

HERACLITUS
THE PRIORITY MONIST:
A STUDY IN ANCIENT METAPHYSICS

By

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To my family, for their patience and never-ending support.

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Abstract: Heraclitus is famous for claiming that “all things are one,” (ἐν πάντα εἶναι). But what does this mean? In this thesis, I offer a novel, ground-theoretic model for unity in Heraclitus: Cosmic unity through priority monism. I will argue that all things are one through their shared metaphysical ground in the cosmos. My approach is novel in that it diverges from the standard translation of “ἐν πάντα εἶναι” as a means of explaining the unity of conceptual entities. The Greek is ambiguous and can be translated as “all things (conceptual entities) are one” or “all things (material entities) are one”. In taking this claim to be related to both conceptual and material entities, I offer an account that takes seriously Heraclitus’s representation of unity between material entities. First, I present what I will call the ‘Problem of Unity’ in Heraclitus. Then, I give an account of historical interpretations that have attempted to solve the problem of unity, and highlight their theoretical limitations. Next, I turn to my proposed solution through an analysis of metaphysical priority throughout Heraclitus’s fragments. In doing so, I show that Heraclitus’s cosmos appears to be the most metaphysically basic entity. Thus, I argue that Heraclitus’s cosmos grounds its proper parts. Lastly, I show that Heraclitus’s cosmology coincides with a contemporary argument for priority monism through the internal relatedness of all the parts of the cosmos (Schaffer, 2010a; Schaffer, 2010b). I conclude that the claim “all things are one” means that the proper parts of the cosmos share a metaphysical ground: the cosmos itself.

TABLE OF CONTENTS

Chapter	Page
I. THE PROBLEM OF UNITY.....	1
Historical Solutions – The Identity of Opposites.....	7
Historical Solutions – The Unity of Opposites.....	18
Historical Solutions – Transformational Equivalence	20
II. PRIORITY MONISM.....	24
Existential Dependence and Fundamentality.....	27
Essential Dependence and Fundamentality.....	32
III. INTERNAL RELATIONS AND PRIORITY MONISM.....	40
IV. LOGOS AND SOLVING THE PROBLEM OF UNITY.....	48
V. PRIORITY MONISM VS. METAPHYSICAL COHERENTISM.....	50
VI. CONCLUSION.....	56
REFERENCES	57

LIST OF FIGURES

Figure	Page
1. Principle of Interdependence	41
2. Transitivity of Grounding	45

CHAPTER I

THE PROBLEM OF UNITY

One of the long-standing puzzles within Heraclitus scholarship is how to approach Heraclitus's use of the term "*logos*," (ὁ λόγος).¹ The puzzle is as follows: During Heraclitus's active period in the fifth century BCE, *logos* denoted a spoken word or personal account (Kahn, 1979, p. 97-98). However, Heraclitus clearly uses *logos* in a way that is irreconcilable with its historical use. Consider the following two fragments:²

B1: τοῦ δὲ λόγου τοῦδ' ἐόντος αἰεὶ ἀξύνετοι γίνονται ἄνθρωποι καὶ πρόσθεν ἢ ἀκοῦσαι καὶ ἀκούσαντες τὸ πρῶτον [...]

Of this *logos* which holds always, humans prove to be uncomprehending, both before they hear it and after hearing it for the first time...

¹ See (Kirk, 1954); (Kahn, 1979); (Barnes, 1982); (Kirk, Raven et al., 1983); (Johnstone, 2014).

² I refer to all fragments using the Diels-Kranz numbering system. Translations are mine though I draw from Kirk (1954), Kahn (1979), and Laks & Most (2016).

B50: οὐκ ἐμοῦ ἀλλὰ τοῦ λόγου ἀκούσαντας ὁμολογεῖν σοφόν ἐστὶν ἐν πάντα εἶναί. ³

It is wise, listening not to me but the *logos*, to agree [and be in tune] with the fact that all things are one.

From these fragments, it's clear that the *logos* must refer to something distinct from a spoken word or personal account. In fact, the *logos* “holds always” and even has authority over Heraclitus's own words. More specifically, Heraclitus tells his reader that they must agree and be in tune with the *logos* that “all things are one”. Here, we arrive at what I will call the “Problem of Unity”:

The Problem of Unity: What does Heraclitus mean by the claim that “all things are one”, and how does this refer to the *logos*?

A deeper look into Heraclitus's fragments further contextualizes the problem. In fact, the following fragments seem to hint at a possible solution to the Problem of Unity – specifically, in virtue of an appeal to some principle or doctrine that unifies things and opposites in Heraclitus's cosmos:⁴

B60: ὁδὸς ἄνω κάτω μία καὶ ὡυτή

³ Scholars often translate ὁμολογεῖν as ‘to agree’ (Kahn, 1979, p. 45; Kirk, 1954, p. 65). ὁμολογεῖν combines ὁμο (same) with λογεῖν (to speak). ‘To agree’ (or saying in agreement) translates the parts of the word adequately, but fails to emphasize the ‘resonance’ with B51 (ὁμολογέει), and lessens the significance of the wordplay that Heraclitus intends with the connection between τοῦ λόγου, ὁμολογεῖν and ὁμολογέει. I borrow the term, “Resonance” from Kahn (1979). Resonance is the ability to use one expression to evoke another (Graham, 2019). In B51, ὁμολογέει indicates a harmonious (ἁρμονίη) solution to one of Heraclitus's many paradoxes. I contend that the concept of a harmonious solution denotes much more than merely an agreement. In fact, Kahn argues that “we expect to find [ἁρμονίη] used in all available senses: as a physical fitting together of parts [and] as a principle of reconciliation between opponents,” (1979, p. 197). Mere verbal agreement does not do justice to this unificatory harmony, nor does it accurately portray the implicit normativity of the first clause of B50: we must listen (and obey) the *logos*. As I hope to show throughout this paper, such a normative claim falls in line with Heraclitus's overall project.

⁴ I use the term ‘*thing*’ in an Aristotelian sense – that is, an underlying substance. I might note that thing can also be expressed as individual entities (English, 1913), subject (Mackenzie, 1988), and/or object (Neels, 2018). To avoid anachronistic language, I favor ‘*things*’.

The path (ὁδός) upward and downward: one and the same.

B59: γραφῆων ὁδὸς εὐθεῖα καὶ σκολιὴ μία ἐστὶ, φησί, καὶ ἡ αὐτή.
The path of letters: straight and crooked.⁵

B103: ξυνὸν γὰρ ἀρχὴ καὶ πέρασ ἐπὶ κύκλου περιφερείας.
For on the circumference of a circle, the beginning and the end are in common.

B57: Διδάσκαλος δὲ πλείστων Ἡσίοδος· Τοῦτον ἐπίστανται πλεῖστα εἰδέναι,
ὅστις ἡμέρην καὶ εὐφρόνην οὐκ ἐγίνωσκεν· ἔστι γὰρ ἓν.
The teacher of most is Hesiod; they believe he has the greatest knowledge - who
did not comprehend day and night: for they are one.

B60 suggests that two contradictory instantiations of a certain subject (the upward and downward road) are the same;⁶ while B59 seems to suggest the obscure conclusion that

⁵ In the manuscript, γραφῆων is corrupt and has been open to much interpretation. The direct quotation by Hippolytus is interrupted by an attempt to clarify what Heraclitus meant with the term γραφῆων. However, it seems that Hippolytus gives an account of γναφῆων rather than γραφῆων (note the difference between the Rho ‘ρ’ and Nu ‘ν’). Kirk convincingly identifies that γραφῆων much refer to the path of letters. That is, the way in which letters are written. The second instance of the term γναφῆων is translated as in the fuller’s shop or for the carding wheel (Kahn, 1979, p. 323n243). This instance, I believe, must be an incorrect interpretation by Hippolytus of the corrupted text. For a full discussion and justification for this translation, see Kirk, 1954, p. 97-105 and Kahn, 1979, p. 190-94.

⁶ In his commentary on B60, Kirk asserts that, “most scholars have accepted the view that the upward and downward paths referred to here are the paths which matter follows in the change of the cosmos from fire to sea to earth (downward) and from earth to sea to fire (upward)” (1954, p. 105). This is virtue of passages given to us by Theophrastus. Kirk also offers four other historical interpretations: the road (ὁδός) could refer to the (i) the variability of human fortunes; (ii) the journey of the soul; (iii) a cosmogonic process; and (iv) a cosmological process. However, I don’t think these historical interpretations fit correctly into Heraclitus’s corpus (see Kirk, 1954, p. 105-112). On the contrary, I agree with Kirk that B60 refers to a physical road, whose opposites instantiations are one and the same. A similar view is represented in Mackenzie (1988), who develops an idea initially presented by Aristotle in *Physics*, 202a20. On Mackenzie’s views, the resolution to the paradox in B60 comes from our common-sense assumptions (doxa) – specifically, she claims that we might come to understand from Heraclitus’s fragments that the road up from Larisa to Athens is the same as the road down from Athens to Larisa (1988, p. 16). In this sense, with qualification, the paradoxical nature of the fragment is resolved and we come to know a historically relevant insight: Different perspectives give different value judgments.

there is one single entity (the path) that instantiates contrary opposites at any given time.⁷ B103 too fits into this puzzling formula: any point on the circumference of a circle is both the beginning and the end.⁸ And lastly, in a strict rejection of Hesiod's metaphysics, in B57 Heraclitus asserts that day and night – two contrary events – are one. From these fragments, we can clearly see that unity is somehow important for explaining how an entity can instantiate opposite properties (B60, B59); how an entity can *be* both opposite descriptions (B103); and how opposite phenomena are united *over* time (B57).

Many scholars have offered divergent solutions to make sense of this appeal to unity. I note that these solutions to the problem of unity are often expressed as doctrines that attempt to explain Heraclitus's philosophy. For instance, Barnes, following the interpretations of the Ancients, attributes a doctrine of flux to Heraclitus, by which things are somehow unified through change (1982); Graham argues for a doctrine of lawlike material flux, by which all things are unified through their transformational equivalence (2006); and various scholars have argued for the unity of opposites doctrine, by which opposites are somehow united.⁹ Despite the different interpretations, scholars agree that

⁷ Contrary to B60, where the road must refer to a physical road, I favor a more abstract reading of ὁδὸς in B59. If we are correct in translating γναφέων as 'of letters', it makes sense to say that this path refers to a more abstract (or artistic) notion than, for example, the material road in B60.

⁸ B103 might not fit the formula as well as B59 and B60 in virtue of its mathematical accuracy. Of course, any point on the circumference of a circle is both the start and its end. The more interesting question then arises: Can a point on a circle *be* both opposite instantiations?

⁹ The modern Unity of Opposites doctrine was developed by G. S. Kirk (1954). The following is a non-exhaustive list of scholars who have argued alongside this view: (Marcovich, 1967); (Mourelatos, 1973); (Kahn, 1979); (Hussey, 1982); (Mackenzie, 1988); (Long, 2007).

some form of unity is important for understanding the above fragments and making sense of Heraclitus's fragments.

I further note that my approach in this thesis is different from that of other Heraclitus scholars. Most scholars have taken Heraclitus to solely deal with the unity of conceptual entities – specifically, opposites. While it is clear that Heraclitus is very interested in opposites, I want to stress Mourelatos' influential conclusion (1973): Heraclitus is the first Greek philosopher to reject a naïve metaphysics. That is, while for Heraclitus' predecessors, conceptual entities had an ontological status identical to that of material entities,¹⁰ Heraclitus correctly pointed out that conceptual entities were not tangible things. Rather, as will be discussed later, they are metaphysically derivative of underlying things.

My approach to the problem of unity is motivated by the theoretical limitations of the doctrines ascribed to Heraclitus and the lack of coherent solutions to the problem of unity. The claim, “all things are one” (ἐν πάντα εἶναι), is ambiguous in that it does not specify whether “all” (πάντα) refers to material and/or conceptual entities. In my approach, I take seriously Heraclitus claim that all are one – including both conceptual entities – such as opposites and elements - and all material entities. Notably, I believe this has been an oversight in the literature. In what follows, I give an account of the historical interpretations and show their theoretical limitations. I conclude that none of the views on

¹⁰ Consider, for instance, Hesiod's Day and Night (Theogony, 748-757) and Anaximander's elemental opposites.

offer fully solves the Problem of Unity in Heraclitus and that a new approach is warranted.¹¹

¹¹ As will be explained in the following, I base this view on two points: (i) Consistency with the fragments; and (ii) Coherency of the Philosophy.

HISTORICAL SOLUTIONS TO THE PROBLEM OF UNITY - THE IDENTITY OF OPPOSITES

One of the first (and historically dominant) solutions to the problem of unity comes from Plato & Aristotle, expressed as the Identity of Opposites doctrine. This doctrine relies on a key attribution to Heraclitus's account - specifically, the doctrine of flux. The flux doctrine is seen in both Plato's and Aristotle's accounts of Heraclitus.¹² It commits Heraclitus to the following view: All things are always in motion in every regard and nothing stays the same. I follow the convincing arguments of the last century that Heraclitus did not hold this view. However, before rejecting this doctrine and its alleged solution to the problem of unity, it'll be helpful to examine this historically predominant view. The flux doctrine is often derived from the famous river passage, by which Heraclitus is assigned the incoherent view that all things are always in motion *in every regard*.¹³ The river fragment is as follows:¹⁴

¹² In the *Cratylus*, Plato mentions this doctrine twice (401d3-5 & 402a4-6); and further discusses the doctrine in the *Theaetetus* (152c-e). Aristotle mentions the flux doctrine in *Metaphysics*, Book IV. Aristotle seems to develop Plato's initial view here: In virtue of everything being in motion and not being able to step into the same river twice, it must be the case that all things are always in motion and nothing stands fast. Given this, Aristotle suggests that nothing can be true or false (more on this later).

¹³ Depending on how one reads the passages in the *Cratylus* - specifically (*πάντα χωρεῖ* or *πάντα ῥεῖ*) - it's possible to assert that *all* things are in motion in *all* respects, or that *all* things are moving in *some* respects (Graham, 2006, p. 118). I follow Kirk in assuming that Plato means in all respects (1951a). I favor this translation in virtue of Plato's (wrong) generalization of the flux doctrine to things in general. The clear incoherency that Plato and Aristotle find in Heraclitus's alleged flux doctrine does not appear if *πάντα χωρεῖ* denotes merely flux in some sense (i.e. material change), for, of course, it's seems very reasonable that the things of the cosmos are always changing in some respect (material, aging, locomotion). So, to establish the alleged critique of Heraclitus's philosophy, it seems to me that Plato intends *πάντα χωρεῖ* to refer to flux in all regards.

¹⁴ In the Diels-Kranz edition, there are more river fragments. However, more recent editions have excluded the other fragments in virtue of their inauthenticity. For a complete picture of the original fragment and its alleged progression, see Kirk, 1954, p. 375. Also see Graham, 2019.

B12: ποταμοῖσι τοῖσιν αὐτοῖσιν ἐμβαίνουσιν ἕτερα καὶ ἕτερα ὕδατα ἐπιρρεῖ.
Upon those who step into the same rivers, different and different waters flow.

It's not immediately clear why this fragment commits Heraclitus to a flux doctrine. In fact, it might be reasonably argued that this fragment denotes the polar opposites view – specifically, that the river fragment deals with the problem of identity and continuity over material change or time.¹⁵ However, scholars have convincingly identified how this doctrine came to be attributed to Heraclitus. Kirk, for instance, has traced this doctrine to Plato's interpretation of the fragment in the *Cratylus* (402a4-6):¹⁶

λέγει που Ἡράκλειτος ὅτι ‘πάντα χωρεῖ καὶ οὐδὲν μένει,’ καὶ ποταμοῦ ῥοῆ ἀπεικά ζων τὰ ὄντα λέγει ὡς ‘δις ἐς τὸν αὐτὸν ποταμὸν οὐκ ἂν ἐμβαίης.’
Heraclitus, I believe, says that all things are in motion (πάντα χωρεῖ) and nothing stays still, and comparing existing things to the flow of a river, he says you could not step twice into the same river.¹⁷

¹⁵ See Mackenzie, who argues that we must qualify each paradoxical statement (1988). In this sense, Heraclitus uses a unique pedagogical technique to illuminate a much deeper insight than the blatant violations of the law of non-contradiction. To me, one of these insights seems to be some notion of an underlying substance. We might say, for instance, the material parts of some thing changes, but we continue to hold onto the notion of the same river. I might further note that if Heraclitus did posit an underlying subject by which entities stay the same through material change over time, the flux doctrine cannot be assigned, nor were Plato and Aristotle's critiques of Heraclitus warranted.

¹⁶ 1951b.

¹⁷ Kirk offers a plausible manner by which Plato wrongly assigns Heraclitus the flux doctrine. The confusion in Plato's *Cratylus* comes from the conflation of Heraclitus's alleged theory of flux with Socrates's attempt to show that the Forms are unchanging. In fact, Kirk writes, “it is *Socrates* who introduces the Heraclitean idea of flux...[Cratylus] accepts the idea only because he has been misled by Socrates into thinking that it supports his own theory about names” (1951b, p. 227). The flux doctrine, consequently, will persist throughout both Plato and Aristotle's corpus, but is likely wrong. This might be because Plato misinterpreted the different and different (ἕτερα καὶ ἕτερα) waters to be a universally assigned command to change of all things. Rather, in B 12, the repetition of the term “different” (ἕτερα) must merely denote the irregular flow of the waters (Kirk, 1951a, p. 36) and should not be universally assigned to things in Heraclitus's cosmos. I further note that this confusion might be because of Heraclitus's implicit notion of relativism. For instance, in B59, when the fragment is qualified with *doxa*, it becomes clear that the road is up from one perspective and down from the other. As we will see later, in B61, seawater is pure for fish, but foul for humans. If Plato understood Heraclitus as thinking that all things are relative, including truth, we gain a certain

Here, before giving an indirect quote of B12 (Kirk, 1951a & 1954),¹⁸ Plato commits Heraclitus to a deeper claim: all things flow and nothing stays still. Plato's conclusion is consistent with the discussion of the doctrine of flux in the *Theaetetus*, by which sensible things are always in motion and, thus, unknowable (Irwin, 1977, p. 1).¹⁹ This is because if everything is in constant change, we cannot identify nor describe it.²⁰ Socrates says of

contextualization that coincides with the *Theaetetus* and *Cratylus*. But, of course, the applications of this doctrine to Heraclitus are inconsistent with the rest of his work. Thus, I follow Kirk: "The river fragments, then, seem to exemplify not the constancy of change - for there is no hint that all things resemble rivers- but the regularity of natural change in one particular manifestation," (1951a, p. 37).

¹⁸ I agree with Kirk that it cannot be the case that Plato gives a direct quote (1951a & 1954).

¹⁹ Irwin bases this claim on evidence given to us by Aristotle (*Metaphysics*, 987a32-b7). Aristotle argued that Plato's rejection of the alleged Heraclitean flux doctrine (1078b9-10) leads to the principle of separation in the middle-dialogues on the Theory of Forms. The principle of separation is as follows: "The F [form] is itself by itself, at least in the sense of being separate from, and hence not identical with, the things that partake of it" (Rickless, 2020). In other words, Aristotle believed that the doctrine of flux – by which it seems that sensible particulars cannot be known – is the motivation for Plato's postulation of the Forms as separated from the sensible particulars. This is because if the Forms are separated, they are stable, by which we can consequently come to *know* them.

²⁰ Reshotko presents the following argument, highlighting a problematic conclusion for the alleged doctrine of flux in Heraclitus's work (1994, p. 146):

1. There are two kinds of motion: Alteration and motion in space (181d)
2. All things move in all [both] kinds of motion (181e)
3. If all things moved in only one way [in space] and did not undergo alteration, we could perhaps say what/how those mobbing things were [but, since they do undergo alteration, we can't] (182c)
4. Since not even this is stable, that thing which is in flux flows white, but it changes, so that even it itself – the whiteness – is in flux and changes into another color, so that it might not in this way be pronounced stable, it is impossible to call this color some name and still speak correctly (182d)
5. Then we cannot give a name to anything, for while we are speaking it slips away – as it is in flux (182d)
6. As a result, seeing is no more seeing than not seeing. Hearing is no more hearing than not hearing (182e)
7. If knowledge is perception, then knowledge is no more knowledge than not knowledge (182e)

the constituents of Heraclitus's world: "being in flux, it is always quietly slipping away as you speak" (*Theaetetus*, 182d4-5).²¹

If we connect Plato's indirect quote of the river fragment in the *Cratylus* with the discussion on knowledge in the *Theaetetus*, it makes sense to say that, for Plato, it is impossible to step twice into the same river – specifically, because everything about the river has changed and our attempts at identifying it fail. It seems clear to me that Heraclitus becomes associated with the doctrine of flux *in virtue* of Plato's interpretation of the river fragment – and more specifically, the phrase, "πάντα χωρεῖ".

The attribution of the flux doctrine to Heraclitus's philosophy had important implications for the historical solutions to the problem of unity. Plato's solution to the problem of unity (applying Heraclitus's flux doctrine to the problem of unity) must go something like this:

1. All sensible things are in a state of flux – i.e. moving in every way (πάντα χωρεῖ)
2. Some sensible thing *x* is becoming hot (from 1)
3. Some sensible thing *x* is becoming cold (from 1)
4. Some thing *x* is becoming both hot and cold (from 2 & 3)
5. All things are becoming polar opposites (repeat premises 2-4 for any sensible thing)
6. Thus, "All things are one" refers to the unified identity of opposites

In virtue of the alleged flux doctrine, by which we cannot know anything, we may, with equal epistemic validity, assert that a thing is (becoming) both hot and cold. This is

-
8. Then if all things are in motion, nothing is ever thus or not thus, for that implies stability: The only way to describe anything is to use some indefinite term, like "nohow"

Note that we can ignore premise 7, for it is not quite apparent that Heraclitus held this view, and still conclude that things are never thus or not thus.

²¹ It is noteworthy that Socrates asks Theodorus whether things both move and alter (*Theaetetus*, 182c7-8). This question clearly highlights the doctrine of flux, in that it describes forms of change, rather than one form of change.

because we cannot differentiate between the validity of premise 2 & 3. Clearly, if Plato interprets Heraclitus as holding the doctrine of flux, Heraclitus's philosophy becomes incoherent. It cannot be the case that things are in a constant state of flux, by which they are becoming *both* polar opposites.²² While this view challenges the validity of Heraclitus's philosophy, it does provide a solution to the problem of unity: All things are one in the sense that all things are becoming everything.

Aristotle seems to develop Plato's view further in a criticism of Heraclitus. He writes in two famous passages in the *Metaphysics* (1012a24-26) & (1005b24-25):

ἔοικε δ' ὁ μὲν Ἡρακλείτου λόγος, λέγων πάντα εἶναι καὶ μὴ εἶναι, ἅπαντα ἀληθῆ ποιεῖν,... ὥστ' οὐδὲν εἰπεῖν ἀληθές.

The doctrine of Heraclitus, which says that everything is and is not, seems to make all things true... so no statement is true.

ἀδύνατον γὰρ ὄντινοῦν ταῦτόν ὑπολαμβάνειν εἶναι καὶ μὴ εἶναι, καθάπερ τινὲς οἴονται λέγειν Ἡράκλειτον

For it is impossible for anyone to suppose that the same thing is and is not, as some imagine that Heraclitus says.

Aristotle takes the flux thesis from Plato's *Cratylus* and develops a critique presented by Plato's in the *Theaetetus*. Given the doctrine of flux, we cannot come to know anything. But Aristotle assigns to Heraclitus a slightly different doctrine. While for Plato, things are in the realm of becoming, Aristotle views Heraclitus's doctrine of flux in relation to his own substance-metaphysic. Aristotle seems to suggest that, "all things are one" because all substances instantiate both what is and what is not. That is, all substances instantiate all sets of contrary opposites. And, of course, a substance cannot instantiate both polar

²² Reshotko argues that, if Plato represented Heraclitus's alleged doctrine of flux in this manner, Plato has not done his due diligence in representing his true philosophy, for "the radical doctrine is one of the least plausible interpretations of Heraclitean flux available" (1994, p. 140). However, as I've shown in this section, it seems to me clear that Plato's postulation of Heraclitus doctrine of flux *as* radical is a necessary commitment.

opposites. This is because in Aristotle's substance metaphysics, when a substance instantiates a property, it is precluded from instantiating its opposite, at least at the same time.

So, both Plato and Aristotle's solutions to the problem of unity follow from their attribution of the flux doctrine. Problematically, their solution makes Heraclitus's philosophy incoherent.²³ If we read Heraclitus in this way, he breaks the law of non-contradiction: it cannot be the case that the road is (and/or becoming) both straight and crooked (B59); nor can upness and downness be assigned to the same road (B60), or day and night be the same phenomena (B57). In an unqualified sense, the straightness of the road *precludes* it from being crooked; if the road leads up, the same road cannot also lead down; and if it is day, it cannot be night. Thus, while it seems that Plato and Aristotle were critical of Heraclitus, the alleged doctrine to which they commit Heraclitus does provide a solution to the problem of unity:

Identity of Opposites (blended): "all things are one" in virtue of things simultaneously expressing contrary properties.

I argue that Barnes and the Ancient's criticisms are uncharitable to a fault. Firstly, there is no evidence within Heraclitus's corpus that he held a doctrine of flux.²⁴ Kirk convincingly shows that the doctrine of flux is in virtue of Plato's misinterpretation of B12 (1951a & 1954), and not than based on evidence presented in any of the fragments. And as I noted earlier, it is not immediately clear why the doctrine of flux is assigned to

²³ Barnes, in a more contemporary commentary on the pre-Socratics, shares Plato's and Aristotle's criticism. In fact, he labels Heraclitus's doctrine as a "flagrant violation of the Law of Contradiction; hence [Heraclitus's view] is false, necessarily false, and false in a trivial and tedious manner" (1982, p. 79).

²⁴ One might note that it's possible that Plato had more of Heraclitus's work than we currently do. I address this later in the chapter.

Heraclitus from B12. It seems, then, that Plato misrepresented Heraclitus as a dialectical tool for the development of his own ideas – this is especially clear in the *Theaetetus*. In light of this, I further argue that later commentators who assigned the doctrine of flux to Heraclitus have relied too much on Plato’s interpretation.²⁵

Secondly, as a brief response to Aristotle’s criticism that Heraclitus believed that things instantiated both polar opposites, it seems to me that Heraclitus’s obscurity is purposeful. This might be in virtue of some pedagogical technique to bring about some deeper philosophical insight.²⁶ In his reconstruction of the Ancient’s critiques of Heraclitus, Barnes – who shares Aristotle’s view – blatantly dismisses the qualifying statements that clearly move away from the doctrine of flux.²⁷ Consider the following fragments:

B61: θάλασσα ὕδωρ καθαρώτατον καὶ μιαρώτατον. ἰχθύσι μὲν πότιμον καὶ σωτήριον, ἀνθρώποις δὲ ἄποτον καὶ ὀλέθριον.
Sea is the purest and most foul water: for fish drinkable and healthy, for men undrinkable and harmful.

B9: ὄνουσ' ἄν' ἐλέσθαι μᾶλλον ἢ χρυσόν
Asses prefer garbage to gold.

I take it that from B61 we are not meant to take Heraclitus’s commitment to contrary properties at face value. Rather, the first clause sets up a deeper philosophical insight in the second. While on the one hand, the sea instantiates both opposite contrarities, seemingly breaking the law of contradiction, Heraclitus does so to bring about a

²⁵ See especially Kirk, 1954, p. 375, where he demonstrates how Plato’s interpretation influenced historical views on Heraclitus.

²⁶ Mackenzie (1988) shares a similar view, as does Graham (2019).

²⁷ If they had similar access to Heraclitus’s corpus, we might also assign this critique to Plato and Aristotle. I might note that I am of the opinion that this is the case (more on this later).

noticeable point: Some opposing values (opposites) are respondent-dependent (Mackenzie, 1988, p. 14; Neels, forthcoming, p. 8).²⁸ B9 seems to suggest this, too. While men prefer gold, asses would pick garbage.²⁹ So, if we take B61 in this qualified sense, the value of a thing is dependent on the respondent. I follow Mackenzie that B61 seems to offer a formula for resolving apparent contradictions and paradoxes (1988).³⁰ Only if we ignore the qualifying fragments can we truly hold on to notion that Heraclitus violated the law of non-contradiction out of ignorance.³¹ Thus, on these grounds, I submit we can rule out the uncharitable critiques from Plato, Aristotle and Barnes.

²⁸ A more detailed discussion on the nature of opposites go beyond the scope of this project. For the interested reader, see Neels (2018, 2021 & forthcoming).

²⁹ This fragment is given to us by Aristotle in the *Metaphysics*, 1176a4-6. The surrounding texts help support this notion that Heraclitus was aware of the nature of opposites: “For these is a different pleasure of a horse and a dog and a man, just like Heraclitus says that ‘Asses prefer garbage to gold’; for food is pleasanter to donkeys than gold”.

³⁰ I’ve touched on this a little already. It seems that we can resolve all the apparent violations of the laws of non-contradiction if we follow the formula in B61 and apply doxa to Heraclitus’s paradoxes.

³¹ I might note that there are more *implicit* reasons for rejecting the view attributed to Heraclitus by Plato, Aristotle and Barnes. First, it seems problematic to commit Heraclitus to such an incoherent philosophy. Should we really believe that Heraclitus, in an unqualified manner, proposed that things instantiate both opposite properties at the same time? I think not. In fact, Heraclitus was clearly committed to the search of the nature of reality. Consider the following fragments:

B123: φύσις κρύπτεσθαι φιλεῖ
Nature loves to hide; and

B47: μὴ εἰκῆ περὶ τῶν μεγίστων συμβαλλόμεθα

We must not concur casually about the most important matters.

The fact that the nature of things loves to hide, alongside his self-proclaimed focus on dealing with the most important matters must mean that Heraclitus did not take his project lightly. Secondly, he was hyper-critical of his predecessors (B40, B42, B56, B57, B80 & B105). It would be amiss of him to be so critical of his predecessors while presenting such a flawed philosophy of his own. Thirdly, his philosophy was well-received in the Ionian world. While I think the validity of these implicit reasons are likely unverifiable to the point where it becomes strong evidence, it makes sense to assert that

One might ask, *why* is our current analysis of Heraclitus so different from that of the Ancient world? Or, in other words, how can we so confidently rule out an interpretation that was adopted by the key thinkers of the Western world? It seems to me that there are three different approaches to this question. First, we might appeal to the possibility that we have lost textual evidence from Heraclitus's original work. This may be either in virtue of not having the original text, or due to the fact that Heraclitus's interpreters misquoted or misrepresented his philosophy. The conclusion of this approach, of course, is that we ought to take the interpretations of Plato and Aristotle seriously.³² This would lead us to the problematic conclusion that Heraclitus's philosophy is incoherent. If this is the case, we are wrong in generously offering alternative views that might try to save Heraclitus from his very own problematic doctrine.

However, I think it is unlikely that there existed further textual evidence that would commit Heraclitus to this problematic worldview. Plato and Aristotle give us much of the textual evidence that we have of Heraclitus. Why would they (or anyone else) exclude the fragments that would have blatantly exposed Heraclitus's work as incoherent? The doctrine of flux is only attributed to Heraclitus in virtue of Plato's misrepresentation of the river fragments. No other fragment alludes to this doctrine. It seems more likely that these thinkers quoted Heraclitus's most problematic statements so that they could illuminate the problems. Hence, we are probably not missing valuable information.

we have strong implicit evidence for holding to Heraclitus's philosophy, in which his work is not fundamentally flawed.

³² This is, of course, under the assumption that they are the ones who had the true works of Heraclitus and understood the message conveyed by Heraclitus.

Second, we might appeal to the possibility that we currently have more of Heraclitus's work now than the Ancients. Or, in other words, while Plato and Aristotle only had in their possession a few fragments of Heraclitus, we have his entire corpus. This seems unlikely: Both Aristotle and Sextus claim that fragment B1 is the opening to Heraclitus's book, and Diogenes Laertius says that his book is made up of three parts. This surely indicates that they had true copies of his entire corpus. Furthermore, if we are to believe Diogenes Laertius, Euripides gives Socrates Heraclitus's treatise (σύγγραμμα) (2. 22), to which Socrates is said to have responded to in a very Heraclitean fashion: "What I understand is good; what I don't understand is also good – I think. But one would have to be a Delian diver".³³ Of course, this is a play on Heraclitus's paradoxical fragments and such a play on words seems to suggest that Socrates clearly understood enough of Heraclitus's philosophy to respond in a Heraclitean manner. I submit that this offers further evidence that Socrates (or Plato) and Aristotle did, in fact, have Heraclitus's complete corpus.

Thirdly, we must consider the fact that Plato, Aristotle and Barnes misread Heraclitus. There is further implicit evidence for this view: In the *Symposium*, Socrates tells Euripides that Heraclitus's mode of expression leaves much to be desired (187a3-4); Aristotle admits difficulty with Heraclitus's syntax (*Rhetoric*, 1407b6-7); Diogenes Laertius writes that one ought not hasten reading Heraclitus book, since "it's path is not easy to traverse" (9.16); Cicero suggests, in virtue of his obscure writing, that Heraclitus did not want to be understood (3. 14. 35); and Graham presents a convincing critique of

³³ The claim that one would have to be a Delian diver is supposed to represent the difficulty in understanding Heraclitus's philosophy.

Barnes's Ancient account of Heraclitus's solution to the problem of unity (2006, V). In virtue of Heraclitus's unique worldview and his difficult mode of expression, I submit that the third approach best explains the distinction between ancient and contemporary readings. This, of course, comes with a desirable implication: It seems that we can reject the Ancient's account of Heraclitus as an incoherent philosopher and attempt to find a more accurate solution to the problem of unity – preferably, one that holds Heraclitus to a historically accurate, coherent philosophy.

HISTORICAL SOLUTIONS TO THE PROBLEM OF UNITY – THE UNITY OF OPPOSITES

The mainline contemporary solution to the Problem of Unity is the Unity of Opposites doctrine, by which pairs of opposites are somehow united and can describe things and phenomena in the cosmos. This unity of opposites thesis is best exemplified by Kirk, who identifies four manners in which opposites are conceptually connected (1954):

(i) the same thing is regarded in opposite ways by different types of observer, and has opposite effects on different subjects (p. 73); (ii) The same observer may ascribe opposing attributes to the same object... because different applications or aspects of the object are being considered (p. 87); (iii) Opposites exist as complementary poles in human judgment (p. 123); (iv) and opposites are the same because they invariably succeed each other (p. 134).

The standard Unity of Opposites theorists would say that B1 and B50 refer to a fundamental connection (unity) between opposites. We can represent this a doctrine that attempts to solve the problem of unity as follows:

Unity of Opposites: “all things are one” through the connection between opposites.³⁴

For the Unity of Opposite theorists, the *logos* is instrumental in recognizing the unity of opposites within Heraclitus’s cosmos. That is, we must understand the *logos* before we come to understand that all things are one.³⁵

³⁴ In the Unity of Opposites doctrine, “[the opposites] aren’t simply two parts that come together to form a whole, but configure a reality that is distinctly superior to the sum of their parts,” (Bernabé, 2009, p. 119). Translation mine: “[Los polos] no son simplemente dos partes que se suman para formar un todo, sino que ambos configuran una realidad superior distinta a la suma de sus partes”.

³⁵ I would also like to highlight one key conclusion of the unity of opposites that will be helpful to the following chapters: if opposites describe things in the cosmos, then there is some underlying thing or phenomena which these opposites describe.³⁵ That is, while things underlie change (Mackenzie, 1988, p. 16) and are concrete in this sense, opposites are context-dependent (Neels, forthcoming, p. 8), and further depend on the instantiation of a thing/phenomenon for their existence (Mourelatos, 1973, p. 35). In whichever

But, does the Unity of Opposites doctrine solve the problem of unity? I do not think so. The Unity of Opposites doctrine does very little in explaining how and why the unity is as an important aspect of Heraclitus's philosophy. In fact, I share Neels's criticism that "the central issue with the [Unity of Opposites] is that it reduces Heraclitus' interesting and varied statements about opposites to the single, banal thesis that opposites are essentially connected" (forthcoming, p. 2).³⁶ Furthermore, the Unity of Opposites doctrine can also only explain how *conceptual* entities are connected. That is, it explains how *opposites* are somehow related to each other. But, recalling that opposites are not things in Heraclitus's cosmos,³⁷ it cannot explain how the *things-as-entities* of the cosmos are unified, nor does it adequately address why people ought to agree and be in tune with the *logos*. In light of these theoretical limitations, I submit that there must still be something deeper in Heraclitus's work that is not adequately explained.

manner one explains the unification of opposites in Heraclitus, it follows that opposites turn out to be metaphysically derivative in relation to the things that they inhere. In other words, as I hope to show, the nature of things explain their relative opposites – or, as I will explain in the following chapters, things ground opposites.

³⁶ Neels uses the term "Standard View". I have changed replaced the standard view for the Unity of Opposites for relevant context.

³⁷ For Heraclitus's predecessors, opposites such as hot and cold, Day and Night, were tangible entities that one could touch. So, for instance, if it was a particularly hot day, there would be a lot of hot *things* floating around. It is noteworthy that Heraclitus was the first philosopher to identify that opposites and/or elements were not tangible *things*, but rather, mere properties of **underlying** things (Mourelatos, 1973). It also seems to me that Mourelatos's argument is consistent with a quasi-Aristotelian substance theory, by which changes are constant, but an underlying thing persists.

HISTORICAL SOLUTIONS TO THE PROBLEM OF UNITY - TRANSFORMATIONAL EQUIVALENCE

As we've seen, Graham has been influential in rejecting the historical doctrines that fail to solve Heraclitus's problem of unity. In light of this, Graham, too, assigns Heraclitus a positive doctrine with the attempt of solving the problem of unity. Graham argues that the unity in Heraclitus is a principle of transformation equivalence, by which "all things are one" in virtue of things and properties being able to transform into one another (2006). Unity, thus, is merely an alleged connection between two entities or instantiations of properties at different times.

We can see this view developed through an analysis of three key fragments, one of which deals with the elements, and the others, seemingly referring to things. Consider the following fragments:

B76: πυρὸς θάνατος ἀέρι γένεσις, καὶ ἀέρος θάνατος ὕδατι γένεσις, γῆς θάνατος ὕδωρ γενέσθαι καὶ ὕδατος θάνατος ἀέρα γενέσθαι καὶ ἀέρος πῦρ καὶ ἔμπαλιν.³⁸
The death of fire is the birth of air, and the death of air the birth of water. It is death for earth to become water, and death for water to become air, and death for air to become fire and contrariwise.

B126: τὰ ψυχρὰ θέρεται, θερμὸν ψύχεται, ὑγρὸν αὐαίνεται, καρφαλέον νοτίζεται
Cold things warm up, hot things cool off, wet things become dry, dry things become moist.³⁹

³⁸ This is the combination of 76a, b & c. It may be argued that these fragments represent either a four-element ontology, or a three-element ontology (Graham, 2006, p. 124n32). It is not my aim to endorse one of these theses. Rather, I merely wish to show that elements turn into one another.

³⁹ Walter Brocker gives a different translation of τὰ ψυχρὰ. Brocker favours the Cold (1956, p. 382). But this seems anachronistic. It's unlikely that Heraclitus would have used such such an abstract concept. In fact, the Greek supports "cold things" - This is because the article 'τὰ' is in the plural and denotes a physical thing. However, θερμὸν, ὑγρὸν and καρφαλέον change to the singular and lose their articles. Here, I submit that we must take the same approach as seen in the application of B61, by which the first clause of the fragment represents the formula for how to treat the rest of the clauses.

B88: ταὐτό τ' ἔνι ζῶν καὶ τεθνηκὸς καὶ [τὸ] ἐγρηγορὸς καὶ καθεῦδον καὶ νέον καὶ γηραιόν· τάδε γὰρ μεταπεσόντα ἐκεῖνά ἐστι κάκεῖνα πάλιν μεταπεσόντα ταῦτα
As the same things in us are living and dead, waking and sleeping, and young and old. For these things having changed around are those, and those in turn having changed around are these.⁴⁰

In B76, it is clear that Heraclitus intends for the elements to turn into one another; and in B126, certain things turn into another. Consider, for instance, if Socrates were to leave Athens and go to the desert. It follows that he would warm up. It is noteworthy that, while Heraclitus argues that elements turn into one another, he intends for there to be a subject for the transformation of opposite properties. This is because of the definite article “τᾶ”, which denotes that there must be some *thing* that is cold.⁴¹ This entity, then, must be the subject of the properties. Similarly, on the other hand, if Socrates were to then go to the mountains, he would cool off. Notable is the continuity of a subject that undergoes change.

Graham suggests that B88 gives us the process by which opposites are connected. In fact, he writes that, “contrary qualities are found in us ‘as the same thing’” (2019). He further mentions that, “[things] do not possess incompatible properties at the same time, but at different times” (2019).⁴² Graham seems to suggest that this principle of

⁴⁰ Kirk identifies that ἔνι must mean that the opposites are “present” (1954, p. 137). However, this cannot be the case in the sense that opposites constitute the material constituency of things in Heraclitus’s cosmos, for this would commit him to a weird bundle theory or a naïve metaphysics. Rather, it must merely mean that the opposite instantiations of things are conceptually present in the ability of the thing in which it inheres. B88 is unique in that he justifies his generalization in the first clause with an explanation in the second. In no other fragment does he do this (Kirk, 1954, p. 141). Graham will use this justification as key evidence for his doctrine of transformational equivalence.

⁴¹ It is noteworthy that Heraclitus uses a definite article only in the first clause of the fragment. As is common in Heraclitus’s writing style, this article acts a model for the rest of the sentence, and explains the missing articles in the following clauses.

⁴² I’ve replaced Graham’s “subjects” with “things” for consistency.

transformational equivalence accounts for both material change and change in properties. He writes, “X is transformationally equivalent to Y just in case X can turn into Y and Y can turn into X” (2006, p. 123). This clearly applies to B76 and B126; and furthermore, does not violate some law of non-contradiction. He concludes,

Opposites are the same just in the sense that opposite things and stuffs turn into one another... They are, moreover, quantitatively equivalent in the sense described, by bearing a determinate ratio to one another. To say that opposites are the same is simply to say that they are transformationally equivalent. (2006, p. 129)

That is, Heraclitus’s appeal to the unity of all things is an appeal to how things and elements turn into one another. Graham’s solution to the problem of unity has many theoretical benefits: It holds to the coherency of Heraclitus’s thought, while still providing a unique insight into the development of Western thought.⁴³

In a forthcoming article, Neels has pointed out the theoretical limitations for Graham’s view. While the principle of transformational equivalence can account for fragments B76 and B126, other fragments preclude Graham’s principle of transformational equivalence. Consider again the following fragment:

B61: Sea is the purest and most foul water: for fish drinkable and healthy, for men undrinkable and harmful.

⁴³ Graham assigns to Heraclitus what seems like a world-view compatible with the unique status of the *logos*. He concludes with the following Lawlike Material Flux (LMF):

The basic substances of the world are constantly undergoing reciprocal transformation in a lawlike way: i. Each portion of a given basic substance that turns into another substance is replaced by an equivalent portion from another basic substance which turns into the first substance. ii. Hence the total amount of each basic substance in the world remains constant. (Graham, 2006, p. 137)

This view would ultimately be seen in Aristotle and aligns with some form of the law of conservation.

Here, Graham's thesis does not account for the opposite values of the seawater at the same time. That is, it is not the case that polluted seawater turns into pure seawater, but rather, simultaneously, seawater is pure and foul. As Neels correctly points out, this fragment has nothing to do with transformations (forthcoming, p. 11).

We can briefly highlight the problem with Graham's thesis schematically. He suggests that between substances S_1 and S_2 , there is a qualitative and quantitative transformation q_1 and q_2 . We can represent this as follows:

Transformational Equivalence: $S_1 q_1 \leftrightarrow S_2 q_2$ (Graham, 2006, p. 126).

However, this is clearly not the case for B61. Rather, it seems to me that one substance – the sea – exerts two distinct properties - pureness and foulness (q_1 and q_2). We can represent this as follows:

Non-Transformational Equivalence in B61: $S_1 q_1 \& S_1 q_2$.

Heraclitus's acknowledgment of the relativistic notion of seawater suggests something distinct from transformational equivalence.⁴⁴ In fact, I submit that we must reject Graham's solution to the problem of unity in virtue of its textual inconsistency. In what follows, I argue that Heraclitus envisioned a much deeper sense of unity – specifically, I argue that Heraclitus maintained a connection between things (not only opposites). In the following sections, I provide a novel solution to Heraclitus's Problem of Unity which better contextualizes his unique use of the term, "logos".

⁴⁴ See Neels, forthcoming.

CHAPTER II

PRIORITY MONISM

Jonathan Schaffer has recently defended a contemporary priority monism (2010a). Contrary to existence monism, by which the cosmos is one concrete object, priority monism is the view that the cosmos is the sole metaphysically basic entity and the metaphysical ground for its proper parts (Schaffer, 2010b, p. 342). Metaphysical grounding, or simply ‘grounding’, is an explanatory relation by which one entity (or fact) holds *in virtue* of another, denoting metaphysical priority. . So, when Schaffer says that the cosmos is the sole metaphysically basic entity, he means that the cosmos is not grounded in some other entity and that all other entities hold *in virtue* of it. In this sense, the cosmos is the foundation of metaphysical explanation.

I argue along similar lines that, for Heraclitus, the proper parts of the cosmos are the things in which opposites inhere, and that the proper parts are grounded in the cosmos. As such, Heraclitus’s claim that “all things are one,” indicates the explanatory fundamentality of the cosmos. We have good textual reasons to attribute this view to Heraclitus and doing so makes better sense of cosmic unity than the alternatives in the literature. Of course, it is anachronistic to interpret Heraclitus as having a formal concept

of grounding.⁴⁵ Yet, this doesn't mean that Heraclitus did not have an implicit notion of the fundamentality of the cosmos – or so I'll argue.

Before continuing, it will be helpful to clarify what I mean by metaphysical grounding when it comes to Heraclitus. While it is clear Heraclitus was interested in metaphysical explanations,⁴⁶ there is no evidence to suggest that Heraclitus distinguished between two contemporary notions of grounding: (i) non-factive grounding or ontological dependence, which is related to a real-world, object-object relation; and (ii) factive grounding or metaphysical dependence, which is related to a fact-fact relation which tracks the real-world relation.⁴⁷ So, it makes the most sense to interpret Heraclitus as holding a strong unification principle:⁴⁸ Metaphysical explanation is ontological dependence, by which entities (rather than facts) and their relations explain other entities.⁴⁹ This is for the simple reason that Heraclitus dealt with entities and their properties (opposites) rather than facts.

I might note that just because Heraclitus approached metaphysical explanation in this manner, this doesn't necessarily entail that unificationism is the correct approach in contemporary metaphysics. In fact, there is much controversy about whether ontological

⁴⁵ It is noteworthy, however, that some scholars argue that many Pre-Socratic philosophers had implicit notions of metaphysical grounding (Neels, forthcoming).

⁴⁶ See B1, where Heraclitus's goal is to distinguish the nature ($\phi\upsilon\sigma\iota\nu$) of each thing. For an in-depth analysis of Heraclitus's interest in metaphysical explanation, see (Neels, forthcoming).

⁴⁷ Ontological dependence is identical to grounding for Schaffer, but is rejected by Koslicki, Bernstein and Schnieder (among others). Instead, Schaffer's critics propose a factual form of grounding, by which facts ground other facts.

⁴⁸ Strong unification is also seen in Schnieder's analysis of Jonathan Schaffer's formulation of grounding: "Grounding just is existential (ontological) dependence" (2020, p. 101).

⁴⁹ Neels also endorses the view that grounding and ontological dependence run akin in Heraclitus' cosmos, although in a weaker sense (2021, p. 45 & n52).

dependence should be taken seriously as metaphysical grounding (see most notably, Koslicki, 2016; Bernstein, 2016; Schnieder, 2020). For this reason, I will attempt to distinguish between the different forms of ontological dependence. In § 2a & § 3, I consider existential dependence, which deals with fundamentality in terms of existence. In § 2b, I consider essential dependence, which deals with the notion of fundamentality in terms of essences. In doing so, I show that Heraclitus's notion of metaphysical explanation corresponds to all explanatory relations in the priority monist model.

I propose that we can approach the explanatory fundamentality of the cosmos from two different starting points: Top-down and bottom-up. By top-down, I mean that we can show Heraclitus's cosmos to be metaphysically basic through an examination of the nature of the cosmos (§ 2a & §2b). Secondly, by bottom-up, I mean that we can show the proper parts of the cosmos as metaphysically derivative through an analysis of the nature of the parts (§ 3).

EXISTENTIAL DEPENDENCE AND FUNDAMENTALITY

So, let's consider the fundamental nature of Heraclitus's cosmos. We can first show this through existential fundamentality – a notion of ontological fundamentality.⁵⁰ Schaffer writes, “An entity x is fundamental if nothing grounds x ” (2009a, p. 373).⁵¹ With this in mind, consider B30:

B30: κόσμον τόν[δε],⁵² αὐτὸν ἀπάντων, οὔτε τις θεῶν οὔτε ἀνθρώπων ἐποίησεν, ἀλλ' ἦν ἀεὶ καὶ ἔστιν καὶ ἔσται πῦρ ἀείζων, ἀπτόμενον μέτρα καὶ ἀποσβεννύμενον μέτρα.

⁵⁰ It is common to use ontological and existential dependence interchangeably. However, this can become a problematic amalgamation. In fact, existential dependence is just one of many subsets of ontological dependence, alongside forms of essential dependence.

⁵¹ In this case: an entity x is existentially fundamental if nothing existentially grounds x .

⁵² Scholars disagree on how B30 should be translated. The disagreement lies in the acceptance of κόσμος as a term that could conceivably have denoted some form of worldliness. Kirk and Laks & Most translate κόσμον as “world-order” (1954, p. 307; 2016, 179). However, Kahn argues that κόσμον merely denotes order – specifically, the ordering of troops. The problems arise when we consider τόν[δε] in conjunction with ἀπτόμενον, which can either mean “all things” or “everyone” (Kahn, 1979, p. 45). So, we could translate the start of B30 as either: The ordering, the same for all [people]; or: this world-order, the same for all (things). Of course, the meaning of these translations varies immensely. Kahn's non-worldly translation of κόσμον falls much more in line with its historical use. That is, prior to Heraclitus's use of the word, κόσμον denoted a ‘good-order’, adornment or disciplined troops (Kahn, 1979, pp. 132-33; Kirk, 1954, pp. 312-17). However, it is noteworthy that Heraclitus is likely the first to use κόσμος to denote a world-order. I take it that, for Heraclitus, κόσμον must refer to something more than merely ‘order’. I favor this translation for three reasons: Firstly, Kirk clearly identifies historically relevant uses of κόσμον that seem to coincide with a tangible, cosmic whole – most importantly, ‘ordered-whole’ (1954, p. 314). Second, Heraclitus is infamous for using terms in a novel manner. Of course, this claim is not without controversy (see the charge of anachronism in Heraclitus scholarship), but is consistent with widely-accepted views regarding Heraclitus's novel use of the word λόγος (Johnstone, 2014). Thirdly, even though Kahn argues that the fragment may be paraphrased (1979, p. 104), it is clear that in B89 κόσμον clearly refers to a physical world. The issue of paraphrasing can easily be resolved once we re-establish the first clause of the fragment with B30. So, it is likely that Heraclitus used κόσμον to denote worldliness. But, κόσμον does not lose its historical value: It is still the case that κόσμον denotes order. The concept of order changes from the ordering of troops to the order of the cosmos. In this sense, Heraclitus used κόσμον in a novel manner while keeping its historical connotations. The result being an ordered cosmos (world-order).

This world-order, the same for all, none of the gods or humans made it, but it always was and is and will be an ever-living fire, being kindled in measures and in measures being put out.

In B30, Heraclitus explicitly tells us that no god or man created the cosmos. The absence of a creator god excludes the historically predominant divinities from taking ontological priority. In this sense, it is clear that Heraclitus rejected a cosmogony (Kirk, 1954, p. 319-20; Gregory, 2007).⁵³ In light of Heraclitus's rejection of a cosmogony, Kahn proposes: "insofar as the *kosmos* is made, it is self-made" (1979, p. 134). However, Kahn's interpretation does not quite do justice to Heraclitus's view. Heraclitus does not say the

⁵³ It's possible that Heraclitus's motivation for positing an eternal cosmos is as a response to Anaximander's problematic *creatio ex apeiron*, by which a seemingly non-physical entity brings into existence physical entities. In this sense, *creatio ex apeiron* is aligned with the problematic *creatio ex nihilo*. Heraclitus, realizing that such an endeavor is bound to fail, thus posits an eternal cosmos, avoiding any notion of cosmogony. Another possible motivation is that Heraclitus aligns with other late Pre-Socratic philosophers in respecting Parmenidean being. Thanks to Dr. Ryan Brown for the development of this second thought. This motivation is under the controversial assumption that Heraclitus wrote during or after Parmenides. For a discussion on the controversy, see Graham, 2006, p. 27-28.

cosmos is self-made,⁵⁴ but rather, the cosmos always has been, is, and always will be. In other words, it must be the case that Heraclitus's cosmos is eternal.⁵⁵

⁵⁴ Post-Aristotle, Heraclitus was interpreted as having a cyclical cosmogony, “where the kosmos is generated out of fire, and degenerates into fire again, in a cycle without beginning or end” (Gregory, 2007, p. 57). This view was attributed to Heraclitus by the Stoics, and is supported by the following fragments:

B31a & b: πυρὸς τροπαὶ πρῶτον θάλασσα, θαλάσσης δὲ τὸ μὲν ἥμισυ γῆ, τὸ δὲ ἥμισυ πρηστήρ ... θάλασσα διαχέεται καὶ μετρέεται εἰς τὸν αὐτὸν λόγον ὁκοῖος πρόσθεν ἢν ἢ γενέσθαι γῆ

The turnings of fire: First sea, and of sea half is earth, half fireburst... Earth is liquefied as sea and measured into the same proportion as it had before it became earth.

B30: ... ἀπτόμενον μέτρα καὶ ἀποσβεννύμενον μέτρα

...Being kindled in measures and in measures being put out.

These fragments seem to suggest that fire acts as the underlying element for all other elements (perhaps some material monism) and the cause for change. The cosmogonic notion interpreted by the Stoics must be deduced from the everlasting fire, which is kindled in measures and in measures put out (B30). To hold to a cosmogony in Heraclitus, one must postulate that the kindling (ἀπτόμενον) and going out (ἀποσβεννύμενο) in measures refers to some world conflagration (*ekpyrosis*) – by which all things return to a state of fire. This interpretation of Heraclitus, influenced by Aristotle (*De Caelo*, 297b12-17 & *Physics*, 205a1-6) and implemented in Stoic thought, seems to be misguided. Firstly, it clearly contradicts B30, by which a cosmogony is precluded. Secondly, a further lack of evidence is present in Plato, who excludes the possibility of such a cosmogony in (*Sophist*, 242D-E) – see Kirk (1959) and Gregory (2007) for a discussion. Thirdly, we can explain away the kindling and going out in measures (more on this later).

⁵⁵ Alternatively to Heraclitus's cosmos being “eternal”, it's possible to conclude that Heraclitus's cosmos is everlasting. This is because eternity has a common connotation to exist outside of time - atemporality (Stump & Kretzmann, 1981). This is clearly not the case, for the meteorological phenomena within Heraclitus's cosmos happen over time. However, the atemporality of eternity is only apparent after Plato's famous passage in the *Timaeus* (28a-c & 38c-d). For this reason, it's unlikely Heraclitus dealt with the timelessness of eternity. In fact, Heraclitus exclusively uses *aei* (always) to describe divine, eternal entities: In B1, the λόγος holds forever (*aei*), and in B30, πῦρ is always-living (ἀείζωον), and the κόσμον always (*aei*) was, is and will be. In later sections of this paper, it will be shown that Heraclitus's cosmos is divine. I propose that the ‘alwaysness’ of the divine entities is best defined as eternal. So, I submit that it is a safe assumption to agree with Kirk that Heraclitus intends for the cosmos to be eternal (1954, p. 311), but that it does, in fact, exist within space and time where cosmological processes occur.

From the eternality of Heraclitus’s cosmos, we can deduce an important conclusion in regard to existential fundamentality. The argument is as follows: If the cosmos is eternal, it is unmade. If the cosmos is unmade, it does not existentially depend on anything (i.e. it has no existential ground). And if the cosmos has no existential ground, it follows from Schaffer’s definition of fundamentality that the cosmos must be existentially fundamental.

The connection between eternal entities and existential fundamentality is intuitive: eternal entities must be existentially fundamental. Kneale writes that “if there is an eternal object, e.g. God,⁵⁶ then there is obviously no sense in asking when he began to exist or when he will cease to exist,” (1969, p. 228). This is because existential dependence is an “in-virtue-of” relation that deals predominantly with existence (Correia, 2008, p. 1013). Since eternal entities always are and have been, it is nonsensical to talk about a possible existential ground.⁵⁷ It might be noted that the cosmos being existentially fundamental is not a sufficient condition for being foundational. For example, it might be

⁵⁶ This claim will be amplified in the following section, where I argue that Heraclitus’s cosmos is divine.

⁵⁷ Furthermore, consider the relationship between eternal entities and existential fundamentality in terms of Platonic Forms. Platonic Forms are eternal, basic causes or “explanatory entities” [αἰτία] (*Phaedo*, 100d). For a discussion, see (Vlastos, 1969; Burge, 1971, especially p. 4; Ledbetter, 1999). This basic causation of explanatory entities must refer to grounding or metaphysical causation. For example, entity *x* is beautiful because it is grounded in the Form of beauty. In terms of existential dependence, it makes no sense to talk about the ground of the Form of beauty, for the entity exists necessarily and in virtue of itself. Platonic Forms are eternal, basic entities that ground things (and their facts) in the cosmos. I take this approach under the assumption that forms exist outside of any participants. That is, the Form of beauty exists even if there are no beautiful things that partake of the Form. Similarly, Heraclitus’s cosmos is eternal and turns out to be the existentially fundamental entity that, as I hope to show, grounds all other entities.

the case that the cosmos, as a whole, is forever, but this could be the same for its smallest parts.⁵⁸

Yet, there is evidence that the smallest parts of Heraclitus's cosmos are not eternal. In fact, in B76 and B126, it is clear that the smallest parts (elements) exist in a cycle of death and rebirth (Graham, 2006; Neels, 2018).⁵⁹ So, contrary to the parts, it must be the case that Heraclitus's cosmos alone is existentially foundational. In other words, in the sense that Heraclitus uses "eternality" (see footnote 55), his cosmos exists necessarily, in virtue of itself and prior to the parts.

⁵⁸ Thanks to Richard Neels for this potential objection.

⁵⁹ As I will explain in §3, it appears that opposites are metaphysically derivative of things, and, as such, are precluded from taking status as metaphysically basic.

ESSENTIAL DEPENDENCE AND FUNDAMENTALITY

Next, let's consider the other notion of ontological fundamentality - essential fundamentality. An essentially fundamental entity is a privileged (prior) entity that plays a role in determining the nature of reality.⁶⁰ So, in other words, an entity x is essentially fundamental when nothing grounds x and plays a role in determining the structure of the cosmos (i.e. grounds some other entities y & z). My aim in this section is to first show that Heraclitus's cosmos is god. Once I have established Heraclitus's god as a cosmic god, I will show that it is essentially fundamental in virtue of its omnipotence over the proper parts. That is, I will show that the cosmos is more than the sum of its parts and plays a role in determining the nature of reality.

We start with fragment B67, in which Heraclitus gives us the only explicit definition of god (ὁ θεός):

B67: ὁ θεὸς ἡμέρη εὐφρόνη, χειμῶν θέρος, πόλεμος εἰρήνη, κόρος λιμός
[τὰναντία ἅπαντα· οὗτος ὁ νοῦς], ἀλλοιοῦται δὲ ὅκωσπερ πῦρ, ὅποταν συμμιγῆ
θυώμασιν, ὀνομάζεται καθ' ἡδονὴν ἐκάστου.

[g]od is day night, summer winter, war peace, satiety hunger [all the opposites, this is the meaning], and alters just as fire, when it is mixed with spices, is named according to the aroma of each of them.

It is noteworthy that the four sets of opposites represent all opposites (Kirk, 1954, p.

184).⁶¹ In this sense, Heraclitus defines god as an all-encompassing phenomenon. If this

⁶⁰ See (Morganti, 2020).

⁶¹ It must also be the case that the listed opposites in B67 are predicates of the subject – god (Kirk, 1954, p. 185). Kirk acknowledges a possible objection to this view: In the fifth century BCE, ὁ θεός (god) was a predicate (1954, p. 185). Consequently, it would be non-sensical to apply predicates (opposites) to a predicate. However, Kirk holds to the predicate-subject relation of opposites and god in B67 in virtue of its contrast with the traditional use of θεοί in B5, B24 and B53 (1954, p. 187). Furthermore, Mourelatos's advancement of Kirk's work regarding the naïve metaphysics of things in pre-Heraclitean

is the case, the subject of the transition in the first two sets of opposites (i.e. between meteorological instantiations) is god. Interestingly, however, Kahn rejects the idea that the fragment refers to an underlying god (1979, p. 279). On the contrary, he argues that “there is no *one* subject which might become day, then night, then winter or summer, war, or peace,” (1979, p. 279). Kahn’s view is accurate as a response to those who might associate Heraclitus with existence monism.⁶² That is, it cannot be the case that one *material* subject underlies the day or night, winter or summer, like the kind of monism historically attributed to Parmenides.⁶³ Rather, I submit that Heraclitus is defining god as the formal aspect of the cosmos, by which the form of the cosmos is god.⁶⁴

philosophy (1973) – i.e. the claim that opposites are metaphysically derivative descriptions of things – strengthens the argument that the listed opposites in B67 are predicates of god.

⁶² It will be helpful to briefly rule out a Heraclitean existence monism. Heraclitus was critical of our sense experience (B107) in a similar way to Parmenides (B6. 4-9), and it is at least conceivable that the problem of unity could be solved by positing an existence monism. However, there is much evidence to show that Heraclitus was, undoubtedly, not an existence (nor material) monist (see Graham, 2007 on Barnes, 1982). We find a strong objection to a Heraclitean existence monism in the introductory fragment to Heraclitus’s book (both Aristotle and Sextus Empiricus identify B1 as the start to Heraclitus’s book). In B1, Heraclitus attempts to find the nature of each thing by distinguishing them from each other. If Heraclitus had adopted an existence monism, this question would be ‘null and void’ - the nature of the parts of the cosmos would need no differentiation for all would be the same. Furthermore, Heraclitus clearly identifies individual parts, such as the elements (B), that preclude an existence monism. Thus, in virtue of Heraclitus’s search for the nature of the parts of the cosmos, and the very existence of physically distinct entities, existence monism must be excluded from the list of potential candidates.

⁶³ One might question whether the cosmos could be considered an organism. However, it seems that any reference to an organism that Heraclitus makes is merely a metaphor for explaining the fundamentality of the cosmos. Thanks to the audience at the Oklahoma Workshop in Ancient Philosophy for this point. Furthermore, Robinson (2009) convincingly shows that Heraclitus clearly rejected any organic notion of the cosmos.

⁶⁴ One might also object that I am using Aristotelian language, and anachronistically assigning a world-view to Heraclitus. However, as will become apparent, this view clearly captures what Heraclitus put forward in terms of a world-view.

If I'm correct that Heraclitus's god is the form of the cosmos, then Heraclitus appears to have held some kind of pantheism. This view is further supported by the following fragments:

B32: ἔν τὸ σοφὸν μῶνον λέγεσθαι οὐκ ἐθέλει καὶ ἐθέλει Ζητὸς ὄνομα.
The wise is one, unwilling and willing to be spoken of by the name of Zeus.

B41: ἔν τὸ σοφὸν, ἐπίστασθαι γνώμην, ὅτι ἐκυβέρνησε πάντα διὰ πάντων.
The wise is one, knowing the plan by which it steers all things through all.⁶⁵

B64: τὰ δὲ πάντα οἰακίζει κεραυνός.
The Thunderbolt pilots all things.⁶⁶

B32 suggests that some entity aligned with the name of god (Zeus) is one and wise.⁶⁷ B41 then tells us (again) that the wise is one. From these two fragments, there is a clear association of divinity with “absolute” wisdom and oneness. In fact, Kirk argues that “human wisdom is analogous, but less complete than divine wisdom,” (1954, p. 395),⁶⁸ for there is only one wise entity (ἔν τὸ σοφὸν) that knows the plan by which it steers all things through all (B41). This entity, of course, must be god itself.⁶⁹

⁶⁵ B32 and B41 are given to us by Clement of Alexandria and Diogenes Laertius. It could be argued that the repetition of ἔν τὸ σοφὸν (the wise is one) is in virtue of two different misrepresentation of the same fragment. However, I submit that this cannot be the case. In fact, the repetition denotes the importance of this wise entity in Heraclitus's worldview.

⁶⁶ The imagery of Zeus's thunderbolt here is key. It shows a connection to some divine entity and also further connects it to astronomical events – this view will be developed further later.

⁶⁷ Heraclitus did not believe in the Homeric gods – this is apparent from his rejection of Homer and Hesiod (see footnote 29). Rather, the reference to Zeus attempts to convey some divine aspect – or, in other words, something divine.

⁶⁸ Humans are unable to achieve divine wisdom because men fail to comprehend the *logos*, before and after hearing it (B1).

⁶⁹ If we apply this claim to B50, the normative intention of Heraclitus's project becomes apparent: It is not merely wise, but godly, to listen to the *logos* and agree that all things are one.

Further, the divine cosmos is clearly identified with omniscience and omnipotence. This can be inferred from B64, where the thunderbolt must refer to Zeus (B32) - the god that knows that plan (B41) and pilots all things through fire (B64).⁷⁰ So, the question becomes: are we meant to interpret Heraclitus's god as one wise god that controls all with fire (perhaps some Homeric god), or is Heraclitus telling us that the god is the cosmos? We've already seen in B30, that Heraclitus rejects the idea of a creator God. The phrase, "ἐν τὸ σοφόν", is in the neuter and Robinson (2009) convincingly argues that this is meant to act as a rejection of anthropomorphizing the divine (p. 101). So, while the cosmos is meant to represent divinity, it is not meant to represent some divine anthropomorphized god. He further ridicules Homer and Hesiod,⁷¹ and is best interpreted as replacing Zeus's hammer (B64) with an intelligent, ever-lasting fire (Hippolytus, *Refutatio*, IX, 10. 7). Thus, I argue that it must be the case that the Homeric gods are excluded from the list of possible candidates for Heraclitus's one divine, wise entity. Instead, I submit that connection between divinity, oneness, and wisdom is in virtue of a cosmic god, that instrumentalizes "everlasting fire" (B30) through meteorological events as a way "to steer all things through all" (B41). I mean that the cosmos is divine: omniscient and omnibenevolent. I should note that the view that

⁷⁰ It is notable that Hippolytus took the thunderbolt to be mean eternal fire and the "cause of the management of the universe (Kirk, 1954, p. 349). It's likely that Heraclitus saw the "everlasting fire" (B30) as the instrumental power of god – the cosmos - that steered things through all (B41). Kahn identifies Heraclitus's cosmic god as the development of Anaximander, who argued that the *apeiron* contains all things and steers them all (1979, p. 272). Kahn also implies that the Heraclitus's cosmos must be intelligent – see specifically Kahn's discussion on Diogenes (1979, p. 272n400). We can also infer from B78 & B79 that God is intellectually superior to men.

⁷¹ See, (Kirk, 1954, p. 240; Kahn, 1964, p. 191; Kahn, 1979, p. 205;). Also see B40, B42, B56, B57, B80 & B105.

Heraclitus's cosmos is god is not new – many scholars have argued along similar lines.⁷²

We can conclude that in the same sense that the opposites form a whole greater than the sum of its parts, the cosmos's divine nature and power forms an entity larger than the sum of its parts.

What is new about my pantheistic priority monist reading is that it approaches Heraclitus' Problem of Unity in a manner that makes sense of the fragments and assigns to him a coherent philosophy. I base this reading, in part, on Heraclitus's puzzling descriptions of the wise god. Consider these fragments:

B108: ὁκόσων λόγους ἤκουσα οὐδεὶς ἀφικνεῖται ἐς τοῦτο ὥστε γινώσκειν ὃ τι σοφόν ἐστι, πάντων κεχωρισμένον.⁷³

Of all those whose theories I have heard, not one reaches the point of recognition that the wise is separated from all things.⁷⁴

B89: τοῖς ἐγρηγορόσιν ἓνα καὶ κοινὸν κόσμον εἶναι τῶν δὲ κοιμωμένων ἕκαστον εἰς ἴδιον ἀποστρέφεται.

The world of the waking is one and shared, but the sleeping turn aside each into his private world.

⁷² For instance, Neels argues that Heraclitus's God simply is the cosmos (forthcoming, p. 28); Kirk claims that Heraclitus's god can be equated with all the pairs of opposites (1954, p. 166); Kahn implies that the cosmos itself is divine (1979, p. 134); Fränkel argues that the various phenomena of the universe are mere modifications of god (this must refer to a cosmic god who can account for the modifications) (1938, p. 230); and Curd claims that God is all things as one whole, complete being (1991, p. 543).

⁷³ λόγους, in this context, does not denote a world-order but rather relates to the distinct theories that Heraclitus's predecessors offered (Kirk, 1954, p. 398).

⁷⁴ It is important to note that πάντων can be read either as "from all men [humans]" or "from all things" depending on whether it's read as masculine or neuter (Kahn, 1979, p. 115). I have chosen the latter because it better aligns with the cosmic wisdom of B32 (Kahn, 1979, p. 115), and the divine knowledge of "the plan" in B41 (Kirk, 1954, p. 399). Regardless, it must be noted that the divine wisdom is clearly separated from the apparent physical realm.

On one hand, B108 tells us that the wise entity (god), in some sense, is separated from all things. Yet, Heraclitus tells us that the cosmos is “one and shared” (B89) and is the “same for all” (B30). It seems to me that this puzzling separation is in need of a coherent explanation.

I think that this separation (κεχωρισμένον) is a metaphysical separation.

Metaphysical separation has often been associated with metaphysical priority in Plato and Aristotle,⁷⁵ and it seems to me that there is implicit evidence for such an interpretation. Heraclitus’s ancient commentators seems to suggest that Heraclitus incorporated metaphysical separation of the whole and its parts in their description of his world view. In Plato’s *Sophist*, Heraclitus is assigned the following worldview: [Reality] is both one and many (242e).⁷⁶ The context for this claim is extremely important. Plato’s comment is influenced by historically competing world-views: On the one hand, there are pluralistic world-views (242d1-2) and, on the other, following the Eleatic tribe, a Parmenidean monist view (242d3-5). Plato refers to Heraclitus as offering a third world-view that is

⁷⁵ See (Fine, 1984).

⁷⁶ ἀσφαλέστατον ἀμφοτέρα καὶ λέγειν ὡς τὸ ὄν πολλά τε καὶ ἓν ἐστίν. I borrow this translation from Kirk (1954, p. 14-15). From this passage in Plato, Chrysakopoulou identifies that Heraclitus seems to “synthesize” the one and many (2010, p. 76) and Mandolfo says that unity and plurality are co-existent and inter-connected (qtd. In Kirk, 1959, p. 74). It is clear that that these commentators interpret Heraclitus as having a concept of unity, but avoids making the Parmenidean monist claim that all is one and unified. Priority monism seems to be a clear model for how to explain this ‘unified’ separation. It is, however, noteworthy that Plato clearly gets Heraclitus wrong in assigning to him the theory of flux (*Cratylus* 401d). So, one might ask: if Plato was wrong in assigning the theory of flux to Heraclitus, how can we trust his commentary that reality is both one and many? Plato’s reference to Heraclitus in the *Cratylus* deals primarily in a discussion on etymologies and knowledge, rather than some type of worldview. However, in the *Sophist*, Plato talks about distinct worldviews (specifically of Ionian and Sicilian philosophers). Thus, while Plato most definitely wrongly assigned the theory of flux to Heraclitus, we are safe in assuming that his reference to him in the *Sophist* is an accurate representation of Heraclitus’s philosophy.

both one and many (242e2). That is, Heraclitus's view incorporates a monistic view, while still being compatible with the pluralistic world-views. If Plato's description holds true, it seems that there is evidence for a metaphysical solution to Heraclitus's puzzling appeal of separation: the nature of Heraclitus's cosmos is one and indivisible (in virtue of it being more than the sum of its parts), but on the other, its material constituency is divisible and many (in virtue of the proper parts). But this is not the only account of Heraclitus's priority monism. Hippolytus says the following of Heraclitus's cosmos: the whole is one, divisible and indivisible (*Refutatio*, IX, 9. 1).⁷⁷ Plato and Hippolytus seemingly acknowledge that the parts of the cosmos are real and divisible of the whole, but that the nature of the cosmos is one and indivisible. Such a view falls directly in line with my priority monist interpretation of Heraclitus. I address the metaphysical derivative nature of the parts of the cosmos further in section § 3. I take it that Plato and Hippolytus's reference to Heraclitus' worldview is strong support for showing that this separation must be referred to as a metaphysical separation; where there is one basic cosmos with many derivative parts.

Priority monism also accounts for Heraclitus's attempt to distinguish each part according to its nature (B1). In fact, Heraclitus the priority monist would say something akin to: "we can distinguish the nature of each part according to their position and function within the one". On my reading, Heraclitus intends the cosmos to be an eternal, divine, wise, singular deity that steers its many proper parts through ever-lasting fire.

To conclude this section, I've argued that Heraclitus's cosmos is eternal, ontologically basic, divine, and essentially fundamental. This divine cosmos is

⁷⁷ Ἡράκλειτος μὲν οὖν φησιν εἶναι τὸ πᾶν διαίρετον ἀδιαίρετον.

metaphysically prior and explains its derivative parts. On these grounds, I submit that the cosmos appears to be the most basic entity in Heraclitus's cosmos. If this is the case, we can provide a unique solution to the Problem of Unity:

Heraclitus Priority Monism: "all things are one" through their shared metaphysical ground – the cosmos.

I've argued this in line with a top-down approach, starting from the nature of the cosmos and working down towards its parts. In the following section, I will argue for a priority monist reading in line with a bottom-up approach, by which the nature of the parts of the cosmos is metaphysically secondary.

CHAPTER III

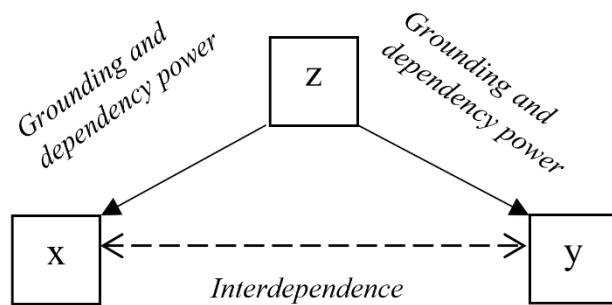
INTERNAL RELATIONS AND PRIORITY MONISM

In this section, I aim to show that there is an internal relation between all the things in Heraclitus's cosmos. If such a relationship exists, we can trace our way back to the fundamentality of the cosmos. Again, Heraclitus obviously didn't have the logical tools to fully defend something as well-theorized as our contemporary notion of priority monism. However, his fragments suggest an implicit argument for priority monism through the metaphysically derivative nature of the proper parts of the cosmos. I will present the argument in three steps. Firstly, I show that opposites are metaphysically grounded in things. Secondly, I argue that, similarly to how pairs of opposites are codependent on things, the things of the cosmos, too, are codependent on the cosmos. I show their codependence through an analysis of the nature of causality in Heraclitus's cosmology. Lastly, I argue that the codependency of the parts *on* the cosmos denotes the metaphysical priority of the cosmos. So, the first step is to show that, for Heraclitus, things ground opposites. Such a grounding relationship is clear from B126:

B126: τὰ ψυχρὰ θέρεται, θερμὸν ψύχεται, ὑγρὸν ἀαίνεται, καρφαλέον νοτίζεται.
Cold things warm up, warm things cool off, moist things become dry, dry things become moist.

B126 suggests that the descriptive opposites – coldness and warmth – are properties of an underlying subject. This means that they are codependent on an underlying thing.⁷⁸ As I argued in Chapter 1, the instantiation of a property is dependent on whether the underlying thing goes to the mountains or the desert. In other words, the instantiation of Socrates-as-hot or Socrates-as-cold depends on the physical location of Socrates and its surrounding elements. From the codependence of properties on the behaviors of Socrates, we can infer that Socrates is metaphysically prior. This is because co-dependency entails interdependence. Schaffer writes, “*x* and *y* are interdependent if *x* and *y* are non-identical and codependent on a common whole [*z*]” (2010, p. 347). We can portray metaphysical interdependence as follows:

Fig. 1: Principle of Interdependence



In this figure, *z* is the thing that grounds the opposites *x* and *y*. While Schaffer’s intention was not to deal with the co-dependence of descriptions (opposites), it is a helpful conceptual scheme within which Heraclitus’s thought can be situated. With this first step established, we can apply this figure to Heraclitus cosmos and its parts. Thus, *z* will

⁷⁸ Notably, Kahn argues that *θέρπεται* is most likely used in instances where a person ‘warms themselves up’ by fire (1979, p. 165). This, of course, can be referred back to B126, where an underlying thing warms up or becomes cold.

represent the metaphysically prior cosmos, while x and y will represent the metaphysically posterior things.

The second step of the argument is to show that the things of the cosmos are codependent on the cosmos. I argue that the structural codependence of opposites on things is identical to the structural codependence of things on the cosmos through a principle of causality. For Heraclitus, the nature of causality is such that it determines cosmic events by some set principle or law. There is explicit evidence throughout the fragments of such a principle. Consider the following fragments:

B8: τὸ ἀντίξουν συμφέρον καὶ ἐκ τῶν διαφερόντων καλλίστην ἄρμονίαν καὶ πάντα κατ' ἔριν γίνεσθαι.

The counter-thrust brings together, and from tones at variances comes the finest harmony, and all things come to pass through conflict.

B80: εἰδένα δὲ χρῆ τὸν πόλεμον ἐόντα ζυγόν, καὶ δίκην ἔριν, καὶ γινόμενα πάντα κατ' ἔριν καὶ χρεών.

One must realize that war is shared and Conflict is Justice, and that all things happen by conflict and necessity.

In B8 and B80, we see that in virtue of conflict, all things come to pass. We can derive from “καὶ πάντα κατ' ἔριν γίνεσθαι” that conflict is not only applicable to humans, but to all things (Kirk, 1954, p. 241). This is because “πάντα” refers to the same “all things” in B50, which states that they are one. And note that this conflict holds off necessity (χρεών). This necessary conflict must be related to the divine plan (B41 & B78) and everlasting fire (B30) which pilots all things (B64). Note, too, that Heraclitus thinks that there is εἷς θεοῦ νόμος “one divine law” (B114). In light of this evidence, I submit that

Heraclitus's conception of conflict refers to some single causal law, determining change in the world (through everlasting fire).⁷⁹

Heraclitus's Ionian predecessor, Anaximander, also held a doctrine of conflict,⁸⁰ but accompanied this with justice, by which equality of opposites is always restored. Heraclitus advanced Anaximander's principles by applying his law of necessary conflict to all things (not just opposites). Heraclitus's causal law of conflict, thus, must be construed as an interaction between *things*. If we then take this alongside the *qualitative* changes in B126,⁸¹ it seems that Heraclitus saw change as a constant law through the interaction of things, leading to either quantitative or qualitative change. This seems to me as a fairly developed view of causation.

Furthermore, consider the law-like aspect of some fragments we've already discussed. In B41, Heraclitus hints that there is a plan that steers all things and in B78, this plan is called divine. The notion of a plan (*gnômê*)⁸² seems to align some divine law – the ever-lasting kindling of fire (B30) – that is consistent for past, current and future

⁷⁹ Celsus, for instance, says that Heraclitus used hints at a kind of divine war (Kirk, 1954, p. 238).

⁸⁰ Anaximander, B1: "Giving recompense and paying restitution". Translation by Graham, 2006.

⁸¹ It's likely that Heraclitus was the first Greek to acknowledge that opposites were not tangible entities (Mourelatos, 1973). This infers that, for Heraclitus, there existed an underlying subject by which opposites are merely properties. If this is the case, it seems reasonable to assume that Heraclitus saw the interaction between opposites as similar to an Aristotelian conception of qualitative change.

⁸² γνῶμην (plan) is mentioned twice in Heraclitus. Once in B41, where it refers to a cosmic plan (Kahn, 1979, p. 173), and once in B78 (γνώμας), where it either denotes opinion, judgment, plan or purpose (Kahn, 1979, p. 173). From the resonance between B41 & B78, it seems clear that in B78, it must also refer to a cosmic plan or purpose. It is notable, though, that in B78, γνώμας is plural. This seems to question the notion of a single divine plan. However, this problem is resolved when we take into consideration that Heraclitus is skeptical of man's wisdom (Kirk, 1954, p. 396).

events. B64 again links the divine power of the god as *cosmos* with the steering of all things, either as a cosmic power or as a set of laws. I propose that this shows a form of unified cosmic causality. Specifically, it seems that there is an essential nature to this causality. That is, in virtue of a single divine plan, the things of the *cosmos* pass in accordance. What could be this causal principle or law by which the divine plan comes into accordance? I argue that this must be explained in reference to the war or conflict of things (B80). That is, Heraclitus argues that the things of the *cosmos* are governed by a causal relationship, the nature of which is divine, aids in the plan of the *cosmos*, and of necessity.

However, before continuing, I want to address one possible objection to my reading, in virtue of B100:

B100: *περιόδους ᾧν ὁ ἥλιος ἐπιστάτης ὦν καὶ σκοπὸς ὀρίζειν καὶ βραβεύειν καὶ ἀναδεικνύειν καὶ ἀναφαίνειν μεταβολὰς καὶ ὥρας αἱ πάντα φέρουσι καθ' Ἡράκλειτον.*

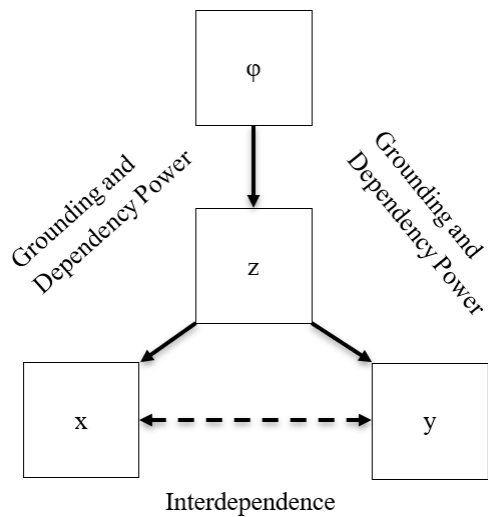
The sun is overseer and sentinel of cycles, for determining the changes and the seasons which bring all things to birth.

In B100, it seems that the cosmological processes and states of the things of the *cosmos* are determined by the sun. That is, from B100, it seems that the sun is fundamental in that it plays a privileged part in explaining the nature of the *cosmos*. This would obviously undermine my reading. But, I offer two solutions to dissipate this objection.

Firstly, it seems plausible that the sun in B100 is comparable to the ever-lasting fire in B30 – by which all things come to pass in accordance. This would reinterpret the sun as being a metaphysically derivative tool (derivative, of course, of the *cosmos* itself). Secondly, it is important to note the transitivity of grounding relations: If *x* grounds *y*,

and y grounds z , x also mediately and partially grounds z (Thompson, 2016, p. 7).⁸³ So, I argue that things are immediately dependent on the sun but are ultimately grounded in the cosmos. Consider the following figure demonstrating the how grounding as metaphysical causation expresses transitivity. Note that ϕ represents the cosmos, z represents the sun, and x & y represent the things of the cosmos:

Fig. 2 Transitivity of Grounding



This resolution makes sense if the cosmos pilots all things (B64) through the everlasting fire [B30 & B64 & B100] – the view I defended in the previous section. That is, it must be the case that the sun is an instrumental tool in the cosmological processes of the cosmos. So, instead of all things being grounded in the sun, it is rather that the cosmos pilots all by means of the sun and everlasting fire. The determining nature of the sun in

⁸³ We can also put this in terms of factive grounding:

The fact that ϕ grounds the fact that ψ

The fact that ψ grounds the fact that ρ

Thus: the fact that ϕ grounds the fact that ρ . (Schaffer, 2012)

B100 is in virtue of the divine plan of the cosmos in B41. In this sense, it seems that all things are still codependent on the cosmos.

The last step of the argument is to show how the codependence of things on the cosmos entails the metaphysical priority of the cosmos. Schaffer argues that we may build up toward the metaphysical fundamentality of the cosmos through casual chains. He suggests the following strategy (2009, p. 364):

- (i) All things are related by causal connectedness
- (ii) Causal connectedness is an internal relation (given causal essentialism)
- (iii) Thus all things are internally related.

The things in Heraclitus's cosmos are causally connected in virtue of a determined, essential causal law. Thus, the things in the cosmos are internally related. We can simplify the next step of the argument as follows: If all things are related causally, they are internally related. If they are internally related, they are interdependent (Schaffer, 2009a, p. 349). This is because their nature entails grounding relations to other entities and the causal law. In virtue of all things being in a constant state of strife, they are intrinsically connected to one another, precluding them from taking metaphysical fundamentality. Ewing explains that, "the nature of any one thing taken by itself is incomplete and internally incoherent without the whole system on which it depends. Things by their very essence belong together, (1934, p. 187)". That is, the interconnectedness of the parts of Heraclitus's cosmos precludes them from being fundamental.

So, then, what is fundamental? Recall Schaffer's principle of interdependence: " x and y are interdependent if x and y are non-identical and codependent on a common whole" (2010b, p. 347). The only manner by which these causally linked, interdependent

parts can *be* is through their codependence on a more foundational whole - in this case, the cosmos. Thus, each part of the cosmos is interdependent and necessary, but only has its existence and facts in virtue of the whole. I have argued that Heraclitus's cosmos coincides with Schaffer's argument for priority monism. So, I think it makes good sense to conclude that, Heraclitus's cosmos, as a whole, is metaphysically (i.e. foundational) whereas its parts are metaphysically derivative.

CHAPTER IV

LOGOS AND SOLVING THE PROBLEM OF UNITY

In light of the top-down and bottom-up arguments for a priority monist reading of Heraclitus, reconsider the Problem of Unity: What does Heraclitus mean by the claim that “all things are one”, and how does it refer to the *logos*? The priority monism reading creates a unique grounding chain that also includes certain aspects of the Unity of Opposites thesis. Opposites are grounded in things and unified in their codependence on the thing; and similarly, things are grounded in the cosmos and unified in their codependence on the cosmos. So, “all things are one” in virtue of their shared ground: the cosmos.

Interestingly, this reading provides a unique response to Heraclitus’s search for the “nature of each part” (B1). Taking into consideration Heraclitus’s overall focus on the meteorological phenomena alongside the cosmos’ causal determinism, it makes sense to say that the nature of each part must refer back to something within the cosmos (or the power of the cosmos). In B112, Heraclitus says that we must perceive things according to their nature (φύσις). So, I’ve proposed that Heraclitus the priority monist would say something akin to, “we can distinguish the nature of each part according to their place or

function within the one”. This accounts for the derivative nature of the parts of the cosmos in relation to the ordered whole.

So, how does my reading account for the Heraclitus’s appeal to the *logos*? I take Mark Johnstone’s position that the *logos* denotes much more than merely a personal, spoken account (2014). In fact, I think that Johnstone is right in that the *logos* refers to some expression of the cosmos – specifically, I argue that it is the expression of the law I laid out in the previous section. This interpretation falls in line with it being described as common (B1), having the power for all things to come into accordance with it (B50), and as taking authority over Heraclitus’s own account (B50).

Johnstone seemingly holds an intermediary position between two camps in Heraclitus scholarship: On the one hand, he accounts for those scholars who associate the *logos* with merely an account by linking it to the *expression* of the cosmos. On the other hand, it seems that Johnstone’s interpretation can account for the lawlike aspects of the *logos* we see in B1 and B50. He does this by conveying the content of the *logos* as similar to that of a divine law – specifically, that which is ordered and whole. I might note that, to avoid the clear charge of anachronism, I submit that Heraclitus clearly uses *logos* in a novel manner (which is, of course, not unusual for his puzzling philosophy).

Thus, the Problem of Unity is directly linked to the *logos*. In solving the problem of unity - i.e. recognizing that everything is all part of the one - we come to understand the normative aspect of the *logos*: we must agree and be in tune with the oneness of the cosmos and its divine law, that which determines the cosmos.

CHAPTER V

PRIORITY MONISM VS. METAPHYSICAL COHERENTISM

In a recent article, Richard Neels challenges the view that Heraclitus was a metaphysical foundationalist (forthcoming). Instead, he proposes that Heraclitus was a metaphysical coherentist. Contrary to metaphysical foundationalism, metaphysical coherentism argues that there are no metaphysical foundations. If Heraclitus posited that there are no metaphysical foundations, he could not have held a priority monism, since the cosmos would not be fundamental. In this chapter, I'll initially give an account of Neels' view and deflate possible objections to my reading.

Neels bases his view largely on B10:

B10: συλλάψεις· ὅλα καὶ οὐχ ὅλα, συμφερόμενον διαφερόμενον, συνᾶδον διᾶδον
καὶ ἐκ πάντων ἔν καὶ ἐξ ἑνὸς πάντα

Collectives, wholes and not wholes, brought together, pulled apart; sung in unison, sung in conflict, both from all things one and from one all things.⁸⁴

Graham (2006) notes that B10 is concerned with mereology and Neels (2022) adds that the fragment is concerned with mereological priority. If this is the case, Heraclitus seems

⁸⁴ This fragment is given to us by Aristotle. Prior to giving a direct quote, Aristotle mentions a Heraclitean notion of harmony (ἁρμονία). While we must not take Aristotle's commentary seriously, for he often presented his predecessors fallaciously, as we will see, it is noteworthy that Aristotle mentions Heraclitus's concept of harmony in B8 alongside this fragment.

to offer a unique answer to the question: what is prior, parts or wholes? ⁸⁵ In fact, a mereological reading of B10, suggests that Heraclitus endorses both top-down determination of the whole (from one thing all) *and* bottom-up determination of the parts (from all things one). For Neels, this is evident from the Greek word ἐκ (from) connecting one and all things in a symmetrical fashion. Problematically, the metaphysical foundationalist, such as the priority monist, cannot accept both claims (Neels, p. 27). This is because, under their model, something must be foundational.

On the other hand, metaphysical coherentists can explain both top-down and bottom-up determinations because of the interdependent relationship between the parts and wholes. Thus, Neels argues, “Heraclitus appears to be ambivalent with respect to mereological priority: the whole and its parts stand to one another in a relation of metaphysical *interdependence*” (Neels, 2022, p. 30).⁸⁶ This would allow for a unique solution to the problem of unity. In fact, it looks like the attribution of metaphysical Coherentism to

⁸⁵ Also notable is Emlyn-Jones: “The fragment describes the different ways in which the elements of the world are related. On one side a tendency towards unity is stated and, on the other, a tendency away from unity. These elements are clearly intended to be regarded as simultaneous rather than successive” (1976, p. 108). Here, Emlyn-Jones gives an account of fragmented unity: In some metaphysical aspect, there is unity, and in some material (elemental) aspect, there seems to be individual parts. Her comments, of course, coincide with the priority monist reading.

⁸⁶ I note here that Neels and Schaffer disagree on the definition of the term, “interdependence”. As we have seen, Schaffer’s definition of interdependence is:
 x and y are interdependent if x and y are non-identical and codependent on a common whole [z]

Neels, on the other hand, defines interdependence as follows:

x and y are interdependent if x grounds y AND y grounds x .

The difference here is that Schaffer’s principle relies on the fact that something must be foundational – that is, there must be some entity that is explanatorily basic. In Neels’s coherentist interpretation, nothing is explanatorily basic, removing the requirement of a foundational common whole – z . I favor Schaffer’s principle of interdependence, by which something *must* be explanatorily basic. I give a theoretical limitation of ‘Heraclitus the Coherentist’ later. Notably, this critique can be applied to any coherentist worldview.

Heraclitus would commit Heraclitus to the following view: All things are one in virtue of their mutual dependence.

If B10 is concerned indeed with fundamental mereology, the metaphysical coherentism reading offers an objection to my priority monist reading. However, I will offer two brief counterarguments. First, I will offer a non-metaphysical account of B10 - resolving the metaphysical priority problems. This is simply to demonstrate that B10 can be read in a way that does not entail a metaphysical interdependence between parts and wholes. Second, I show that the non-metaphysical account of B10 has theoretical advantages.

Let's look at B10 more closely. The first term, "συλλάψεις" has been heavily debated. We have a variety of interpretations: Kirk argues that it stands for 'things taken together'; for Markovich, συλλάψεις is 'connections'; for Bollack-Wismann 'assemblages'; and for Neels 'collectives'. Notably, these interpretations denote a physical or material subject. It seems to me likely that this subject would be the cosmos undergoing change in some cosmological process. But, Khan tells us that συλλάψεις can be understood as physical or cognitive – the cognitive interpretation entails reading συλλάψεις as cognitively grasping a subject.⁸⁷ If we take συλλάψεις cognitively, and I think we can, B10 tells an epistemological story.⁸⁸ Here's how.

⁸⁷ Kahn writes that 'one thing from all, and all things from one' should not refer exclusively to physically changing patterns of cosmic change (1979, p. 281-86). See also, Sassi, 2015.

⁸⁸ Also notable is Curd: "Graspings here refers both to the action of the mind in reaching out to understand the *logos* and to the unified object which is grasped, as well as to the unified entities in the world about which that truth tells" (p. 539, 1991).

To grasp the cosmos, we must investigate it from two perspectives: a unifying view and a disparate view. We can learn about the parts of the cosmos by examining their roles within the whole cosmos. In this sense, our *understanding* of all things is determined by the one. But we can also learn about the cosmos by examining its parts. In this opposing sense, our understanding of the one is determined by all things. Such a reading is still consistent with the idea that Heraclitus is a priority monist with respect to his metaphysics.

Such a reading is supported by Heraclitus's epistemology. For Heraclitus, it is difficult to truly know the essence of an entity. Consider the following fragment:

B123: φύσις κρύπτεσθαι φιλεῖ
Nature loves to hide.⁸⁹

B1: γινομένων γὰρ πάντων κατὰ τὸν λόγον τόνδε ἀπείροισιν εἰκόασι πειρώμενοι καὶ ἐπέων καὶ ἔργων τοιούτων ὁκοίων ἐγὼ διηγεῦμαι κατὰ φύσιν διαιρέων ἕκαστον καὶ φράζων ὅπως ἔχει
Although all things come to pass in accordance with this logos, men are like the untried when they try such words and works as I set forth, distinguishing each [part] according to its nature (φύσιν) and telling how it is.

Not only is the nature of each thing hidden and difficult to find (B123), Heraclitus's contemporaries failed to give an account of how it is (B1). Note that this must not only mean that it is difficult to give an account of these hidden essences, but also that Heraclitus's fragments are an attempt to do so.

But, it is not mere perception that allows us to give an account of these essences.

Consider the following fragments:

B17: οὐ γὰρ φρονέουσι τοιαῦτα πολλοί, ὁκοῖοσι ἐγκυρεῦσιν, οὐδὲ μαθόντες γινώσκουσιν, ἔωυτοῖσι δὲ δοκέουσι

⁸⁹ Nature here does not denote the natural world, but rather the essence of an entity. In other words, nature "is used to characterize things" (Neels, 2018, p. 199).

Most men do not think things in the way they encounter them, nor do they recognize what they experience, but believe their own opinion.

B107: κακοὶ μάρτυρες ἀνθρώποισιν ὀφθαλμοὶ καὶ ὄτα βαρβάρους ψυχὰς ἐχόντων
Eyes and ears are poor witnesses for me if their souls do not understand the language.

In B17, it seems clear that mere perception (encountering things) does not achieve Heraclitus's intended wisdom;⁹⁰ and in B107, it seems that sense experiences is limited, if their souls do not first understand.⁹¹

In light of these fragments, it becomes clear that we need something more than just perception. To fully understand something, we must not merely find its individual essence, but also understand how it fits into the cosmos. My epistemological reading of B10 tells us how we can do just that: The things in which opposites inhere (collectives) are brought together and pulled apart by some divine, determined law, and we come to know these entities by looking at their parts (from one all things) and their place/function within the one (from all things one).

On the other hand, metaphysical coherentism, which is entailed by a metaphysical reading of B10, has some troubling consequences. If we were to adopt a Heraclitean coherentism, Heraclitus would be committed to the following view: nothing is explanatory basic, and all things explain each other. If this is the case, let's reconsider B1:

B1: γινομένων γὰρ πάντων κατὰ τὸν λόγον τόνδε ἀπείροισιν εἰκόασι πειρώμενοι
καὶ ἐπέων καὶ ἔργων τοιούτων ὁκοίων ἐγὼ διηγεῦμαι κατὰ φύσιν διαιρέων
ἕκαστον καὶ φράζων ὅκως ἔχει

⁹⁰ I use wisdom here as a direct comparison with knowledge. A deeper dive into Heraclitus's epistemology goes beyond the scope of this paper. For such a discussion, see Hussey, 1982.

⁹¹ I plan a future study into the necessary conditions for understanding the language (and logos).

Although all things come to pass in accordance with this account, men are like the untried when they try such words and works as I set forth, distinguishing each [part] according to its nature and telling how it is.

If nothing is explanatorily basic, how does Heraclitus the Coherentist distinguish each part according to their nature? Here, Neels offers a possible answer. It seems that Heraclitus is consequently committed to what Neels dubs the ‘difference principle’: “Anything is what it is, in part, by being distinct from any other thing and is therefore explanatorily dependent, in part, on those things” (forthcoming, p. 30). Each entity is explained (*explanans*) and explainer (*explananda*) of all other entities. Thus, to find the nature of each part is to be distinct from other things.

In other words, the nature of each part is distinguished *via negativa*. Intuitively, this principle seems odd.⁹² If we try to find the nature of something, we want positive content. Distinguishing this nature *via negativa* tells us no positive content. So, I argue, if Heraclitus adopted a metaphysical coherentism, this principle seems like a theoretical flaw. This issue is side-stepped if we adopt an epistemological reading of B10. Thus, the epistemic reading of B10 - whereby Heraclitus can be a metaphysical foundationalist - fits better into Heraclitus for two reasons: (i) It avoids the *via negativa* principle - a clear theoretical advantage; and (ii) fits better with the *majority* of fragments. On these grounds, I submit we read B10 as epistemological rather than metaphysical, resolving the coherentist challenge.

⁹² I might note that, if we accept that B10 refers to mereology and metaphysics, this principle follows. That is, I do not disagree with Neels that this is the inevitable principle that Heraclitus must adopt if Heraclitus envisioned a metaphysical coherentist model. Rather, I disagree with Neels on the reading of B10.

CHAPTER VI

CONCLUSION

I have argued for a priority monism model in Heraclitus's corpus. I started by demonstrating that there is an unresolved problem – the problem of unity – which historical doctrines cannot fully solve (§ 1). Next, I analyzed instances metaphysical priority to show that Heraclitus's cosmos seems to metaphysically basic (§ 2). Further, I argued that Heraclitus had all the necessary ingredients to develop an ancient version of Jonathan Schaffer's argument towards the fundamentality of the cosmos (§ 3). I submitted that Heraclitus's priority monism best answers the problem of unity and contextualizes his influence in Western thought (§ 4), and responded to a contemporary argument against metaphysical fundamentality in Heraclitus (§ 5). On these grounds, I submit that we should consider Heraclitus to be the first Greek priority monist.

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