

Manuscript Version. Please cite published version:  
*Ancient Philosophy Today*: DIALOGOI 3.1 (2021): 74–97  
DOI: 10.3366/anph.2021.0043

<https://www.eupublishing.com/doi/abs/10.3366/anph.2021.0043>

## **Heraclitus against the Naïve Paratactic Metaphysics of Mere Things**

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### **Abstract**

This article considers an interpretative model for the study of Heraclitus, which was first put forward by Alexander Mourelatos in 1973, and draws upon a related model put forward by Julius Moravcsik beginning in 1983. I further develop this combined model and provide a motivation for an interpretation of Heraclitus. This is also of interest for modern metaphysics due to the recurrence of structurally similar problems, including the *colour exclusion* problem that was faced by Wittgenstein. Further, I employ the model to shed new light on Heraclitus' image of the river, while relating potential readings to various contemporary metaphysical views.

### **Keywords**

Heraclitus – Wittgenstein – Naïve Metaphysics – Parataxis – Opposites – River Fragment

### **I. Introduction<sup>1</sup>**

In his 1973 article, 'Heraclitus, Parmenides, and the Naïve Metaphysics of Things',<sup>2</sup> and in subsequent work, Alexander Mourelatos proposed a novel interpretation of Heraclitus by way of a reconstruction of the context in which his thought takes place, that of Presocratic metaphysics. Mourelatos proposed that Heraclitus was reacting to a commonly-held *naïve metaphysics of things* (hereafter 'NMT') (Mourelatos 2008: 300–1), which he also describes as being a 'paratactic metaphysics of mere things' (Mourelatos 2008: 319), borrowing from the artistic notion of *parataxis*, meaning things being arranged side by side. That is, 'the [75] genius of *parataxis*', akin to that of the world of the NMT, is that

things are thought of as being complete by themselves and merely externally related to each other (Mourelatos 2008: 316). I will provide a further exposition of the NMT in section II.

It is also worth taking account of similar work done by Julius Moravcsik. In three articles, the first of which is from 1983,<sup>3</sup> Moravcsik expounded an interpretation of Heraclitus that places him, as did Mourelatos' interpretation, at the cusp of what became a revolution in metaphysics that would eventually be carried through in a mature way by Plato. Moravcsik frames his interpretation in terms of three stages of what he calls 'explanatory patterns', namely, 'explanation solely in terms of origin, explanation in terms of stuff or constituency, and explanation in terms of entities and their attributes' (Moravcsik 1983: 134). In section II, I provide an overview of these stages and show how this scheme can cohere with Mourelatos' NMT.

Mourelatos' NMT and Moravcsik's stages of explanatory patterns have been picked up sporadically and employed to varying degrees by a number of scholars.<sup>4</sup> For my own part, coming to this work as I did from endeavouring to understand Heraclitus' thesis of the Unity of Opposites (Begley 2016), I have attempted to refocus attention on what I take to be the important aspects of Mourelatos' view in this regard. What interests me is how Heraclitus managed to inflect the NMT so as to spark what was a revolution in metaphysics. Recently, in a further development of an observation that was originally made by Mourelatos, I have argued that there is a strong connection between Heraclitus' rebuke of *polymathy* and his rejection of the paratactic NMT (cf. Begley 2020a). I briefly return to this topic again towards the end of section II.

In the following sections, I will outline Mourelatos' notion of the NMT, and at times draw upon further insights provided by Moravcsik's notion of stages of explanatory patterns in order to elucidate Heraclitus' reaction to this naïve metaphysics. This is the first time that these two views have been brought together in this way and, as such, constitutes a further development of the combined view. I will attend to some of the differences and disagreements between the resulting interpretations. For example, in section III, I side with Mourelatos over Moravcsik in taking Heraclitus to have considered the relation between opposites to be a necessary one. I will also highlight some important differences

between the naïve and contemporary metaphysics, some ways in which this naïveté remains with us, and the lessons this holds for contemporary philosophy.

[76] I develop the view in two further ways, while relating it to contemporary philosophy. First, I take seriously the claim that Heraclitus was reacting against ‘the genius of *parataxis*’ (Mourelatos 2008: 316) and, in section III, rather than recommending an association with the early Wittgenstein (*pace* Mourelatos and Karl Popper), I find that there is in fact a disanalogy between Heraclitus and Wittgenstein in this regard. This is most apparent when we compare their views regarding opposites and incompatibles; in particular, in Heraclitus’ reaction to Hesiod and Anaximander, and what is known as the *colour incompatibility* or *colour exclusion problem*, which afflicted the early Wittgenstein’s system, especially in the *Tractatus Logico-Philosophicus*.

Secondly, in the final section, I develop the combined view by applying it to Heraclitus’ river in B12, drawing upon Moravcsik’s treatment of the same fragment, and relating the potential interpretations to contemporary kinds of metaphysical theory such as, *mereological essentialism* and *mereological nihilism*, in a way that I think will be familiar both to readers of the literature on this fragment but also to readers of the contemporary debates.

It is sometimes thought that Heraclitus is best characterised as some kind of naïve nominalist. This is no doubt due to an abiding impression that he was the archetypal philosopher of radical flux. However, I am inclined to think that this is not entirely correct and that, instead, due to the ambiguity of the context and the terse style of his message it is likely to get turned around or confused if we are not sufficiently attentive. In fact, Heraclitus was pointedly responding to such naïve metaphysical views that themselves had such consequences. Heraclitus was indeed concerned with the ‘what it is to be’ of things, their *essence*, or, as he puts it in B1, how things *divide* according to their *nature* and how they *hold together*.

## **II. The Naïve Paratactic Metaphysics of Mere Things**

Mourelatos identifies three ‘postulates or requirements’ of the NMT: ‘thinghood’, ‘equality of status and independence’, and ‘recognition of affinity and polarity’. The naïve

paradigm of knowledge is one of ‘encounter and acquaintance with each of the things that present themselves in physical (or perceptual) space’ (Mourelatos 2008: 300). Thus, regarding the first postulate of ‘thinghood’, a *thing* is that which is presented in physical or perceptual space. The first postulate is intimately connected with the second postulate of ‘equality of status [77] and independence’, in view of the fact that part of what it means to be such a *mere* thing is to lack any ontological dependency relations to any other thing (except for mereological relations, which we will return to in a moment), and to be on the same ontological level as every other mere thing, as a physical and spatial being. As Mourelatos explains:

Each thing would be (conceptually, as we would say) independent of every other thing. There would be no abstract or dependent entities—no qualities, or attributes, or kinds, or modes of reality. All things would be equally real since they all are univocally *in* physical space. (Mourelatos 2008: 300)

It is crucial to grasp the difficulty of putting oneself in the position of some thinker who operates within this framework. Indeed, Mourelatos warns us that, ‘The mental effort of feigned naïveté is required of us if we should try to picture a world merely of things’. This is because we are accustomed to approaching the world by way of those later metaphysical notions, and through the use of ‘intelligent discourse—predicates and propositions’ (Mourelatos 2008: 300), that is, through *logoi*.

There is, I believe, a correspondence to be found between Mourelatos’ NMT and the first two of Moravcsik’s stages. Let us now briefly survey Moravcsik’s three stages of explanatory patterns, namely, ‘explanation solely in terms of origin, explanation in terms of stuff or constituency, and explanation in terms of entities and their attributes’ (Moravcsik 1983: 134).<sup>5</sup> In the context of the first stage, Moravcsik notes that the question, ‘What is it?’, is difficult to separate from the question, ‘How did it come about?’ For both Homer and Hesiod, natural phenomena and the feats of some human beings were to be accounted for in terms of their origins in divine actions or parentage by the gods. We can still find naïve examples of this kind of explanation in instances of prejudice, such as when someone imputes a negative characteristic to someone else on the basis of their familial, religious, or racial origins, and so on. A shift to the second stage occurred when presenting an explanandum’s origins in terms of some natural element or stuff,

such as was the case for the Ionian *phusikoi*, led to a gradual transition from questions regarding origin, 'Where does it come from?', to questions regarding composition or constitution, 'What is it made up of?' or 'What is its stuff?' (Moravcsik 1983: 135–6). Moravcsik considers the shift from the second to the third stage, that is, from construing explanations in terms of constituents to construing them in terms of attributes, to be a gradual one, which was due to the distinctions involved being 'fairly subtle'; for example, the distinctions between the attributes of being hot or being [78] water, and all of the heat or water. In this stage, the question, 'What is it?', is taken as a request for an analysis in terms of a set of attributes (Moravcsik 1983: 137–8).

I take the first two of Moravcsik's stages, those involving explanation only in terms of origin and composition, to correspond roughly to Mourelatos' NMT in the following way: Moravcsik's separation of the third stage, involving explanation in terms of entities and their attributes, from the first two, corresponds to Mourelatos' distinction between the NMT and later metaphysics involving the substance-attribute distinction and the postulation of abstract entities.<sup>6</sup>

What is presented as the NMT is not simply akin to a modern single-category ontology that has been postulated in the full knowledge of a debate regarding the existence of other putative categories. It is, rather, a naively conceived and *undifferentiated* ontology. One must cross one's eyes to see it clearly, so to speak. As Moravcsik puts it:

Unless we were to be given strong evidence to the contrary, we should assume that ontological contrasts such as material-mental, abstract-concrete were not drawn in the early conceptual frameworks. The move is not from materialist to dualist, but from an undifferentiated ontological framework to a gradually differentiated one. (Moravcsik 1989: 259; cf. 1991: 555)

This is of course not to say that the ancients and their language were incapable of these feats, merely that they operated within a certain conceptual scheme, way of doing things, or as it is sometimes put, 'language-game'. Conversely, there are remnants and reminders of this way of thinking still in some of our ways of thinking and speaking. Mourelatos provides salient examples such as when we talk of *having* or being *full* of courage out *in* the cold or *in* the dark, rather than *being* courageous despite the outside's *being* dark or

*being* cold (Mourelatos 2008: 305–6). It is likely that this is not something of which we can entirely rid ourselves through an intellectual or volitional act.

When we begin to question what something is made of, we must at least make the minimal distinction between an entity and that of which it is composed, and thereby we must also posit mereological relations, relations of constituency, between these (Moravcsik 1983: 136). With the advent of this new conceptual apparatus, which Moravcsik attributes to the early Ionian *phusikoi* (Moravcsik 1991: 556), comes the shift to a new kind of explanatory scheme, that of ‘compositional explanation’, or ‘constitutional analysis’. There are many kinds of constitutive explanation, employing differing kinds of basic entities in their [79] explanations; for example, there are those of the early Ionians involving observable basic entities denoted by mass terms such as ‘water’ or ‘air’, and, later, those of the Atomists involving unobservable basic entities denoted by count terms, e.g., ‘atom’. Explanation at this stage also calls for principles of transformation, causal mechanisms such as condensation and rarefaction, etc., in order to account for how one kind of stuff changes into another (Moravcsik 1983: 136–7).

Mourelatos also thinks that the NMT must accommodate and account for recognisably complex entities and coins the term ‘character-powers’ to refer to the thing-like components of such entities, giving *dunamis* (δύναμις) as the equivalent Greek for this expression (Mourelatos 2008: 301).<sup>7</sup> He recognises that:

The “opposites” in Anaximander and in Alcmaeon, the intermingling earth and water of Xenophanes, the opposite *morphai* in Parmenides’ “Doxa,” the four elements of Empedocles, the infinite *chrēmata* of Anaxagoras’ cosmology, and (in parallel to these more properly philosophical contexts) the *dunamies*, “powers,” of the medical treatises – all these entities represent a hybrid category of thing-stuff-power-quality (Mourelatos, 1973, pp. 17–30). (Mourelatos 2006: 62)

These character-powers are not on a different ontological level to any other thing; they are also merely ‘concrete entities in physical space’ (Mourelatos 2008: 302), but we should repeat the caveat that this is to be understood with feigned naïveté, that is, not in contradistinction to, for example, abstract entities and relations of attribution.<sup>8</sup> The NMT bears a close resemblance to a form of total nominalism in the sense that, along with not positing any abstract entities or, for that matter, properties, it also does not posit any

universals. However, this is perhaps what could be called a nominalism with a small 'n', in view of the fact that no attempt was made to expand or differentiate the ontology beyond character-powers as mere things, as there were no explicit debates in which to take sides on these matters.

The third postulate of the NMT is that of 'recognition of affinities and polarities'. The affinity between character-powers takes the form of 'nothing more than a tendency of physical propinquity in space', while that of polarity takes the form of 'a tendency of apartness' (Mourelatos 2008: 303). Thus, within the NMT, affinities and polarities between things are primarily conceived of as being tendencies of the spatial arrangement of things.

In order to see better how the three postulates come together, let us look at the main historical examples of the NMT that Mourelatos [80] presents from Hesiod and Anaximander. The example from Hesiod that he cites is *Theogony* 748–54, where Night and Day are depicted as separate persons who live in the same house. The house never contains both of them, and while one is in the house the other is outside of it, journeying across the earth and *vice versa*. Mourelatos reads this as being 'a model of Hesiod's scheme of characters-powers', which satisfies all three of the requirements of the NMT described above. In Hesiod's depiction, Night and Day are both 'things', that is, persons presented in space, thereby satisfying the first requirement, that of thinghood. They are independent of each other and are of equal status, in view of the fact that they are separate persons having equal access to the house and the earth, thus satisfying the second requirement. The depiction also recognises the polarity of Night and Day, which is portrayed by their tendency or agreement to be apart spatially, thus satisfying the third requirement (Mourelatos 2008: 314–5).

Mourelatos locates the character-powers of Anaximander's thought in 'the opposites', which have 'equal claims of tenure' in the world. This scheme similarly satisfies the requirements of the NMT. However, he notes a subtle difference to Hesiod's model in that, instead of punctually succeeding one another, 'the opposites of Anaximander are utterly hostile to one another, they drive one another out' (Mourelatos, 2008: 315). Despite this difference, what Mourelatos finds to be most important is 'the spatial context of advance,

retreat, and tenure in the conception of the opposites', which is portrayed through a 'territorial vendetta' between opposites (Mourelatos 2008: 315), that is, through a vendetta regarding space and in terms of mutual exclusion.

In addition to the three postulates of the NMT, Mourelatos identifies 'a semantic-epistemological corollary to the requirement of thinghood. *Logos*, the characteristically propositional texture of intelligent discourse, is not in any way constitutive of reality, of our object of knowledge' (Mourelatos 2008: 303). He explains that for the NMT, language is 'dispensable' and 'merely a convenience'. This is because here the paradigm and the peculiar function of the verb 'to be' is one of acquaintance with mere things.<sup>9</sup> The function that language performs is merely the naming of things, and later the evoking of them, equivalent to what can be accomplished by the body without the use of language through direct contact with a thing, and gesturing or reaching for it, respectively. Mourelatos explains how this dispensability of language [81] as a mere convenience in this context engenders a 'thorough-going realism':

The transparency and dispensability of language that this metaphysics requires and guarantees give it the intuitive appeal of a thorough-going realism. It affords a welcome license that we may disregard details and nuances of language, confident in the expectation that our knowledge of the world would ultimately have the form of "This is *F*," where the statement is understood as indifferently analogous to "This is Odysseus," "This is Ithaca," "This is water," or "this is gold." (Mourelatos 2008: 316)

The term 'realism' here is perhaps not a particularly apt label for the NMT, especially if it leads us, as it did Mourelatos, to talk of Heraclitus as being an 'anti-realist'. Mourelatos' use of these terms, 'realism' and 'anti-realism', is indebted to their philosophical use at the time of his writing circa 1968–73. Indeed, it may be better to avoid such labels as 'realism' and 'anti-realism' when we have Heraclitus' own characterisations available to us. I am thinking here especially of the 'polymathy' for which he rebukes his contemporaries and predecessors, those who 'know the most' in an extensive sense when he says in B40:

Much learning does not teach intelligence: for otherwise it would have taught it to Hesiod and Pythagoras, and again to Xenophanes and Hecataeus. (D20 [B40], trans. Laks & Most)

Heraclitus' complaint is that his predecessors and contemporaries could not have attained to *noos* (understanding; intelligence; mind) merely through attending to the many mere things they encountered, otherwise they would have attained to it on account of their extensive learning. Mourelatos too recognises that Heraclitus' 'scorn for πολυμαθίη ['polymathy'] is probably connected with his critical stance toward the paratactic metaphysics of mere things' (Mourelatos 2008: 319). I take the connection between this naïve paratactic metaphysics and its concomitant naïve polymathic form of pseudo-wisdom to be a very close one (cf. Begley 2020a). That is, close enough that, for a Presocratic philosopher who certainly did not make sharp theoretical distinctions between metaphysics, semantics, epistemology, and so on, in the manner that some modern philosophers do, it would look very much like a single integral view.<sup>10</sup> There is a very close connection between the view that holds that reality consists of mere things arranged paratactically, distinct from one another and external to one another in their manifoldness, with which we are merely acquainted and towards which we can merely gesture, and our knowledge of them being of a merely extensive and polymathic kind.

[82] One should not be too strict in applying modern distinctions between areas of philosophy to ancient contexts. Indeed, part of what the study of ancient philosophy offers is a view of philosophy before it was professionalised and divided into its various disciplines according to the modern syllabi. This observation in itself, I think, holds a certain lesson for contemporary modern philosophy, which far too often begs important questions and cuts off lines of inquiry by assuming such distinctions. For example, assuming that one can ask what knowledge or wisdom *are* independently of asking other pertinent philosophical questions that are rooted firmly in the metaphysical, such as, what it is for anything to be or to be one, and so on.

### **III. Heraclitus' reaction to the NMT**

Mourelatos uses the framework of the NMT as a foil for Heraclitus, and as an interpretative tool for his thought. His claim is that Heraclitus was the first thinker to 'perceive the incompatibility between the requirement of thinghood and the recognition of polarity', these being the first and third postulates of the NMT, respectively; Heraclitus'

solution is 'to preserve the latter but to abolish the former' (Mourelatos 2008: 317). In B57, Heraclitus responds to Hesiod's depiction of night and day:

The teacher of the most people is Hesiod; they are certain that it is he who knows the most things—he who did not understand day and night, for they are one. (D25 [B57], trans. Laks & Most, transliteration excised)

Mourelatos interprets Heraclitus' criticism of Hesiod to mean that, instead of their opposition being conceived spatially as a tendency of alternating occupation of the same house, 'Night and day are not two persons or two *things*; they are complementary moments, aspects, or phases of a single phenomenon' (Mourelatos 2008: 318).<sup>11</sup> It is important to note here that, in comparison with Hesiod, the novel metaphysical point that was made by Heraclitus was that it is no mere *contingency* or 'tendency' that night and day occupy separate regions, rather, this is a *necessary* consequence of their relationship, their being *one* in the sense of being 'internally or conceptually related', which in principle could never be otherwise. What Heraclitus had realised was that 'it is no accident that the world should instance *both* hot and cold, bright and dark, dry and moist, and likewise for other opposites; and that it is no accident that opposites should exclude one another' (Mourelatos 2008: 331).

Mourelatos notes that 'It is very plausible that Heraclitus would have extended the same line of criticism to Anaximander's opposites' [83] (Mourelatos 2008: 318). While there is no fragment that directly mentions Anaximander, Mourelatos is content to abide by the common reading of B80, that Heraclitus was admonishing Anaximander for his pessimistic notion that strife (between opposites) is a kind of injustice.<sup>12</sup>

One must know that war is in common, that justice is strife, and that all things come about by strife and constraint. (D63 [B80], trans. Laks & Most)

For Heraclitus, justice is strife and all things are in accordance with it. An interpretative framework that takes into account the NMT allows us to suggest a metaphysical aspect to this admonishment in that 'the opposites are essentially incompatible [...]; they are *one*, they are internally or conceptually related by being opposed determinations within a single field' (Mourelatos 2008: 318).<sup>13</sup> The thought here is that because Anaximander was still in the grip of something like the NMT, he viewed the opposites as being

independent warring opponents, separate individual things, which relate to each other externally and spatially. The reason that Heraclitus gives for the strife of the opposites is, on the contrary, that it is essential to them to be incompatible because they are internally related in this way and not separate *mere things* related externally, thereby undercutting Anaximander's pessimistic attitude.<sup>14</sup> It is clear that the difference is not simply one between a pessimistic or an optimistic attitude towards the external polar relations between mere things. Rather, Heraclitus is denying that these relations are external and contingent; thus, the choice between pessimism and optimism is not applicable because there is no situation in which opposites could cease to be in strife, and furthermore, they are not even *mere things* in the sense in which Anaximander thought them to be.

Moravcsik's interpretation differs somewhat from that of Mourelatos regarding the necessity of the relation. Moravcsik thought that there is no evidence that Heraclitus had attained to explanation at the level of stage three or distinguished *clearly* between composition and attribution (Moravcsik 1983: 147), and so thought that it is not possible to answer the question of whether or not Heraclitus took the relation between opposites to be a necessary one. As he later put it: 'Was their incompatibility construed as necessary and *à priori*, or as just an extreme case of clashing natural forces, is an unanswerable question' (Moravcsik 2004: 8). However, I am inclined to side with Mourelatos in claiming that Heraclitus did indeed hold that opposites were internally related, that this is shown by the evidence that we have (e.g. B57), and that it was an essential element in his break from the naïve metaphysics. While Moravcsik is certainly correct that explanation in terms of something [84] like attributional relations is required to explain necessary relations between opposites, the historic discovery of this requirement is perhaps better seen as being a *consequence* of its tacit deployment. We are not here dealing with an idealised development of metaphysics, but an ambiguous and historically contingent progression. This is something for which Moravcsik not merely allows, but holds up as being the 'main claim' of his interpretation:

The main claim of this interpretation is that Heraclitus' thought is *characterized* by a shift from the second to the third stage, and that this shift is, to a large extent, *responsible for ambiguities* that run through many of the fragments. (Moravcsik 1983: 135, my emphasis)

We will return to this again in a moment when we will see that recognition of this kind of ambiguity can also account for the difficulty of interpreting fragments that seem trivial from our standpoint.

In his claim that Heraclitus abolishes the postulate of thinghood and preserves the postulate of recognition of affinity and polarity, Mourelatos overlooked just how intimately connected the first two postulates of the NMT are, or would have been. As I mentioned at the outset of my exposition, what it is to be a mere thing is in part to have *equality of status* with and *independence* from other mere things, which I take to be central to the 'genius of *parataxis*' (Mourelatos 2008: 316). Heraclitus does not merely abolish the postulate of thinghood and preserve the postulate of recognition of affinity and polarity. Thinghood is abolished only as *mere* thinghood, that is, insofar as the second postulate, that of equality of status and independence, is also undermined. This thereby allows for the possibility of differing ontological levels, that is, the possibility of entities that are not presented in physical or perceptual space. On this point there is too much to say. Mourelatos himself, I think, begins to recognise an aspect of this in the phenomenon that he calls the 'leaning' of the opposites (Mourelatos 2008: 323), in which even the equality of opposites *qua* opposites is undermined. This 'leaning', I have previously argued,<sup>15</sup> is best understood in relation to the linguistic phenomenon known as *Markedness* and as a form of *hypotaxis* or metaphysical hierarchy. I will leave further discussion of this issue for another occasion, as it would require a full exposition and further development beyond the scope of this article.

I wish to focus instead on the fact that the *independence* of things is undermined by the possibility of internal relations between things. This point relates more directly to modern philosophy, and especially through a comparison with the early Wittgenstein. Mourelatos began [85] his article by following Karl Popper in associating Heraclitus with the early Wittgenstein's recognition in the *Tractatus* that 'The world is the totality of facts, not of things', in that both can be said to favour *facts* over things if, following Popper, we read facts as being primarily 'events' for Heraclitus, (cf. Mourelatos 2008: 229 & 321, n.56).<sup>16</sup> Mourelatos also extended this association to one between Wittgenstein's metaphor of 'logical space', and his own notion of 'the *logos*-textured world', that is, the

world as requiring indirect explanation via language due its being ‘pervaded by abstract entities, such as qualities, kinds and relations’ (Mourelatos 2008: 299, cf. 328).

I find these associations somewhat incongruous in view of that fact that the early Wittgenstein was in fact a counter revolutionary figure in this regard. Popper fixates on *Tractatus* 1.1: ‘The world is the totality of facts, *not of things*’ (Popper [1945] 1947: 180, chapter 2: n.2, Popper’s emphasis). However, my contention here is that we should not also become so fixated as to overlook the disanalogy presented further down the page by 1.21: ‘Each item can be the case or not the case while everything else remains the same’ (Wittgenstein [1921] 1974: 5). This and further related propositions later in the book present the world of facts as being atomistic and, precisely, paratactic in that they bear no internal relations to each other. Mourelatos’ own interpretation has shown us that this is something with which Heraclitus would disagree. As such, these associations have the potential to distort Heraclitus’ position.

The situation bears a close resemblance to what is known as the *colour incompatibility* or *colour exclusion problem*,<sup>17</sup> which was faced by Wittgenstein. One way of looking at the problem in this case is that mere (paratactic) atomic facts having no internal relations between them do not provide sufficient resources to explain why the same patch *cannot* be red and blue at the same time. Further, the proposition ‘The patch is red and blue’ does not have the form of a *logical* contradiction, which was the only form of impossibility available in the Tractarian system. This problem was in part what eventually led him to abandon the logical atomism of the *Tractatus*, after some attempts to solve the problem in an *ad hoc* manner. For example, in ‘Some Remarks on Logical Form’, Wittgenstein allows that atomic propositions may *exclude* one another rather than *contradict*. He describes the situation precisely in spatial terms, with what could even be characterised as a depiction of a ‘territorial vendetta’ for tenure over a chair; in the following, ‘R P T’ and ‘B P T’ are each propositions asserting the [86] existence of a certain colour, red and blue respectively, at a certain place and time:

How, then, does the mutual exclusion of R P T and B P T operate? I believe it consists in the fact that R P T as well as B P T are in a certain sense *complete*. That which corresponds in reality to the function “ ( ) P T ” leaves room only for one entity—in the same sense, in fact, in which we say that there is room for one person only in a chair. [...] The propositions, “Brown now sits in this chair”

and “Jones now sits in this chair” each, in a sense, try to set their subject term on the chair. But the logical product of these propositions will put them both there at once, and this leads to a collision, a mutual exclusion of these terms. (Wittgenstein 1929: 169)

Note especially here that the propositions (and the facts they picture) are said to be *complete* by themselves. He subsequently formalises the exclusion in terms of an *ad hoc* modification of the Tractarian truth table system, which would prevent the formation of such logical products.<sup>18</sup>

This is similarly a problem more generally for any system that attempts to explain a relation of opposition (and indeed many other kinds of relation) merely through exclusivity relations between sets of objects in the extension of the opposed predicates. That is, merely through the tendency, convention, or postulation that such objects are apart, for example, through such postulates as:  $\forall x(Fx \rightarrow \neg Gx)$ .<sup>19</sup> Just like Hesiod’s Night and Day as distinct mere things, persons alternately occupying the same house and journeying across the earth perhaps by an *ad hoc* agreement, or two persons attempting to occupy the same chair, the respective members of these sets are complete by themselves and are unconnected with each other; they forever remain apart but in a way that is not fully explained or explained merely in an *ad hoc* manner. Heraclitus, I believe, would weep over such a rent world, in view of his thesis of the unity of opposites, that is, that opposites are *one* in that they are internally related. Indeed, the reoccurrence of such structurally similar systems and problems holds a deep lesson for contemporary attempts to address them.

The ‘deeper harmony’ that Heraclitus wished to express was, as Mourelatos put it, ‘the harmony of conceptual connections’ and, more generally, that of the *logos*. Opposing this to the polymathic approach, Mourelatos explains that what Heraclitus ‘wants to know is not an aggregate or array of things in space but a γνώμη, a thought, and τὸ σοφόν, “the wise.”’ (Mourelatos 2008: 319). This distinction between a paratactic aggregate or array of things in space and a ‘thought’ or ‘plan’ (*gnōmē*), may also be characterised as a distinction between extensional [87] and intensional conceptual structures. That is, what Heraclitus derides is particularised extensional knowledge and instead seeks an

intensional understanding in the form of 'a thought' and 'the wise'. This, I think, is what he means when he says:

One thing, what is wise: to know the thought that steers all things through all things. (D44 [B41], trans. Laks & Most, transliteration excised)

Heraclitus' depiction of change is not in terms of any spatial metaphor, that is, it is not in terms of character-powers entering or exiting a mixture or compound or engaged in 'territorial vendetta'. Rather, it recognises the unity of the opposites, their internal relation to each other, and speaks in terms of their change into one another. Mourelatos finds Heraclitus' reply to the scheme of 'territorial vendetta' between opposites in B126: 'Cold things heat up; hot cools down; moist dries up; the parched is soaked' (Mourelatos 2008: 320). Mourelatos quite rightly points out that 'What this language most pointedly disparages is the conception: "the hot comes in and the cold goes out, etc."' (Mourelatos, 2008: 321).

This interpretation is able to account for the seemingly trivial nature of the statement; that is, it merely *appears* trivial to us because it is largely in accord with our own use of language, when in fact it is really a reaction to the paratactic NMT. One of the main reasons for the difficulty in interpreting the fragments is due to such ambiguities arising from what is the subtle shift from one stage of explanatory patterns to another, for which Heraclitus' thought is partly responsible (Moravcsik 1983: 135). These and similar difficulties with the interpretation of Heraclitus (and others), which are caused by confusions regarding the nature of the metaphysical context, are endemic in this tradition of scholarship.

Perhaps more striking is the simile of 'exchange' in B90: 'All things are an exchange for fire and fire for all things, as goods for gold and gold for goods' (Mourelatos 2008: 321). Mourelatos explains that this conception was Heraclitus' way of 'groping toward something more subtle and (as we would say) abstract' (Mourelatos 2008: 321). What is being exchanged could not be the objects as mere things, it could not be their physical weight, spatiality, or quantity; instead, in an exchange the general qualitative component is to the fore in the equivalence of value between things exchanged, which could not be a

mere character-power. Thus, Heraclitus makes a compelling move away from the NMT, one that prefigures 'The complexity of the conceptual structure of qualitative alternation' (Mourelatos 2008: 322), or as Moravcsik puts it 'the ordering-structuring model' that relies on analysis and explanation in terms of attributes (Moravcsik 1991: 563).

[88]

#### **IV. Essential waters, waters arranged river-wise, or river essences?**

In this section, I will apply the interpretive model discussed in the previous sections through a discussion of an emblematic example from Heraclitus' fragments, that of the river. There are three putative fragments that mention the river: B12, B49a, and B91. B12 is generally considered to be an authentic quotation of Heraclitus while, in the main, it has been the other two fragments that have been disputed by some.<sup>20</sup> The river has long been seen as emblematic of Heraclitus' philosophy and is widely known, even among those who may never have heard of Heraclitus. It is often referred to in the form that it is found in Plato's *Cratylus* at 402a:

[Socrates:] Heraclitus says something like this: that all things flow and nothing remains; and comparing the things that are to the flowing of a river, he says that you could not step twice into the same river. (D65c [A6]; Plato, *Cratylus* 402a, trans. Laks & Most)

It is this saying regarding not being able to step into the same river twice that has captured the imaginations of many generations of scholars and others also. It is, perhaps, a notion that has been over-romanticised without full consideration being given to its consequences. It appears to tell us something informative that we did not know or realise about rivers, that is, that they are, if anything, momentary entities that are there at one instant and gone the next. This has been taken by many, especially those who advocate for a theory of 'flux' in Heraclitus, as a particular example of a more general fact about the nature of reality: that in some manner and to some degree all things flow; that everything changes or is changing.

In contrast to the text from Plato, B12 is considered by most scholars to be a genuine fragment; it reads as follows:

As they step into the same rivers, other and still other waters flow upon them. (L [B12], trans. Kahn)

It has been suggested by a number of scholars that, instead of doubting the possibility of the persistence of rivers, Heraclitus in fact accepted the common-sense notion of a river and sought to explain it.<sup>21</sup> The NMT and its attendant explanatory patterns provide us with a further motivation for this view, that is, a reason why Heraclitus addressed the issue in this manner. The river serves as a useful counterexample for a thinker, such as Heraclitus, who wishes to point out the flaws in the naïve compositional model of explanation. Adhering to this model of explanation would lead to the absurd consequence, no less absurd today, that rivers are never the same from one moment to the [89] next due to some or all of their parts flowing away and being replaced by others.

It is manifest that B12 does not straightforwardly suggest a reading like ‘you could not step twice into the same river’. It can only be made to do so if one has already identified the river merely with the waters and other parts, of which it is composed. That is, on this view, because these waters are *mereologically essential* to the river, we cannot step again into the same river. The river has dissipated as a result of some of its parts flowing away downstream. On this reading then, there is no great mystery it would seem. River water flows away and therefore we cannot step into it again (and even if we can it will be at a different part of the riverbed and bank, cf. Moravcsik 1983: 149; 1991: 564). So, why should it seem so paradoxical when Heraclitus invites us, if not to bite the bullet, to walk in the water? On this reading, the apparent unity and persistence of the river remains unexplained. This would seem to have the consequence that the thinker who adopts a naïve compositionally-based account of rivers would have to admit that they do not really live in a world that contains real rivers at all, and that rivers are mere nominal entities. As Seneca later reports: ‘“Into the same river we do and do not step twice.” For the name “river” remains the same, but the water passes by’ (Laks & Most 2016: 169, D65d).

A more extreme reading is to be found in Aristotle’s report in *Metaphysics* Gamma at 1010<sup>a</sup>10–15 of Cratylus’ censuring of the view, apparently Heraclitean, that one cannot step into the same river twice, on the basis of his belief that we cannot step into the same river *even once*. Perhaps this is because he thought of the river as, at most, *waters*

*arranged river-wise*. Cratylus in this case leads by example and does not speak at all, instead using bodily gestures such as pointing a finger. In connection with this, we should recall that language is dispensable and merely a convenience for the NMT, in view of the fact that it does nothing more than can be accomplished through bodily movement (Mourelatos 2008: 303); Cratylus is here an embodiment of this theoretical consequence. Whether the account itself leads to a *mereological nihilism* to match Cratylus' epistemological nihilism is uncertain as the NMT was never a complete and explicit metaphysics that could be interrogated. Certainly, whichever reading we take of the naïve compositional account, any talk of rivers that is intended truly to pick them out would not succeed in doing so.

Assuming our common-sense notion of a river, the image of the river becomes a deft counterexample to the naïve compositional view. Every time we step into the *same* river we encounter *different* river parts, [90] waters, and so on. Thus, the counterexample is a purely negative criticism of the NMT, just as in B40 we found the purely negative criticism that polymathy did not teach *noos* (understanding; intelligence; mind), when presented with the counterexample of the polymaths including Hesiod. Moravcsik also points out that the image of the river shows that 'sameness of parts is not a guarantee of persistence' (Moravcsik 1991: 564). It is in virtue of the fact that the river flows and changes that it is a river and persists as such. If the river did not continually flow, if it was converted into a canal or a static body of water, or perhaps if it burst its banks or lost its *unity* in some other fashion, then the river may be lost with it despite an abundance of waters (cf. Moravcsik 1991: 564).<sup>22</sup> Moravcsik argues that Heraclitus develops a conceptual framework in which 'change and stability, diversity and unity are equally fundamental, and co-exist throughout all regions of reality' (Moravcsik 1991: 558). It is clear that Mourelatos is also in agreement with this position, as he says that 'Heraclitus is not purely a philosopher of flux; he gives equal emphasis to the constancy and stability found in flux, to the unity found in diversity' (Mourelatos 1987: 127).

Moravcsik further claims that Heraclitus was a pioneer in exploring ontological issues regarding the identity and persistence of entities, and considers his insights to have been developed further by Plato in the *Sophist*, into a general account of sameness and difference (Moravcsik 1983: 147–8). Mourelatos also makes this same point, again with

reference to Plato's *Sophist* and also to the *Phaedrus*,<sup>23</sup> when he says, regarding the programmatic statement in B1, that:

Heraclitus would have spoken very aptly of "dividing (διαίρεων) each thing in accordance with its φύσις ['nature'] and showing (φράζων) how it is," or, more literally, "how it holds together (ὅκως ἔχει)." It is important not to overlook the balanced pairing of division and collection in this line. The homonymy with Plato's doctrine of a διαίρεσις, which, presupposing a συναγωγή, cuts things ἧ πέφυκεν [*Phaedrus* 265D-E] is not fortuitous. In the realm of conceptual connections, a "division" can properly be said to be "natural" insofar as it presupposes an encompassing unity. Heraclitus and Plato seem to have responded to essentially the same idea by using similar words. (Mourelatos 2008: 322)

This interpretation of B1 by Mourelatos, with the inclusion of the recognition of 'the balanced pairing of division and collection' in virtue of the literal reading of ὅκως ἔχει as 'how it holds together', is quite important because it adds weight to the notion that part of what [91] Heraclitus was attempting to elucidate through his examples were their conditions of unity, how they hold together, or at least the need for such conditions. Also important to note is that here in B1 we find in Heraclitus an antecedent to Plato's notion, still routinely referred to in contemporary philosophy, of carving nature at its joints (*Phaedrus* 265e).

If indeed this was what Heraclitus intended to expound in his writings, then it would be no surprise that he would place such a programmatic statement at the beginning of his work, which is where B1 is generally accepted to have been placed, in order to inform his readers of his intentions, and so they would not become overly confused by the presentation of his message to the point of thinking that it says the opposite of what he had intended. Rather than being a naïve nominalist, Heraclitus was concerned with the nature or *essence* of things, that is, what they are, both in terms of how they divide according to nature and how they hold together, how they are unified in diversity (cf. Mourelatos 2008: 322, n.60).

## V. Conclusion

In this article, I have outlined and provided a further development of a combined interpretative model derived from Mourelatos' NMT and Moravcsik's stages of

explanatory patterns. This has been employed as the basis for an interpretation of Heraclitus, which motivates the claim that his reaction to the naïve metaphysics was not simply a rejection of thinghood in favour of a recognition of polarity, but a rejection of *mere* thinghood insofar as the equality of status and independence of mere things, central to ‘the genius of *parataxis*’, is undermined. Heraclitus’ discovery was not one of a world of quasi-Tractarian *facts*, but of a *logos*-textured world replete with internal relations between things and differing ontological levels. It has not been my intent to divorce Wittgenstein’s philosophy from the exposition of Mourelatos’ NMT, but rather to reposition it, so that we may better understand both philosophies and their legacies almost fifty years after the first publication of Mourelatos’ article.

We have seen that the naïve metaphysics described is long-lived and in some respects is still with us today, in some of our everyday ways of thinking and speaking, and in some instances of prejudice and faulty reasoning. Equally, it has not been fully overcome even in contemporary philosophy, and so deserves our continued attention as philosophers, perhaps more than ever.

[92] The radical fluxist interpretation of Heraclitus is, I think, mistaken. Due to the ambiguity of the context and the terse style of his message it is likely to have been misunderstood. Heraclitus was not suggesting a form of *mereological essentialism* about rivers, and Cratylus’ *epistemological nihilism*, dispensing with *logos* and resorting to bodily gesture, should not lead us to think that Heraclitus posited a *mereological nihilism*. The image of the river is the perfect counterexample to these views. Heraclitus was instead concerned with the ‘what it is to be’ or the *essence* of the river, which turns out to be a kind of unity in diversity and change.

We can see clearly from this that the philosophical problems related to the naïve ways of thinking have not gone away, instead, they reappear in new but structurally similar forms. In the end, I believe that they must be addressed in ways analogous to those we have discussed, that is, through the recognition of unity in diversity, the internal relations between things, and a study of how things *divide* according to *nature* and how they *hold together*, as proposed by Heraclitus, and which was later developed in a more mature form by Plato.

## Notes

<sup>1</sup> Acknowledgements: This article draws upon, incorporates, and further develops some of my previous work, especially from Chapter 2 of my unpublished doctoral thesis (Begley 2016). I am grateful to Alexander Mourelatos for some discussion of his work and his encouragement at the time. I also wish to express my gratitude to my former supervisor, Vasilis Politis, for all his help and guidance.

<sup>2</sup> The article was republished as an appendix to a revised and expanded edition of his work *The Route of Parmenides* (2008). I will refer to this version, which differs from the 1973 version mostly in its footnotes.

In his postulation of an early Presocratic naïve metaphysics, Mourelatos is drawing upon a similar theory proposed by Heidel in 1906 (cf. Mourelatos 2008: 307), and further work by Cornford and Cherniss in the 1930s, although he is critical of elements of all three approaches. He also points out that former his teacher, Wilfred Sellars, proposed a similar theory (cf. Mourelatos 2008: 302, n.5).

<sup>3</sup> The first work is a chapter in Kevin Robb (ed.), *Language and Thought in Early Greek Philosophy* (1983). The second work is a chapter in Konstantinos Boudouris (ed.), *Ionian Philosophy* (1989). The third work is a 1991 article in *The Monist*, which is an updated version of the 1989 work that largely consists of the same material but with changes to the wording.

<sup>4</sup> For example, see Graeser (1977); Pritzl (1985); Curd (1991); Wilcox (1994: esp. 138, n.20). I find that Moravcsik's theory tends to crop up less regularly. His 1983 article is also mentioned by Curd (1991), but for somewhat tangential reasons. Another more extensive example is in a work by Schiappa (2003: esp. chapter 5).

[93] A most useful overview of the state of the debate has been provided by Daniel Graham who, rejecting so-called 'Material Monism', identifies 'two alternative theories to account for early Ionian philosophy' (Graham 2006: 65). The first he calls 'The Theory of Powers', and the second he calls 'The theory of generating substance' (Graham 2006: 66). Graham identifies Mourelatos' theory as belonging to the first, and his own as belonging to the second. He later notes that Mourelatos' interpretation of Heraclitus is one that 'has particularly influenced' his own, though he 'dissents from key points of it' and he also identifies Moravcsik's approach as having 'much in common' with his own (Graham 2006: 117, n.21). Despite this, Graham does not refer to Moravcsik again in his book. He references the name 'Moravcsik', and refers to his 1983 and 1989 articles, but overlooks his 1991 article.

After dismissing the first theory in a single paragraph, Graham implores supporters of the view to develop and defend it, for otherwise it does not seem to him to be viable (Graham 2006: 67–8). There has since been some development. For example, in 2008, Mourelatos republished his article as an appendix to a revised and expanded edition of his *The Route of Parmenides*. The view was also taken up and employed by Sedley (2009) in the *The Routledge Companion to Metaphysics*. See also, Begley 2016, and Begley 2020a on Heraclitus' rebuke of *polymathy*. I intend the present article as being a further development.

<sup>5</sup> While these three 'stages' or 'models' of 'patterns of explanation', or 'levels of analysis', are spelt out in similar and largely equivalent ways by Moravcsik in his three articles, he does use slightly different names for them in each: (i) In the first paper, he gives no particular name to the first stage, but in the second and third he gives it the name '*the productive model*' (1989: 258; 1991: 553). (ii) In the first paper, he gives the second stage the name '*compositional explanation*' (1983: 136), or 'the compositional model' or 'level of analysis' (138). In the second and third papers, he calls it instead 'the constitutive pattern of explanation' (1989: 260), 'the constitutive model' (1989: 260; 1991: 556), and '*constitutive analysis*' (1989: 260; 1991: 555). (iii) In the first paper, he gives the third stage the name 'the *attributive level of analysis*' (1983: 137). In the second paper, he calls it 'the attributive model' (1989: 260); however, in the third paper, he switches to calling it 'the ordering-structuring model' (1991: 563). This last change in terminology is the one that is most indicative of a change in, or deepening of, his interpretation.

<sup>6</sup> Despite the similarities between the theories we must still agree with Moravcsik when he says that 'The particular three-stage development that I posit has not been—to my knowledge—pointed out before [...]' (1983: 134). Although, it is clear that Moravcsik would have been aware of Mourelatos' work; for one thing,

he also had an article in the 1973 supplementary volume of *Phronesis* in which Mourelatos' article appeared. Also see Graeser 1977: 388, n.88.

<sup>7</sup> Daniel Graham reports that in 2006 Mourelatos preferred the term 'characters/powers' (Graham 2006: 66, n.52). However, in the same year, Mourelatos also refers to *dunamies* as being 'a hybrid category of thing-stuff-power-quality' (Mourelatos 2006: 62). Although Graham seems to have been influenced somewhat by Mourelatos' theory, and adopts certain aspects of it (e.g., the '*logos*-textured' world), he rejects the interpretation of the early Ionian view of entities as being in terms of a theory of powers. Instead, he interprets the Ionian view in terms of what he calls the 'Generating Substance Theory' (Graham 2006).

[94]

<sup>8</sup> Especially helpful for grasping what is required for this feigned naïveté is Mourelatos' analysis of Cherniss' and Cornford's paradoxical accounts; see Mourelatos 2008: 311, n.29.

<sup>9</sup> 'Neither fully a predicative copula nor a marker of identity, this "is" might be called the "is" of introduction and recognition, since it has its paradigm—as does the scheme as a whole—in acquaintance' (Mourelatos 2008: 303).

<sup>10</sup> Roman Dilcher says: 'the ethical and the epistemological level [...] are indistinguishable for Heraclitus' (1995: 20); and 'Heraclitus did not conceive of a philosophy of language, as a consideration in its own right which can be undertaken in separation of what is being discussed in language' (1995: 128). As Mourelatos put it, it is an "area where it's very very difficult to distinguish between ontology and epistemology or philosophy of language" (Personal Communication, 2014).

<sup>11</sup> See also Sedley (2009: 8–10), who largely follows Mourelatos in his interpretation of Heraclitus' metaphysics.

<sup>12</sup> For example, see Kirk (1954: 176, 401); Vlastos (1955: 358), quoted below at note 14; Kahn (1979: 206–7), who links this fragment to Hesiod and Homer in addition to Anaximander; and McKirahan (2010: 136).

<sup>13</sup> Mourelatos did not intend anything more technical here by 'internally or conceptually related' than that the relation is not merely a factual one in which things *happen* to be together, like 'blue and wise', rather, it is one in which things *go together*, like 'red and blue' (Personal communication, 2014).

<sup>14</sup> A similar thought was presented by Vlastos: "Two of the fundamental ideas in Anaximander—that there is strife among the elements, and that a just order is *nevertheless* preserved—are re-asserted in a form which universalizes both of them and thereby resolves the opposition between them: what is a "nevertheless" in Anaximander, becomes a "because" in Heraclitus' (Vlastos 1955: 358). Kahn (1979: 206) quotes from a partial reprint of this article in which 'because' has been emended to 'therefore'.

<sup>15</sup> See Chapter 3 of Begley 2016. A version of the chapter was also presented at the International Association for Presocratic Studies, fifth biennial conference, at the University of Texas at Austin, in June 2016.

<sup>16</sup> The tendency was not unique to Mourelatos; a year earlier, Edward Hussey had said: 'As the early Wittgenstein, inspired by the new "language" of formal logic, tried to mark out the limits of significant language-use as that which depicts the world, and thereby to exhibit some truths about the structure of reality reflected in the true structure of language, and to demolish as meaningless all metaphysics, so Heraclitus seems to be using his new consciousness of sentences as formulae for exhibiting reality, suggested by his use of the term *logos*, to exhibit the structure of things in appropriately constructed language' (Hussey 1972: 59).

<sup>17</sup> For overviews and commentaries on this problem, see Jacqueline 1990, Katz 1998, Monk 2014. See Begley 2020b for a discussion of the context of Katz' solution.

<sup>18</sup> Wittgenstein later, c. 1933–4 in the Blue Book, comes to reject the spatial depiction of colour exclusion: 'We say three people can't sit side by side on this bench; they have no room. Now the case of the colours is not analogous to this; but is somewhat analogous to saying: "3 × 18 inches won't go into 3 feet". This is a grammatical rule and states a logical impossibility' (Wittgenstein [1958] 1978: 56).

<sup>19</sup> The following example was noted by the linguist Lynne Murphy: 'While meaning postulates are regularly employed in model-theoretic semantics, it has been repeatedly pointed out that the postulates explain

nothing about relations [95] among meanings (e.g., Katz 1972; Lakoff 1972). Since the only “meanings” involved are extensional sets, meaning postulates essentially express relations among things (i.e., the denoted things in the words’ extensions) rather than among words or word senses. Furthermore, they simply assert those relations – they do not explain why certain relations (and not others) hold between certain expressions.’ (Murphy 2003: 64)

<sup>20</sup> For example, see Kirk (1954: 373–5); Vlastos agrees with Kirk that not all three can be kept, but would prefer to reject B12, if any: ‘the one I would sacrifice is B 12, for it is the flattest of the three, and can be better explained as a smoothing down of B 91a [...] and B 49a’ (1955: 343). However, he also says in a footnote that: ‘I have misgivings about dropping even B 12. It has its own peculiar stylistic beauty, best noticed by H. Fraenkel’ (1955: 343, n.15); Marcovich says of B12(a) that ‘This is the *only* original form of the river-statement (correctly Kirk 374 *contra* Vlastos 338 ff.)’ (1966: 23); Hussey (1972: 54–5); Kahn says of B12 that ‘This is the only statement on the river whose wording is unmistakably Heraclitean.’ (1979: 167); Moravcsik says that his ‘sympathies lie with Vlastos’ in ascribing all three fragments to Heraclitus (a simplified version of Vlastos’ view) (Moravcsik 1983: 149); McCabe reports that ‘12 is generally preferred’, but chooses to retain all three and incorporate them into her dialectical interpretation (Mackenzie 1988: 2 ff.); McKirahan says that B12 ‘is probably the only authentic river fragment’ (2010: 118, n.19). Laks & Most, in their Loeb edition, retain B12 and B49a, but do not treat A6, the extract from Plato’s *Cratylus* quoted below, as containing any of Heraclitus’ words (2016: 169); see also, Graham (2019) who takes B12 to be ‘the one river fragment’. My preference is also to take B12 as an authentic quotation and to take the other two fragments as potential readings (or misreadings) of this fragment.

<sup>21</sup> For example, Marcovich (1967: 212–3) who quotes Reinhardt and Vlastos in this regard, and considers the river to be an example of the unity of opposites (213); Kahn says that: ‘[B12] does *not* deny the continuing identity of the rivers, but takes this for granted’ (1979: 167); David Wiggins says that: ‘it was the maintenance or perpetuation of the world order—and within that order the persistence through time of things such as rivers (‘the same rivers’)—that Heraclitus set out to describe, redescribe and explain’ (2012: 3); Daniel Graham says that: ‘the message of the one river fragment, B12, is not that all things are changing so that we cannot encounter them twice, but something much more subtle and profound. It is that some things stay the same only by changing’ (Graham 2019).

<sup>22</sup> Similar interpretations have been proposed by other scholars, for example: Richard McKirahan: ‘If the water stopped flowing it would no longer be a river but a long narrow lake. If the basic forms of matter stopped changing, the stable, ordered, regulated *kosmos* would cease to exist’ (McKirahan 2010: 134).

<sup>23</sup> Mourelatos mentions, in a footnote to the final sentence of the quoted passage, that: ‘Plato is aware of the fact that the language of collection and division he employs in his account of the realm of forms is adapted from Heraclitus: see *Soph.* 242C–243A (esp. 242E), which prefigures 251E ff. (esp. 252B)’ (Mourelatos 2008: 322, n.62).

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