim like the form-matter distinction. One cannot disregard it, since failing to respect the difference between the categories means failing to offer any theory of being at all.

Let me illustrate the point with an example: Suppose you tell me that you are constructing a semantic theory for a language, and I respond by asking you what you think the semantic value of sentences is. Clearly, in asking this I am not presupposing any specific semantic theory, nor am I putting forward any substantive claim of my own. Rather, I am inviting you to clarify and specify what type of semantic theory you are actually proposing. For example, if you are a Fregean, you might say that the semantic value of sentences is the True and the False; if you are a Russellian, you might say that the semantic values of sentences are propositions. But whatever option you prefer, answering my question is part of what it means to construct a semantic theory at all. What you *cannot* do is answer that a sentence does not have a semantic value.

Two reasons might explain why scholars have failed to appreciate the status of Aristotle's criticism. First, as noted above, Aristotle does not explicitly call his discussion "logical" in *Physics* 1.2–3. As I will show below, however, it is

Recent interpretations of *Physics* 1.3 are Horstschäfer, *Über Prinzipien*; Clarke, *Aristotle and the Eleatic One*; Castelli, "*Physics* 1.3"; Quarantotto, "*Physics* 1.3."

beyond doubt that the principles he uses in his argument are logical in the required sense. Second, and more interestingly, these principles are not obviously logical *for us* modern-day philosophers. For us, they may indeed represent metaphysical doctrines, but if we are interested in what Aristotle thought he was doing then we must emulate the way he thought about these principles. There is no doubt that Aristotle makes it clear that a failure to acknowledge the form-matter distinction is a different kind of mistake from violating logical principles. Other philosophers might not be able to solve certain philosophical puzzles because they did not grasp the form-matter distinction, but Aristotle does not criticize them solely because they did not make the distinction. However, he frequently criticizes others for violating logical principles, such as the principle of non-contradiction, the principle that each thing and its essence must be the same, or the principle that no universal can be a this ($tode\ ti$). ti

It is very telling in this respect that, for Aristotle, essential predication and the distinction between substance and accident have the same fundamental status that the principle of non-contradiction (PNC) has. In *Metaphysics* Γ, Aristotle states that the denial of PNC "does away with substance and essence" (*Met.* Γ.4, 1007a20-21), and after demonstrating why this is the case he takes this demonstration to be a refutation of those who deny PNC. Most modern-day philosophers think that PNC is a fundamental logical principle, whereas substance and essence play a role in metaphysics. So, for us, Aristotle's strategy is quite peculiar, for if one is prepared to deny PNC, one is typically not concerned about whether this also entails a denial of substance. We would be concerned if it were the other way around, however, and a denial of substance meant a denial of PNC, since for us—but not for Aristotle—these two principles have a very different status.

Again, this is nothing specific to ancient philosophy. When Carnap famously accused Heidegger of producing meaningless sentences, he did not intend simply to point out that Heidegger's metaphysical theory contained a mistake, ¹⁴ but rather to show that Heidegger was producing mere gibberish. To understand Carnap's point in "Die Überwindung der Metaphysik durch logische Analyse der Sprache," we must consider this crucial point, and his point does not change simply because philosophers are nowadays skeptical about his own view about what constitutes a meaningful sentence or a logical mistake. The comparison with the Carnap-Heidegger debate also highlights another fea-

¹³ In the order mentioned, see Met. Γ.4–8, Z.6, and Z.13.

¹⁴ Carnap, "Überwindung der Metaphysik durch logische Analyse der Sprache."

ture of Aristotle's criticism. Heidegger wanted to put forward a *metaphysical* theory, and Carnap objects that it does not pass the test for any theory, i.e., consisting of meaningful statements. Similarly, the Eleatics saw their theory as metaphysical, and Aristotle was aware that they wanted to propose a metaphysical theory. Still, he objects that the Eleatic view does not pass his test for any theory, i.e., conforming to the logical principles.

3.2 How to Report Parmenides' Position

In the previous section, I argued that Aristotle's criticism of the Eleatics is sound because any theory whatsoever must be formulated within the framework of Natural Predication (NP). Before I spell out this framework in more detail and show how Aristotle uses it to argue that Parmenides' claim is self-refuting, I would first like to address the question of whether we should accept Aristotle's reformulation of Parmenides. I will argue that we should and that Aristotle is a reliable doxographer in the *de re* sense.

4 Making Sense of Parmenides

Aristotle explicitly acknowledges that he is interpreting and criticizing Parmenides on the basis of what he must have meant, as opposed to what he explicitly said:

This, however, is something Parmenides did not get far enough to see. It is necessary to assume, then, not only that being, whatever it is predicated of, signifies one thing, but also that it signifies that which precisely is and precisely is one.

Phys. I.3, 186a32-34

As Aristotle argued in 186a22-32, the assumption that being $(to\ on)$ signifies one thing does not establish monism; he therefore suggests one might try to establish monism by assuming that being signifies that which precisely is. According to Aristotle, Parmenides did not have the conceptual means to make this assumption. Does Aristotle thereby misrepresent monism? In my view, he does not. A correct interpretation must elucidate what Parmenides meant. This is not an exercise in psychology, but an application of a fundamental interpretative principle that we use all the time:

Sometimes it is wrong to take a philosopher at his word when he tells us what he believes to exist. For if we differ with the philosopher on some point of semantics, then we must make allowance for that difference if we want to report his position in our own words, in indirect quotation.¹⁵

Parmenides holds that everything is one, or that only being exists (pick your preferred formulation). Although, as we have seen, this does not establish monism, we must allow that Parmenides' semantics was different. From the way he characterizes being, it is clear that he intended to articulate entity and essence monism. ¹⁶ Therefore, if we want to report Parmenides' position in our (that is Aristotle's) language, we must report him as saying that being signifies that which precisely is. With this, Aristotle is not distorting or remoulding Parmenides' view; on the contrary, he is elucidating what Parmenides meant.

If this is right, we must understand Aristotle's phrase, "[i]t is necessary to assume," as follows: The only way this could work is thus-and-thus; therefore, it is necessary to assume thus-and-thus. The only way to establish Parmenides' monistic thesis is to posit that being signifies what precisely is. Therefore, Parmenides must have implicitly assumed that being signifies what precisely is.

If this is correct, it has an important upshot for Aristotle as a doxographer. Aristotle is often hostile to his opponents, but he is not hostile to philosophy. He cares about the philosophical content of theories, and he aims to represent this content correctly using his own terminology. To illustrate this point, we might distinguish between the history of philosophy or doxography de dicto, and the history of philosophy or doxography de re. The former concentrates on the explicit statements of philosophers. Although this may initially sound almost trivially correct, this method of interpretation is in fact of limited value. For as David Lewis makes clear, it might be wrong to take philosophers at their word. For example, if Petra says, "Numbers do not exist," shall we believe her? Well, if it turns out that she uses "to exist" exclusively for material things, and uses another quantifier—"to schmexist"—as we use "to exist," applying it also to numbers, then we should not believe her. The same holds of the history of philosophy de re. We inevitably must translate the statements of philosophers into our own language, and Aristotle, I submit, does the same. Since Parmenides did not distinguish between essential and accidental predication expressis verbis, even thoug this distinction at the same time is bedrock, so to speak, what shall we conclude? I suggest that we do precisely what Aristotle did: we should ask ourselves what Parmenides was getting at, and then report his doctrine in our own language.

¹⁵ Lewis, "Noneism or Allism?," 24.

¹⁶ As forcefully argued by Clarke, Aristotle and the Eleatic One, 4-5.

5 The Framework of Natural Predication

To report correctly what the monists were claiming, one must assume that "being" and "one" signify that which precisely is and that which precisely is one. This claim has its place in Aristotle's theory of Natural Predication (NP),¹⁷ and one cannot overstate the importance of this theory for understanding Aristotle's argument in *Physics* I.3. It explains both why the discussion is not part of metaphysics and why the argument has the form it does. Aristotle bases his arguments against the Eleatics on the following set of principles:¹⁸

(A) Substance, essence, definition:

- (1) X is a substance iff X is what it is without being something else (*heteron ti on*).
- (2) X is precisely (*hoper*) Y iff X is Y without being something else.
- (3) X is precisely Y iff to be Y is what it is to be X or part of what it is to be X (= X is essentially Y).
- (4) X is precisely Y iff Y is not predicated of X as of some underlying subject.

(B) Accidents:

- (1) X is Y by being something else, Z, iff Y is an accident.
- (2) If Y is an accident of X, X is Y but not hoper Y (= X is accidentally Y).
- (3) If Y is an accident of X, Y is predicated of X as of some underlying subject.

To give some brief examples: A human being is a human being or an animal not by being something else; Socrates is precisely a human because being a human is what it is for him to be; and since he is a human without being something else, Socrates is a substance, and being a human is the substance of Socrates. By contrast, the pale (thing) is pale by being something else, namely, Socrates, a human. Socrates is pale, but not precisely pale. Pale is an accident of Socrates and is predicated of Socrates as the underlying thing.

¹⁷ The name goes back to the ancient commentators. For a succinct exposition of NP see also Barnes, Aristotle's Posterior Analytics, 114–117.

It is beyond the scope of this paper to give a full justification and detailed analysis of these principles and the passages in which they are found. Instead, I will here merely mention the passages where these principles are found (there are other passages, too): *An. post.* I.22, 83a32, 83a9–14, 83a24–32; I.4, 73b5–10; *Met.* B.4, 1001a4–9; *Met.* Γ.4, 1007a31–33. For my interpretation of these principles, I rely on Code, "Aristotle: Essence and Accident"; Code, "On the Origins of Some Aristotleian Theses About Predication"; Kung, "Aristotle on Essence and Explanation," 362; Clarke, *Aristotle and the Eleatic One*, 117; Castelli, "*Physics* I.3," though most of these discuss only (A3), and none of them puts them all together or shows how Aristotle's argument in *Physics* I.3 relies on them.

The theory of NP is a logical inquiry in the sense specified above. ¹⁹ It sets constraints on the construction of specific metaphysical theories but does not entail any specific metaphysical theory on its own. For instance, to say that a substance is what it is without being something else is compatible with both Aristotle's and Plato's metaphysics, and even with atomism. Substances are the fundamental items in any ontology, and whatever they are—be they Platonic Ideas, Aristotelian forms, or atoms—they cannot be what they are on account of being something else, for if they were, they would not satisfy the basic requirement for being fundamental. We find a good example of such a failure in *Metaphysics* N:

All philosophers make the first principles contraries: as in natural things, so also in the case of unchangeable substances. But since there cannot be anything prior to the first principle of all things, the principle cannot be the principle as being something else. To suggest this is like saying that the white is the first principle, not *qua* anything else but *qua* white, but yet that it is predicable of a subject, and is white as being something else; for then that subject will be prior. But all things are generated from contraries as belonging to an underlying subject; a subject, then, must be present in the case of contraries, if anywhere.

Met. N.1, 1087a29-b1

If one were to posit both that contraries are principles and that they are predicated of an underlying subject whose nature is distinct from the contraries, one would be contradicting oneself. For if something is a principle, it cannot be predicated of an underlying subject, since in that case the subject would be prior. The criticism is not merely that contraries, understood in this way, are not the right kind of principle, or that one should assume other principles, but rather that this is an erroneous understanding of what a principle is.

Another equally important upshot is that the theory of NP sets constraints on how specifically the items can be characterized. What I mean by this is best explained by looking at an example. Commentators on *Physics* I.3 discuss whether the claim that being signifies what precisely is means that everything is identical to being,²⁰ or that everything is essentially,²¹ or that everything is a

¹⁹ NP is explicitly linked to a logical discussion in An. post. 1.22, 84a7–8, 84b1–2.

²⁰ Ross, *Aristotle's Physics*, ad loc.; Bostock, "Aristotle on the Eleatics in *Physics* I 2–3", 109 f.; Castelli, "Physics I.3", 94, has a more nuanced version because she assumes that the phrase expresses the identity between a subject and its essence.

²¹ Clarke, Aristotle and the Eleatic One, 118–121.

substance.²² Within NP, this question is moot, since NP implies all of them: If Y is not predicated of some underlying subject, it is a substance; each thing and its essence are identical (*Metaphysics* Z.6); and if there is nothing that is Y by being something else, everything is essentially what it is. Only when we move beyond logical characterizations do these questions become salient. Indeed, in Aristotle's metaphysical theory, substances are not characterized merely by being what they are without being something else. A perceptible substance, for instance, is characterized by being a composite of form and matter. Likewise, Plato's substances, the Ideas, are characterized not only by being what they are, but also as paradigms that exist independently of perceptible things. But these are, to repeat, specific metaphysical theories; the level of discussion in *Physics* I.3 is much more general and abstract. The principles under (A) and (B) above wholly determine what substances and accidents are. To ask more specific questions is to fail to understand the level of the discussion.

6 Aristotle's Arguments against Monism

Aristotle's anti-Eleatic argument in *Physics* I.3 presupposes only the framework of NP. Aristotle first shows that by assuming that being signifies that which precisely is, Parmenides can counter the criticism that things might be many in virtue of having different definitions. As Aristotle points out, however, the assumption is too strong, for it entails that being cannot be a subject, and that both accidental and essential predication are impossible. The upshot is that monism cannot be coherently articulated and is self-refuting.

6.1 Bonus: Being Cannot Be an Accident

Aristotle's argument in 186a22–32 shows that, even if only one single pale thing existed, being could still be many in definition. The argument relies on the distinction between the being of pallor and the being of the thing that is pale. If pallor is an accident of Socrates, Socrates is pale by being something else, a human. Thus, it leaves open the possibility that this one thing is many things; for example, it is a pale thing, a musical thing, a large thing, and a human. To counter this argument, Aristotle says, Parmenides must assume not only that being signifies one thing, but also that it signifies that what precisely is (*hoper on*) and what precisely is one (*hoper hen*). For if he assumed this, then whatever

²² This interpretation is seldom entertained today, but it was advertised by Simplicius, In Phys. 122.25–32.

is one is one not by being something else but is essentially so. This would be a way to establish monism. 23

Take again the example of pallor: If the only way to be pale is to be precisely pale, the distinction between the being of the property pallor and the being of its bearer collapses. For if something is precisely pale, the principles under (A) and (B) above imply that it is essentially pale and not accidentally so, and that what it is for X to be is to be pale and nothing else. In other words, the being designated by the predicate and the being of the subject are the same.

Thus, in following Aristotle's assumption that "to be" in Parmenides' terminology must be interpreted as "to be precisely what is," one can successfully counter the arguments I discussed in the previous section, and thereby establish monism.

6.2 Malus: Being Cannot Be a Subject

After showing that being cannot accidentally belong to anything, Aristotle proves that nothing can be predicated of being either. Thus, being cannot be a subject of either accidental or essential predicates. Unfortunately for the Eleatics, then, the assumption that helped them at first now establishes too much.

Aristotle shows first in lines 186b4–13 that nothing can be accidentally predicated of being. Suppose pallor is an accident of being. Insofar as it is an accident, what it is to be (being) and what it is to be pale are distinct; and since we assumed that the only way to be anything at all is to be essentially, pallor is not. However, since we also posited that being is pale (because pallor is an accident of it), being will not be.

This argument thus proves that nothing can be accidentally predicated of being, for otherwise being will not be. Thus, if the monists are right, we cannot characterize being by any features at all. For instance, the claim that "being is infinite" (*Phys.* I.2, 185a32–33), which Aristotle ascribes to Melissus, must be wrong, since what it is to be and what it is to be infinite are two different things, answering to different definitions. But since only what it is to be is, the infinite is not. Thus, if being infinite were predicated of being, being would not be.

But there is still worse to come. For, as Aristotle shows in 186b14–18, it is also impossible to define being, and so the monists must give up not only accidental predication, but essential predication as well. To demonstrate this, Aristotle

²³ It is important to see that in this first argument Aristotle is not criticizing Parmenides but helping him. The point is that Aristotle must show how the assumption that "being" and "one" signify "what is precisely being" and "what is precisely one" helps in establishing monism. For the opposite view, that this is a critique of Parmenides, see Clarke, Aristotle and the Eleatic One, 125–126.

refers back to 185a7, where he entertained the idea that all that exists is one human. He now argues, quite reasonably, that this human must be something essentially—let it be animal and biped. However, insofar as the human is both animal and biped, these two are themselves things that are essentially something, and hence the world consists of at least three things.

Aristotle's criticism depends on the view that a definition expresses what something precisely is, and for Aristotle, any definition comprises several essential predicates (see, e.g. Met. Z.13, 1039a14-19). Therefore, if monists were to give up accidental predication, they would also have to give up essential predication, because it too entails multiplicity. Monists thus cannot even state their monism because they cannot go beyond uttering the single word "being." Aristotle's argument has established that, under the best interpretation of what Parmenides must have meant, predication becomes impossible. Is Parmenides thereby refuted? If Parmenides predicated nothing of being, Aristotle could not refute him. David Bostock thinks that Aristotle's criticism misfires for this very reason, since Aristotle maintains without justification that Parmenides must say something about his monistic being, but Parmenides might deny this. Against this, Tim Clarke argues that Aristotle relies on Parmenides' explicit statement, and in this sense Aristotle's criticism of Parmenides is justified. Clarke is of course right to point out that in his extant writings Parmenides characterizes being with several predicates; however, given that Aristotle made it clear at the beginning of his discussion that he is investigating what Parmenides must have meant rather than what he explicitly said, it is unlikely that Aristotle had this in his mind. Throughout *Physics* 1.3, Aristotle considers the most persuasive case for monism. The leading question is whether there is any way to understand the Eleatic claim such that it comes out true. In this context, Aristotle cannot rely on anything that Parmenides might have said in a less technical context. Suppose Parmenides had lived to reply to the argument above by saying that he now has a better sense of what his thesis implies being signifies what precisely is—and so he takes his earlier statements back. In this way, he would remain unrefuted.

The real challenge, however, differs from both what Bostock thinks and from what Clarke thinks. If Parmenides cannot characterize being at all, he faces a dilemma. With no kind of predication at his disposal, he is reduced to silence. The problem, as I see it, is not that Parmenides is contradicting himself: as noted above, he does not need to say anything about being at all if he does not wish to. However, he will end up in the uncomfortable position of having no philosophical position to offer. To return to the example of the semantic theory: If I ask you what the semantic value of a sentence is, you will give me different answers depending on whether you are a Fregean or a Russellian, but

it is not an option to give an answer that specifies no semantic value at all. If you did this, I would conclude that whatever you may think you are doing, you are definitely not doing semantics. Likewise, whatever Parmenides thinks he is doing, he is not doing any philosophical work. The boundaries of philosophy are the same as the boundaries of logical theory. If Parmenides cannot express his theory within the framework of NP, he has no theory at all, and we need not philosophically engage with him. In this sense, *Physics* I.3 could have had the title "Die Überwindung der parmenideischen Metaphysik durch logische Analyse der Sprache."

Appendix: The Proofs

a Why Parmenides' Reasoning Is Invalid

As for the invalidity, suppose we say that there are only pale things, and that "pale" signifies only one thing: the pale things will be nonetheless many and not just one. The pale will not be one in virtue of being continuous, nor will it be one in account. For the being of pale will be different from the being of that which has received it. By that, I do not imply that anything can exist separately from the pale: it is not because they can exist separately, but because they differ in their being, that the pale and that to which it belongs are different.

Phys. 1.3, 186a22-32

Proof: Even if we assume that being is said in a single way, it does not follow that everything is one either (a) by continuity or (b) in definition. Suppose pale is said in a single way, and everything that exists is pale. Then the non-pale does not exist; that is, there are no non-pale regions in the world. Still, (a) there can be many discontinuous pale things that are in contact, and (b) the pale thing, a human for example, is different in definition from what it is to be pale. For what it is to be a human and what it is to be pale are different, and would still be different even if all humans were pale. If Y is (accidentally) predicated of X, what it is to be X is different from what it is to be Y.²⁴

²⁴ The construction τὸ εἶναι λευκῷ καὶ τῷ δεδεγμένῳ, where the first expression has an article but the second does not, can be explained by the fact that the expression τῷ δεδεγμένῳ is a placeholder for a more specific term such as "human." The point is not that the essence of pale is distinct from the essence of being a bearer of properties, but rather that the essence

b Why Being Cannot Be an Accident

For an accident is said of some underlying thing with the consequence that that to which being belongs as an accident will not be. For it [sc. the underlying thing] will be different from being; and therefore it will be something which is not. That which precisely is, then, will not be something that belongs to something else. For it will not be possible that it [sc. the underlying thing] is some being, ²⁵ unless "being" signifies many things in such a way that each is some being. But it was laid down that "being" signifies one thing.

Phys. 1.3, 186a34-b4

Claim: If being is predicated of X as an underlying subject, X will not be.

Proof: If being is predicated of X as of an underlying subject it is an accident of X, and so X is not *hoper* being. But on the supposition that being signifies only *to hoper on*, only *to hoper on* is; hence, X is not. Therefore, being cannot be predicated of anything, or else not-being will be. Since monists assume that not-being is not, *hoper on* is not (accidentally) predicated of anything.

Addendum: To hoper on cannot belong to some other thing; that is, it is impossible that there are two things that are *hoper onta* in different ways. The reason is that being signifies exactly one thing.

Note: I take it that in the clause εἰ μὴ πολλὰ τὸ ὂν σημαίνει οὕτως ὥστε εἶναί τι ἕκαστον ("unless 'being' signifies many things in such a way that each is some being"), Aristotle imagines a scenario where being is used homonymously. Consider the word "bank." It may signify a riverbank, or it may signify a credit institution; accordingly, there are two ways to be precisely a bank. Thus, even if all beings were precisely banks, there would still be two *hoper onta*, namely, what it is to be a riverbank and what it is to be a credit institution.

c Why Being Cannot Be a Subject of Accidental Predicates

But now, if that which precisely is is not an accident of anything, but (other things) are accidents of it, why does that which precisely is sig-

of pale is distinct from the essence of the thing that is the bearer of properties. The article is therefore used in the one case but not in the other.

Manuscripts EFJS read: "For being for it will not be something that is."

nify being more than not-being? For if that which precisely is is also pale, and what it is to be pale is not to be precisely what is (for being cannot belong not even as an accident to it, since nothing is except that which precisely is), it will follow that the pale is not. And I do not mean that it will be some particular not-being, but that it will not be at all. But then that which precisely is will not be: for it was true to say that it was pale, and that signified something which is not. So pale also must signify that which precisely is. But then being will signify more than one thing.

Phys. 1.3, 186b4-13

Claim: For all X, if X is predicated as an accident of that which precisely is, that which precisely is will not be.

Proof: Suppose that the pale is an accident of *to hoper on*. Since the only thing that is is *to hoper on* and what it is to be pale is distinct from *to hoper on*, it follows that the pale is not (a being). If the pale is predicated of *to hoper on*, *to hoper on* is pale. Since the pale is not, *to hoper on* also will not be.

d Why Being Cannot Be a Subject of Essential Predicates

That that which precisely is divides, also according to its account, into something else which precisely is, is clear. If, e.g., a man is something that precisely is, animal too must be something that precisely is, and also biped. If they are not something that precisely is, they must be accidents; either of man or of some other underlying thing. But this is impossible.

Phys. 1.3, 186b14-18

Claim: Everything that essentially is must be many.

Proof: For any X, if X essentially is something, X must be definable, and since every definition has parts, X must have definitional parts. Suppose that Socrates is precisely a human. But to be precisely a human is to be a biped animal; hence, biped and animal are also things that are precisely something. Therefore, many things exist.

e Why Animal and Biped Cannot Be Accidents of Human

A thing is called an accident, either if it is such that it can belong or not belong [or if that of which it is an accident comes into the account of it] or if the account of that of which it is an accident comes into it. Thus, being

seated is an accident in that it is separable, and the account of the nose of which we say snub is an accident comes into snub. Further, whatever enters as a constituent into the definitory account of a thing must be such that the account of the whole thing does not enter into the account of it. Thus, the account of man does not come into biped, and the account of pale man does not come into pale.

Phys. 1.3, 186b18-26

In his rebuttal, Aristotle relies on two theses about accidents and definition:

- (1) X is an accident of Y iff X can belong or not belong to Y or Y is in the definition of X. (NB: Aristotle defines *accidents*, not *being said accident-ally*. According to *An. post.* I.4, the second disjunct is an example of a *per se* accident that is said in itself and not accidentally.)
- (2) If A is a part of the definition of B, then B is not a part of the definition of A.

He uses these two principles to prove that biped and animal cannot be accidents of a human being:

That being so, if biped were an accident of man, either biped would have to be separate from man, so that we could have men who were not bipeds; or the account of man would enter into the account of biped. This last, however, is impossible, since biped comes into the account of man.

Phys. 1.3, 186b26-31

Claim: Biped and animal cannot be accidents of human being.

Proof: If biped is an accident of human being, then it is either separable from human or human is part of the definition of biped. The first contradicts thesis (1), and the second contradicts thesis (2).

f Biped and Animal Cannot Be Accidents of Something Else

If, on the other hand, animal and biped were accidents of something other than man, and each is not something which precisely is, human too will be something which is an accident of something else. But we must take it that precisely what is is not an accident of anything, and if both [and each] of two things are said of something, so must that which they constitute.

Phys. 1.3, 186b31-35

31

Claim: Biped and animal cannot be accidents of something else.

Proof: Assume that animal and biped are accidents of something else, call it Elsie, and they are not *hoper on ti*. Human being will also be an accident of Elsie because a human being just is a biped animal. But it was assumed that a human is *hoper* human, and by NP a human is a human not by being something else. Hence, human cannot be an accident, and neither can animal or biped.

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