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## Markedness Neutralisation and the Unity of Opposites in Heraclitus

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**Abstract:** In this article, I shed new light on a misunderstood aspect of Heraclitus' style. The opposites employed by Heraclitus are often of equal status except that one member of each pair may also appear as a designation for the encompassing whole. I begin by discussing two interpretations of this phenomenon, which were put forward by Roman Dilcher and Alexander Mourelatos. The phenomenon is, I suggest, better understood as being an example of what is known as

*markedness neutralisation*. I argue that this phenomenon should be interpreted as further undermining what Mourelatos identified as a *naïve paratactic metaphysics of mere things* (NMT), to which Heraclitus was reacting by beginning to develop a *hypotactic* metaphysics of hierarchies and dependencies as part of a view of the world as being *logos-textured*. Further, I consider a series of three problems that were put forward by Dilcher, which he thinks must be addressed by anyone who claims that Heraclitus held a unity of opposites thesis. I also consider some related issues, and provide some responses.

**Keywords:** Heraclitus, Opposition, Unity of Opposites, Markedness Neutralisation, Metaphysics

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## Introduction

What originally drew me to Heraclitus was his style employing opposites to illustrate his doctrine.<sup>1</sup> In this article, I will propose a new interpretation of an aspect of this style, a peculiar phenomenon that has presented difficulty for many generations of interpreters. The opposites employed by Heraclitus are often of equal status except that one member of each pair may also appear as a designation for the encompassing whole. This interpretation will take account of the notion of *markedness* and the attendant effect of *neutralisation* to shed new light on this phenomenon.

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I begin, in Sections 1 and 2, by discussing two prominent interpretations of this phenomenon, which were put forward by Roman Dilcher (1995) and Alexander Mourelatos ([1973] 2008), respectively. These are not the only scholars to have noticed this phenomenon and I will mention others. However, they have done more than most to problematise it, or to thematise it, each in his own way. In Section 3, I will draw upon work that has been done on markedness, and further develop some of my own recent work on Heraclitus (esp. Begley, 2021a), which employs Mourelatos' framework for interpreting Heraclitus as reacting to a *naïve paratactic metaphysics of mere things* (NMT). This framework is briefly outlined in Section 2. In Section 4, I address three problems that were put forward by Dilcher (1995; 2013), and some related issues in the literature, regarding the unity of opposites thesis in Heraclitus.

## 1 A 'slight difficulty', a 'vicious circle', and a 'fatal ambiguity'

It will be beneficial first to take account of the phenomenon in question as Dilcher portrays it in his insightful and influential *Studies in Heraclitus* (1995). I shall begin, as he does, with some discussion of B90.

All things are in exchange for fire, and fire for all things, just like goods for gold and gold for goods. (B90; transl. LM D87)<sup>2</sup>

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<sup>2</sup> The Greek word order of B90 places 'fire' in first position on both sides of the first clause. It is likely that this is to emphasise that fire is preeminent and, on the interpretation I will outline, *unmarked*. The ordering of three of the four pairs is usually switched in English translations, presenting the first clause as if it were a chiasmus beginning with 'all things'. Vieira makes a good attempt at a better translation with "fire for everything and from fire to everything" (Vieira, 2013, p. 483). I tentatively suggest something like 'Fire is exchanged for all things and for fire all things, just as gold for goods and goods for gold' may be a better compromise.

The opposition between ‘fire’ and ‘all things’ is explained in terms of another more familiar or quotidian opposition between ‘gold’ and ‘goods’ (in the economic sense of ‘wares’).<sup>3</sup> This is a common effect that has been called *ancillary antonymy*. It arises when a better known antonymous relationship (the ‘A-pair’) signals contrast in another (the ‘B-pair’), which may or may not already be opposed (Jones, 2002, p. 45-46).<sup>4</sup> The specific relation between ‘fire’ and ‘all things’ in B90 is signalled by: an ingenious crossing of grammatical and semantic chiasmus and parallelism;<sup>5</sup> an explicit

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<sup>3</sup> Finkelberg (2017, n. 29, p. 46-47), following arguments made by Musti and Vannicelli in the early to mid-1980s, translates χρήματα as ‘coins’ instead of ‘goods’. This takes the parallel as being one with the, primarily material, reciprocal processes of melting down coinage and recoinage. However, these arguments have been rebuffed in a study by Seaford (2004, n. 33 & 34, p. 94); see also Feldman (2023, p. 25), following Osborne (1997, p. 110-111, n. 62).

Graham (2006, p. 127) says that the relation is not “identity or composition” but “weak equivalence”, and that “Gold is a universal standard of value”. He considers B90 “perfectly harmonious with elemental change as happening by generation, and makes no claims beyond those that are already present in GST [Generating Substance Theory]”. Neels (2018a, p. 21) also recognises value as important, but sees this as relevant only for what Graham calls “transformational equivalence” involved in elemental change (2006, p. 123-124). Graham tells us that a so-called “high-level metaphysics” is not in question, and Heraclitus cannot distinguish his properties from his elbow, yet also that such an equivalence is nevertheless “a second-order relation” that “can have properties the first-order relation does not” (2006, p. 124-128), which is incongruous.

I am inclined to follow Mourelatos in his suggestion that Heraclitus is using “the complexity of the structure of exchange” based on value to deemphasise mere paratactic quantitative (or extensional) replacement, and prefigure “something more subtle and (as we would say) abstract” (or intensional), which is a substitution within “the same incompatibility range” (Mourelatos, 2008, p. 307 & p. 321-212; cf. Begley, 2021a, p. 86-87; 2020, 40ff.). The recognition of the phenomenon of *markedness neutralisation*, discussed in the present article, adds further weight and detail to this interpretation.

<sup>4</sup> The use of ‘opposites’ for the relata and ‘opposition’ for this relationship characterized by exchange, is not novel. Mourelatos calls it a “master opposition of fire against all things” (2008, p. 323). Kahn refers to “opposites” having “polar movement” (1979, p. 145-146). Vieira refers to gold and goods as “opposites” that are “striving sides of the same process” (2013, p. 483).

<sup>5</sup> Regarding the first clause of B90, Vieira makes the keen observation that “even if there is not a semantic chiasmus, there is at least a syntactic one, since the cases presented are genitive, nominative: nominative, genitive (πυρός, τὰ πάντα: πῦρ, ἀπάντων)” (2013, p. 484). In addition, the cases of the terms of the two noun

marker of “ontological analogy” (Stamatellos, 2022), “as” or “just like” (ὅκωσπερ); and a similar use of alliteration in each clause: in the first clause ‘π-’ (e.g., πῦρ, πάντα), and in the second clause ‘χρ-’ (e.g., χρυσός, χρήματα).

Despite this ancillary antonymy, there is, as was noticed by Kirk, a “slight difficulty” in that “Fire is said to be an exchange for ‘all things’; but fire itself must be one constituent of ‘all things’” (Kirk, 1954, p. 348).<sup>6</sup> Dilcher sees this as an ambiguity regarding whether fire is to be taken as set against the totality of all things, or instead as part of this totality, that is, as one phenomenal thing merely preeminent among many. Indeed, this ambiguity is reinforced by the relationship between gold and goods, which is ambiguous in a similar respect. On the one hand, gold is not merely distinct from the goods for which it is exchanged, it is also a common measure for any such valuable goods. On the other hand, gold may itself be considered to be a good among other goods, in virtue of being a valuable metal. Dilcher refers to this ambiguity in the term ‘fire’ as a “vicious circle” (Dilcher, 1995, p. 102).

He rightly advises that we should not assume “conceptual unclarity” on Heraclitus’ part, nor explain it away, as he censures Kirk for doing, as being a “slight difficulty (...) due to an unavoidable looseness of speech” (Kirk, 1954, p. 348).<sup>7</sup> Instead, Dilcher makes the important observation that it “concerns the very foundation of

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phrases in the second clause form a grammatical parallelism, i.e., gen., nom. : gen., nom. (χρυσοῦ, χρήματα: χρήματων, χρυσός). So, the first clause contains a grammatical chiasmus and a semantic parallelism, and the second clause contains a semantic chiasmus and a grammatical parallelism. This entire crossed scheme with a reversal of roles was noticed earlier by Mouraviev (2006, p. 127).

<sup>6</sup> Robinson (1987, p. 139) denies that ‘all things’ means ‘all things’. He says that “the phrase ‘all things’, one must assume, is being used somewhat loosely, and must mean ‘all things excluding aethēr’”. Kahn (1979, p. 146) may hold a similar view when he says that “The essential point is that fire is worth ‘all the rest’ (ta panta)”, and connects B90 with B99, i.e., the sun among all the rest of the stars. However, by Kahn’s own lights this phrase of B99 is especially uncertain (Kahn, 1979, p. 51), and his further comparisons with B50, B49, and B29, need not bolster this reading of ta panta.

<sup>7</sup> Quoted similarly by Dilcher.

Heraclitus' thought, the unity of all things (...). The same inherent ambiguity keeps recurring whenever Heraclitus formulates what sounds like a principle of unity" (Dilcher, 1995, p. 103). He notes a few of the oppositions involved: life–death, war–peace, just–unjust. In some fragments the terms appear in opposition to each other, while in others the first term is presented as the “proper designation for the whole” (Dilcher, 1995, p. 103). I quote the passage in full:

The term “life” appears in unmitigated opposition to death (B 88 etc.) and again as the proper designation for the whole (B 30; 32). If we now proceed and take this struggle as the basic and unifying term, we are referred to B 53 and B 80 which indeed present War and Strife in supreme position. Yet, war recurs in B 67 side by side with peace on an equal level – as one opposition in which god manifests himself. And to make the circle perfect, the gods in turn are in no absolute position because they depend on war as their constituting principle. In B 102 finally, the just is opposed to the unjust in the view of men while for god everything is not neutral or something comprehending both, but plainly good.

The recurrence of precisely the same confusing structure cannot be accidental. None of the central notions which account for unity is devoid of a fatal ambiguity. All of them are conceived both in opposition to their respective counterpart and as something comprehending both opposites. There is no “third term” which reasonably comprehends and resolves the previous opposition – and if we construct one, it will again fall into the same pattern. (Dilcher, 1995, p. 103)

There is an infelicity in Dilcher's expression, which may cause readers some confusion in the present context. Four lines after his statement that “for god everything is not neutral or something comprehending both”, he says that “the central notions (...) are conceived both in opposition to their respective counterpart and as something comprehending both opposites”, which I take to be in direct contradiction. However, it will be more charitable to take it that the former statement was intended to be directed against *neutrality*, that is, means and mixtures, etc., *between* two extremes of an

opposition, and to excise the phrase ‘comprehending both’ on that occasion, for the good of its health in the later statement.<sup>8</sup>

Dilcher and Bremer have raised the problem of the ‘ambiguity’ again in a more recent work, in which they have insisted that it “must be taken seriously as a basic problem of interpretation” (Bremer; Dilcher, 2013, p. 613, my translation). We shall see later, in Section 3, that by employing the well-studied notion of *markedness* such ‘ambiguities’ can be considered, *pace* Dilcher, to be instances of linguistic density, and their structural reappearance to be resonances, rather than being ‘fatal’.<sup>9</sup> By repeating similar structural patterns again and again, Heraclitus may have intended to draw attention to such dense structures of unity that are intrinsic to the oppositions. As we will see in Section 4, this is important to consider when attending to the further problems regarding the unity of opposites thesis, which Dilcher thinks follow upon this more basic problem. First, let us turn to consider a less problematised interpretation of the same phenomenon, which was put forward by Mourelatos.

## 2 The ‘leaning’ of opposites

In his article, ‘Heraclitus, Parmenides, and the Naive Metaphysics of Things’ (2008; 1973),<sup>10</sup> Mourelatos briefly touches upon a phenomenon that he identified as occurring in Heraclitus’ opposites, which he calls the “leaning” of opposites. I will first give a preliminary exposition of the overall framework of interpretation

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<sup>8</sup> This reading is corroborated by a conversation that I had with Dilcher about his work when he visited Dublin in 2013 (personal communication, 2013).

<sup>9</sup> The dual interpretive principles of *linguistic density*, a one-many intra-fragment relation between sign and signified, and *resonance*, a many-one inter-fragment relation, were introduced by Charles Kahn (1979, p. 89). Dilcher is somewhat critical of Kahn’s approach (Dilcher, 1995, p. 140, n. 34).

<sup>10</sup> Republished as an appendix to a revised and expanded edition of his work *The Route of Parmenides* (2008), which differs from the 1973 version mostly in its footnotes.

proposed by Mourelatos, in order to see later how this observation fits into it.<sup>11</sup>

Mourelatos employed a reconstruction of the metaphysical context of Heraclitus' thought, a commonly-held *naïve metaphysics of things* (hereafter 'NMT') (Mourelatos, 2008, p. 300-301), also called the "paratactic metaphysics of mere things" (Mourelatos, 2008, p. 319). What is peculiar to "the genius of *parataxis*" is that things are taken as complete by themselves and merely externally related (Mourelatos, 2008, p. 316). This NMT is characterized by three main "postulates or requirements", namely, "thinghood", "equality of status and independence", and "recognition of affinity and polarity".

The first postulate of 'thinghood' says that a *thing* is an entity that is presented in physical or perceptual space. 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, p. 303). That is, by 'the genius of *parataxis*', language is "dispensable" and "merely a convenience"; through naming and recalling, it merely mirrors the functions of the body when gesturing or reaching for a thing, or otherwise being directly acquainted with it. Like Cratylus, one might just as well give up speaking entirely and point to the things instead (Aristotle, *Metaph.* Gamma, 4.5 1010<sup>a</sup>12), not least because the book of the world turns out to be more like a "disemvowelled" alphabet soup, "about which it would be more appropriate to gape and point than to attempt to speak articulately" (Begley, 2021b; cf. 2021a).

The second postulate of 'equality of status and independence' entails that part of what it is to be a *mere* thing is that it does not enter into ontological dependency relations, and is on ontological par with every other mere thing. Mourelatos explains that:

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<sup>11</sup> For a further discussion and development of the framework, see Begley (2021a; 2020).



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, p. 300)

Hence it requires an effort on our part, one of “feigned naïveté”, in order to adopt such a perspective (Mourelatos, 2008, p. 300 & cf. p. 311, n. 29). Of course, the NMT does not preclude mereological compounds or mixtures. Mourelatos calls the thing-like components of complex entities ‘character-powers’, indexing this term with the Greek δύνάμις (Mourelatos, 2008, p. 301).

The third postulate is the ‘recognition of affinities and polarities’ as being tendencies of spatial arrangement. The affinity between character-powers is “nothing more than a tendency of physical propinquity in space”, while polarity is “a tendency of apartness” (Mourelatos, 2008, p. 303), that is, things are only externally related.<sup>12</sup> Mourelatos claims that Heraclitus was the first thinker to recognise the incompatibility between the postulate of thinghood and this third postulate, and that his solution was “to preserve the latter but to abolish the former” (Mourelatos, 2008, p. 317). The third postulate is preserved and strengthened by Heraclitus by being based on internal rather than external relations: “the opposites are essentially incompatible [...]; they are *one*, they are internally or conceptually related by being opposed determinations within a single field” (Mourelatos, 2008, p. 318).<sup>13</sup>

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<sup>12</sup> Mourelatos gives as an example, satisfying all the requirements of the NMT, Hesiod’s depiction of Night and Day as persons presented in space, who are independent of each other, having equal access to their shared dwelling and the earth, and who tend or agree to be apart spatially. Anaximander’s scheme of ‘opposites’ similarly satisfies the requirements, with their “territorial vendetta” leading to mutually exclusive spatial tenure (Mourelatos, 2008, p. 314-315; cf. Begley, 2021a, p. 80).

<sup>13</sup> Neels (2023, p. 18, n. 53) misreads Mourelatos (1973, p. 35; 2008, p. 318) as arguing that Anaximander thought that “the opposites are essentially incompatible”, as this is intended as a statement of Heraclitus’ view. He then imputes to Anaximander also the view that they are “opposed determinations within a single field” on this basis. This is symptomatic, in my view, of an

At the end of his article's section on Heraclitus, Mourelatos addresses the same aspect of Heraclitus' style that Dilcher has called the "vicious circle" with its "fatal ambiguity". Mourelatos notices that in an opposition "one of the opposed terms is often closer to the term expressing the encompassing unity than the other" (Mourelatos, 2008, p. 323). He explains this using the following examples:

Thus while there is a master opposition of fire against all things (B90, B31), it is also true that the world is essentially fire (B30). Similarly, the opposition of "just" versus "unjust" is resolved by God not in something neutral but in "just" things (B102); God is both war and peace (B67), yet primarily war (B53, B80); mortals and immortals are a unity (B62), presumably as immortals. In other words, the equality of the opposites is being compromised. One of the opposites is somehow privileged, closer to the ultimate reality. (Mourelatos, 2008, p. 323)

Both Dilcher and Mourelatos refer to many of the same fragments and Heraclitean terms. B30, B53, B67, B80, B90, and B102, are treated of in common. Indeed, the observations made are also similar. Both observe that for each opposition one of the terms occurs both in opposition to its opposite, and stands by itself as an encompassing unity. Mourelatos denies that the opposition is resolved in something neutral, just as Dilcher does.

Mourelatos also correctly observes that this "leaning is not a peculiarity of Heraclitus' thought" (Mourelatos, 2008, p. 323). He explains further:

In schemes of opposites that do not involve the Heraclitean doctrine of unity, the same compromise of equality can be detected insofar as the two sides are given positive and negative associations respectively. [...T]here is already a tendency to give polarities the

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insensitivity to the differences between Heraclitus' and his predecessors' conceptions of the nature of opposition (cf. Neels, 2023, p. 3, p. 9, n. 23 on Anaximenes, & p. 18-19 on strife; Begley, 2021a, p. 83; n. 12 above), notwithstanding what Neels says about explanation and the difference regarding "the way opposites were being used" (2023, p. 3; cf. n. 22 below).

connotation of a positive and a negative side in Hesiod and even in Homer. The leaning in Heraclitus is a residual feature from older schemes of opposites which otherwise conform to the structure of NMT. (Mourelatos, 2008, p. 323)

However, what Mourelatos did not recognise, at least at the time of writing c. 1968-73, was that this phenomenon has been studied under the name *markedness* (personal communication, 2014). Although he was correct that this is not peculiar to Heraclitus' thought, he inferred that it had been inherited from previous schemes of opposites without considering whether this 'leaning' may be a ubiquitous phenomenon of language. In the next section, I will describe this phenomenon more generally before turning back to its use by Heraclitus.

### 3 Markedness neutralisation and hypotactic metaphysics

In this section, I shed some light on the phenomenon that we have been puzzling over by drawing upon some of the modern research into *markedness*. The particular facet of markedness that is of most interest to us here is *neutralisation*. This is an effect whereby the unmarked term of an antonymy can be used to designate an entire semantic dimension. For example, when the words 'man' or 'men' are used in a generic sense to refer to the entire human species, this neutralises or suppresses the semantic contrast of 'man'–'woman'.<sup>14</sup> Other examples feature terms that are even more unmarked, such as 'dog' and 'lion' used to refer to a particular animal, which might be either male or female. The oppositions dog–bitch and lion–lioness are *neutralised* in 'dog' and 'lion' respectively (Lyons, 1977, p. 307-309). The meaning of the technical term 'neutralised' is important to grasp. It does not entail a mean or a mixture, something in between, etc., rather, it is a neutralisation or suppression of the pertinent

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<sup>14</sup> John Lyons gave the examples: "It is man that is responsible for environmental pollution" and "Men have lived on this island for ten thousand years" (Lyons, 1977, p. 309).

opposition so that the entire dimension, matrix, or genus becomes the intended subject.

One way to judge the distinction in this context is that it is acceptable usage to say ‘female dog’ or ‘female lion’, which are specifications, but not ‘male bitch’ or ‘male lioness’, which are oxymorons; ‘female bitch’ and ‘female lioness’ being pleonasm (redundant phrases due to being tautologous) (Lyons, 1977, p. 307). A principle of parsimony applies in natural languages whereby one side of an opposition may be used as a default encompassing term usually without confusion or detriment.

The neutralising term can be described as a “co-lexemic superordinate”. For example, ‘*dog*’ is a superordinate of the terms ‘dog’ and ‘bitch’, which are co-hyponyms. That is, it “designates what they have in common” (Cruse, 1986, p. 256). There are further complexities to markedness that need not concern us for present purposes. What is most pertinent is that these linguistic analyses reveal the importance of opposition and markedness neutralisation in hierarchical categorisation and abstraction.

Both Mourelatos and Dilcher independently encountered the same pattern in the fragments, each in his own way, without recognising it as markedness neutralisation. Neutralisation is present in the term ‘fire’ in B90 because, on one reading, fire is one thing among many (or as opposed to many others), while on another it is a comprehensive unity of fire and non-fire (cf. Dilcher, 1995, p. 102). Mourelatos (2008, p. 323) points to B31 (the turnings of fire) as a further example of fire being set against other things (i.e., sea, earth, and *prēstēr*), and to B30 as a particular locus for the comprehensive case.

This world order (*kosmos*), the same for all, none of the gods or humans made it, but it always was and is and will be: fire ever-living, kindled in measures and extinguished in measures. (B30; transl. LM D85)

We are not, in the case of B90, expected to resolve any ambiguity, that is, to decide between two readings of the one term.

Rather, in order to grasp the meaning of the fragment we should distinguish them and realise their internal relationship to each other. In B30, life or living, as the ever-living fire, stands as a neutralised superordinate, whereas elsewhere it appears set against the marked terms of death and dying, such as in B88 and B62.

There is the same within, what is living and what is dead, what is awake and what is sleeping, and what is young and what is old; for these, changing, are those, and those, changing in turn, are these. (B88; transl. LM D68)<sup>15</sup>

Immortals mortals, mortals immortals, living the death of these, dying the life of those. (B62; transl. LM D70)

In B53 and B80, war appears alone as the neutralised superordinate, as the father of all and the king of all, and as what is common, bringing about all things through strife and constraint. Further, in B67 war also appears in opposition to peace along with a number of other pairs of opposites.<sup>16</sup>

War is the father of all and the king of all, and has revealed that the ones are gods and the others humans, and has made the ones slaves and the others free. (B53; transl. LM D64)

One must know that war is in common, that justice is strife, and that all things come about by strife and constraint. (B80; transl. LM D63)

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<sup>15</sup> Laks & Most consider the second part of the fragment, referring to changing, not to be part of the quotation.

<sup>16</sup> Kahn also recognised this: “The pairing of war and peace is unique, since elsewhere War stands alone for the cosmic order [B80 & B53]. We thus recognize a duality in the role of war, which figures here as one constituent of a particular antithesis and there as the principle of antithesis as such, just as we have distinguished a partial and a total conception of deity and a particular (elemental) and universal (cosmic) role for fire. There is no *one* term that can designate the principle of total order without ambiguity” (1979, p. 278-279). See also Scully: “There is also some fluidity in Heraclitus’ terms, especially as seen in πῦρ and πόλεμος, as both stand for an extreme (πόλεμος as the opposite of εἰρήνη, social peace; and πῦρ as one element in a series of elements: earth, air, fire and water), and they can also be cosmic forces: πόλεμος as a generative and ruling force (father and king) and πῦρ as judge and executioner” (2022, p. 162, n. 8).

God: day night, winter summer, war peace, satiety hunger. He changes just as <fire>, when it is mixed together with incense, is named according to the scent of each one. (B67; transl. LM D48)

In another fragment involving god, B102, we find another clear example of markedness neutralisation.

For god, all things are beautiful, good, and just, but humans have assumed that some things are unjust, others just. (B102; transl. LM D73)

God takes the perspective that all things are beautiful, good and just, as neutralised superordinates, whereas humans take the perspective that recognises the divergence of things being just and unjust. B23 is probably connected:

They would not know the name of Justice if these things [i.e. unjust actions?] did not exist. (B23; transl. LM D55)

Accepting the implication to unjust things (cf. Kahn, 1979, p. 185; Robinson 1987, p. 91), it is the name of Justice that comes to be known in part by the existence of the unjust things. That is, the two names are not equal in this respect, with justice being unmarked while the unjust is marked. We find similar situations presented in B111:

Illness makes health sweet and good, hunger does so for satiety, toil for repose. (B111; transl. LM D56)

In each case again the existence of the marked item characterizes the unmarked item as positive. Whether and to what extent Heraclitus is attempting to effect *markedness reversal*, that is, to bring about a reorientation of marked and unmarked categories different from earlier schemes, and how this might relate to attributions of value, is a difficult matter, the full treatment of which is beyond the scope of our present discussion. However, it is clear that in some cases Heraclitus effects such reversals. A pertinent example is B57:

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. (B57; transl. LM D25a)

There is some debate regarding what Heraclitus was responding to in Hesiod's view of Night and Day. Kirk thought that *Theogony* 123–4 (Night as mother of Day) was the locus, but Mourelatos thought it more likely that Heraclitus was responding to 748ff. (Night and Day alternately occupying the same house, cf. n. 12 above) (Mourelatos, 2008, p. 317-318). Two observations are important here. First, Kirk's observation that "the two extremes together form a unity which is symbolized by the fact that the same word, ἡμέρα ('day'), can be used to represent either one extreme or the sum of both, i.e. the total period of 24 hours", recognises markedness neutralisation (Kirk, 1954, p. 156).<sup>17</sup> Secondly, the observation that "*hemera* ['day'] and *euphrone* ['night'] means the same thing ('the gentle, kindly one')" (Mackenzie, 1988, p. 19), and that "it is entirely characteristic of Heraclitus to regard such linguistic patterns as metaphysically revealing" (Sedley, 2009, p. 9). So, Heraclitus both reverses the markedness and rejects the naïve paratactic relationship inherent in Hesiod's depictions.

Mourelatos claimed that Heraclitus was the first thinker to recognise the incompatibility between the first and third postulates of the NMT. That is, Heraclitus' innovations were to abolish thinghood, and strengthen the recognition of affinity and polarity, respectively. However, as I have recently argued, this is somewhat inaccurate, in view of the postulates of the NMT being so closely connected with each other (Begley, 2021a, p. 84). It is central to the 'genius of *parataxis*', and what it is to be a *mere* thing, for such things to have *equality of status* with, and *independence* from, one another. In this light, Heraclitus' contribution should instead be viewed as being not that he abolished thinghood, but only *mere* thinghood insofar as the

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<sup>17</sup> Stekeler-Weithofer (2017, p. 530) also notices an "important ambiguity" in Heraclitus' use of 'day', effectively a markedness neutralisation that prefigures abstraction, especially of value as seen in B90.

equality of status and independence of things is undermined. This is accomplished in part by the strengthening of the relations foreseen by the third postulate. The *independence* clause of the second postulate is rejected, due at least to the recognition of internal relations between opposites. That is, things are not radically independent from each other in the way that they were taken to be by anyone who implicitly accepted the naïve paratactic metaphysics.

Extending this, I suggest that the leaning of opposites should also be regarded as being in conflict with the second postulate of the NMT, especially the *equality of status* clause. Mourelatos does not state this outcome explicitly, but he does say that “the equality of the opposites is being compromised” (Mourelatos, 2008, p. 323). Although the opposites are equal in terms of their opposition to each other, they are not equally disposed to their superordinate matrix or genus. This brings to the fore the genesis of a *hypotactic metaphysics*, a metaphysics of hierarchies and dependencies, which is embodied by Mourelatos’ notion of a *logos-textured* world.<sup>18</sup>

The ‘leaning’ of the Heraclitean opposites is due to the close relation between opposition and markedness. Heraclitus must have been aware of this phenomenon, and treated of it in a way that was crucially different to previous approaches to markedness. In earlier schemes, such as those referred to by Mourelatos in Hesiod and Homer, the relations follow archaic patterns of mere production and origin, not conceptual or structural hierarchies. There is a fundamental difference between seeing elements or states of nature as merely produced by each other and being related as, for example, the members of a lineage, perhaps personified as gods or persons and, on the other hand, being related *hypotactically* as intensional entities standing in internal subordination and opposition relations to each

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<sup>18</sup> Moravcsik employed a similar notion called the *attributive* or *ordering-structuring* model of explanation. He recognises the importance of hierarchical organisation for Heraclitus’ new metaphysics that “posits a hierarchical structure of units and wholes, and thus undermines the common sense notion that elements of reality that we can perceive are merely separate scattered bits of matter” (Moravcsik, 1989, p. 265; cf. 1991, p. 562). For more correspondences between Moravcsik’s and Mourelatos’ views and further development, see Begley (2021a).



other. This is especially compelling when we consider that Heraclitus was moving away from a polymathic and paratactic view of the world towards a *logos-textured* view, in which one discovers connections that can be arrived at or expressed only by way of language (Mourelatos, 2008; Begley, 2020).

The recognition of markedness neutralisation helps to introduce *hypotaxis*, hierarchical structure, into Heraclitus' metaphysics. Markedness, opposition, and hierarchical organisation are intrinsically connected. This is succinctly laid out by Battistella in his monograph on markedness:

The hierarchical organization of concepts is a well-known principle of structure. But in addition to superordination or subordination of features, hierarchy also characterises the relation between the terms of an opposition. Hierarchy is reflected in the dominance of more general terms over less general, and we can view markedness as a hierarchization of opposites. The concepts of markedness, opposition, and hierarchy are thus intrinsically linked. Opposition imposes a symmetry or equivalence upon language: within a minimal paradigm two signs are defined by the presence versus the absence of a property. Hierarchy is an evaluative component that organizes related categories. Markedness is the projection of hierarchy onto the equivalence implied by opposition, extending the nonequivalence principle of a ranked taxonomy to the minimal oppositions that make up the quanta of language. (Battistella, 1990, p. 21)

We should pay particular attention here to the description of markedness as a “projection of hierarchy onto the equivalence implied by opposition”. This matches well with Mourelatos' account of the function of the leaning of opposites in Heraclitus as leading to a compromise of equality, which was originally arrived at independently of any theoretical notion of markedness. The leaning of a pair of opposites in Heraclitus displays their hierarchical organisation in relation to their common superordinate, in that one member of the pair can stand for the unified matrix or genus in certain

contexts (*pace* Vieira, 2022, p. 194).<sup>19</sup> Conversely, it is in the nature of opposition to be opposed within the field of an encompassing matrix or genus. Mere incompatibility in the absence of this does not entail opposition.<sup>20</sup>

Heraclitus was not engaged in descriptive linguistics or anthropology, rather, he sought to draw out the hierarchical structure that this phenomenon implies and to apply this understanding in his theory of the hypotactic order and structure of the things in the world. Thereby helping to dispel the naïve paratactic metaphysics. Thus, by way of the phenomenon of markedness, Heraclitus was drawing out an important element of what he saw as being a ‘*logos*-textured’ world. That is, as Mourelatos informs us, Heraclitus realised that language, far from being merely a dispensable convenience, is the medium through which we must take an indirect route in order to articulate the ontological structure of the world (Mourelatos, 2008, p. 299).

## 4 *The Unity of Opposites*

It has been suggested that either there is no ‘unity of opposites’ thesis in Heraclitus, or that there are many such theses but that they are not subsumable by a single thesis. My view is that there is such a thesis in Heraclitus but, of course, there are many manifestations of it through which it must be understood. In 1995, and again in 2013, Dilcher put forward three direct problems that must be addressed by anyone who wishes to hold on to the traditional notion of a unity of opposites thesis. In this section, I briefly outline the problems,

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<sup>19</sup> Vieira says that there is “no clear indication of a shared substance, substratum, genus, or the like underlying the changes between opposites”. I suggest that we should be sensitive to the differences between each of these technical notions and the ways in which they can appear, to avoid tarring them all with the same brush. See also Section 4.3 below.

<sup>20</sup> This insight is often absent even in modern treatments of antonymy in formal semantics (Begley, 2022).

provide some discussion of these and some related issues, and present some responses.

#### 4.1 Problem one

The first of Dilcher's problems is that Heraclitus does not use the term *enantia* to refer to his 'opposites' (Dilcher, 2013, p. 264; Bremer & Dilcher, 2013, p. 613; cf. Buchheim, 1994, p. 79-83). This fact is indeed indisputable, at least for the extant fragments.<sup>21</sup> It is what the verbal formula 'unity of opposites' leads us to consider that is problematic for Dilcher. That is, it is the way we conceptualise 'opposites' and our conceptualisation of 'the unity of opposites' in terms of 'opposition' and 'unity' that is the problem. An analysis in terms of 'opposition' and 'unity' hampers attempts to explain Heraclitus' doctrine in a manner approximating how he might have (cf. Dilcher, 1995, p. 108-109).

I suggest that a plausible reason for why Heraclitus does not use the term for 'opposites' (*enantia*), is that he was attempting to distance his own theory from talk of *mere opposite things*. The word would not have been appropriate to his theory because in contemporary usage, despite not yet being a standard technical expression, it "would help remind one of 'the hot,' 'the cold,' etc., of earlier philosophy" (Mourelatos, 2008, p. 313, n. 33), and so would have been bound up with the NMT. It would have led the reader to conceive of the relation solely in terms of warring opponents or physical things opposed to each other externally and spatially.

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<sup>21</sup> Another word, ἀντίζουον ('opposed', 'adverse'), is used in B8: "(...) Heraclitus [scil. says] that what is opposed converges [cf. D47], and that the most beautiful harmony (*harmonia*) comes out of what diverges [cf. D49], and that all things come about by strife [cf. D63]" (B8; transl. LM D62, brackets original). Laks & Most treat the entire fragment as a paraphrase by Aristotle of three others: B10, B51, and B80 (2016, p. 167, D62). Similarly Dilcher (1995, p. 139, n. 33), and Kahn (1979, p. 193, LXXV), although they follow Kirk (1954, p. 220) in recognising the word as Ionic and so plausibly original. In any event, it is not used as a formal designation for 'opposites', rather, it is itself paired with συμφέρον ('converges'), perhaps in resonance with B10 and B51. In B120, ἀντίον ('against') is used in a purely spatial context (cf. Bremer & Dilcher, 2013, p. 613).

Dilcher's mistake is to assume that because Heraclitus did not use the term he did not wish us to interpret his use of pairs of antithetical terms under *any* conception of opposition. Although Heraclitus rejected one notion of opposition associated with the word *enantia*, he did not intend to reject all notions of opposition, rather, he sought to reconceptualise the notion as part of his reaction to the NMT.<sup>22</sup> So, the use of the term 'opposites' need not mislead *us* if we are suitably inoculated. Let this count as the first dose.

## 4.2 Problem two

Dilcher (1995, p. 103-104; 2013, p. 264) sets up the following dilemma to show that any attempt to derive a formula that will be applicable to all instances of unity of opposites will fail. This is because it will be either (i) too constrictive, thereby not covering all the phenomena or not being consistent, or (ii) too loose and covering them all, but in a way that is uninformative or lacking explanatory content. As such, (i) fails by failing to unify, while (ii) fails by failing to be explanatory. Neels has recently restated the problem: "The central issue with the standard view is that any clear formulation of a unity of opposites principle is too restrictive to make complete sense of Heraclitus' interesting and varied statements about opposites" (2023, p. 3). Both horns of the dilemma take the diversity of the instances as a common assumption, and the solution to be a unification of this diversity under an explanatory formula. As Dilcher puts it: "These alleged opposites are very diverse, and accordingly the logic of their being one would perforce be almost equally diverse" (Dilcher, 2013, p. 264). This is, straightforwardly, a non-sequitur, because diversity of instances, by itself, does not have this consequence.<sup>23</sup>

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<sup>22</sup> Thus, I am roughly in agreement with Neels (2023), at least insofar as opposites become thematised in Heraclitus as *explananda*. Neels (2018a) makes what I take to be a distinct claim regarding the examples that use opposites. This is beyond the scope of the present article, so I leave discussion for another time. For a clear point of disagreement, see n. 13 above.

<sup>23</sup> See Lloyd (1966, p. 99), quoted below at n. 26, who drew a different conclusion.

It would be important to assess the diversity of the opposites *qua opposites*, and not merely with respect to their particular occurrences or contexts, or any arbitrary groupings, etc. For Heraclitus, it is not a mere tendency that a particular pair of opposites is related. That is to say, *contra* the paratactic NMT, it is essential to being an opposite that it is internally related to, and unified with, its opposite. This has a bearing, perhaps only negatively, upon the issue of determining what it is that is opposed. If the relations of opposition were instead relations between mere individual *things*, the unpalatable result would follow that there would be at least as many identifiable oppositions as there are individual *relata*.<sup>24</sup> Heraclitus would then be interpreted as being some kind of naïve nominalist, recognising only mere tendencies of spatial arrangement (cf. Begley, 2021a).

Dilcher is not quite this extreme, but his proposed problem relies on the assumption that there is very little commonality to the various opposites (cf. “almost equally diverse” quoted earlier). However, he does not make any enquiry in this direction. The pairs of opposites taken *prima facie* have in common that the designation ‘opposite’ may be applied. If we were to distinguish different kinds of opposites *qua opposites*, and then show that, with regard to the relevant unity of each kind, a single formula cannot be produced, only then should we be willing to grant Dilcher an analogue of his proposed dilemma. It is clear that Dilcher has not made these necessary steps to motivate his dilemma.

Some interpreters have indeed distinguished what they take to be different kinds of opposites or opposition in Heraclitus (e.g., Marcovich, 1967, p. 161; Stokes, 1971, 90ff.; Bernabé, 2009, p. 106; McKirahan, 2010, p. 131-134).<sup>25</sup> Although this is an admirable and

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<sup>24</sup> A similar argument was made by John Duns Scotus (*Ordinatio*, II d. 3, q. 1, n. 19). I am indebted to Dónall McGinley for drawing my attention to this.

<sup>25</sup> Stokes leaves the question open as to whether Heraclitus would have seen any significance in such an analysis (1971, p. 90). Bernabé outlines seven types of ‘polar expression’, but, as he notes, he does not aim at reconstructing the theory of opposites (2009, p. 103). McKirahan identifies the following “types of opposition”: A: “a single subject has opposite properties with respect to or in comparison with different types of beings.”, B: “a thing has opposite properties in different

valuable pursuit, we should remember Kahn's warning that such cataloguing can reduce to a tedium in which we would end up simply writing down most of the fragments in a special order. What is needed instead is the adoption of a more synoptic vision of opposition and the thesis of unity, which is "coextensive with Heraclitus' thought as a whole" (Kahn, 1979, p. 209). The selection of the categories by which we view the data is effectively a determination regarding how we should divide classes of opposites in a principled manner (*qua opposites*). It strikes me that this is very difficult to motivate in a context in which the technical linguistic and logical vocabulary had not been developed, and scholars have not arrived at any consensus. I am inclined to think that it could only be principled at the 'logical' level of the distinctions between contraries and contradictories, etc., but there is no evidence that Heraclitus explicitly made such distinctions (cf. Lloyd, 1966, p. 127). It should also be borne in mind that, in addition to specific instances of opposition, Heraclitus provides more general statements of the thesis (e.g., B10, B51). These statements are not about particular oppositions, or one class over another, rather, they are attempts to state a more general pattern (cf. Lloyd, 1966, p. 97-99; Mackenzie, 1988, p. 18; Hussey 1999, p. 93).<sup>26</sup>

It has even been argued more recently that there is more than a single unity of opposites thesis in Heraclitus. Neels (2018a; 2018b; 2021) argues that there are precisely three such theses. That is, that

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[objective] circumstances.", C: "a single thing has opposite characteristics at different times.", D: "being able to conceive of, understand, and value correctly either of a pair of opposites requires being able to do the same for the other opposite as well.", "Heraclitus considers many kinds of opposition, some physical (E), others conceptual (D), some depending on the point of comparison (A) or the respect in which (B) or time at which (C) a thing is considered." (2010, p. 131-134). It is important to notice that these characterizations themselves refer to opposites or opposition, and so they are better seen as characterizations of the *contexts* in which the oppositions are found, rather than of types or kinds of opposition *per se*.

<sup>26</sup> As Lloyd puts it, the general doctrine depends "on the recognition of an *analogy* or *equivalence* between the relationships between pairs of opposites of many different sorts, and (...) the range of examples of different types of opposition which are cited to illustrate his general thesis is particularly wide" (1966, p. 99).

the unification happens differently in different domains and so requires a different principle for each. One problem with this view is that it appears to go against Heraclitus' headline unity claim, e.g., the *hen panta* of B50, and the fact that this is in accord with the *logos*. Further, the view addresses Dilcher's dilemma only in that it opts for an extreme adoption of the first horn, (i), by advocating separate constrictive principles, each covering its own base. Moreover, Neels nevertheless does eventually arrive at a *single* formulation "about differing-agreeing", which "can be said about all the opposites in Heraclitus" (2023, p. 36). This ends up being very similar to what others have proposed, except that Neels chooses not to call it *the Unity of Opposites*. The result is a merely verbal dispute, because all parties already agree that Heraclitus himself uses no such name for the principle anyway. However, there is a tradition of giving the name to the principle about all opposites, which is what becomes alienated by this manoeuvre.

These approaches overlook the clear commonalities between all the opposites that Heraclitus mentions. In particular, the phenomenon of markedness neutralisation, a domain independent commonality, is present across the instances of opposition and is directly involved with the doctrine of unity. Although the examples of opposites or their contexts are diverse, it does not follow that "the logic of their being one would perforce be almost equally diverse" (*pace* Dilcher, 2013, p. 264). The relation between opposites is an "internal relation of complementarity" (Mourelatos, 2008, p. 315). Unification is not an operation that takes place, or happens, externally between opposites that are separate from each other, which, as we saw in Problem One, is a point that Dilcher is also at pains to convey, albeit along different lines (cf. 1995, p. 109-110). Instead, (to use Dilcher's words) it is the very 'logic of their being' that involves a unification with their opposite.

### 4.3 Problem three

Dilcher motivates this problem in a manner similar to how he motivated his second problem.<sup>27</sup> He proposes a dilemma between taking the unity of opposites as either: (i) a strict identity, for example, “day is night”; or (ii) as an ‘underlying unity’, for example, “day and night are one in respect of something else, for instance of the continuum of time they both occupy” (Dilcher, 2013, p. 264-265). The first horn has often been adopted by those who wish to claim either that Heraclitus was consciously prefiguring the principle of non-contradiction or that he was unconsciously violating it. In the case of the second horn, those that have sought to save Heraclitus from contradiction have interpreted him as positing a unity ‘underlying’ the opposites, or on a ‘higher level’.<sup>28</sup> Dilcher rejects (i) on the grounds that only some of the fragments are capable of being read as stating formal contradictions, and even then “only at the cost of excessive simplification” (1995, p. 106). Dilcher rejects (ii) on the grounds that such a loose interpretation of the unity as being ‘underlying’ or on a ‘higher level’ oversimplifies Heraclitus’ doctrine and is not in accord with his own description of it in B51 as being a ‘back-stretched (or back-turning) connection’ (Dilcher, 2013, p. 265). This is a hereditary interpretative formula that turns Heraclitus “surreptitiously into a premature Aristotelian” (2013, p. 265). Dilcher argues that the phrase ‘underlying unity’ has its origins in Aristotelianism, because it ultimately comes from Aristotle’s notion of substance, *substratum* or *substantia* in Latin, or ὑποκείμενον (*hupokeimenon*) in Greek (Dilcher, 2013, p. 265). So, Dilcher’s objection is that such interpretations are anachronistic.

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<sup>27</sup> Indeed, in his earlier work (1995) the two problems are difficult to separate, and they have in common an appeal to a dilemma between strict or constrictive interpretation and loose or vague interpretation.

<sup>28</sup> Dilcher (1995, p. 104-105) places Kirk, Kahn, Lloyd, and Marcovich in the latter camp, (ii), and Guthrie, Stokes, and Emlyn-Jones in the former, (i), with Barnes’ analytical view being the most extreme and proleptic representation of Heraclitus as violator of the Law of Non-Contradiction and wanton abuser of first-order logic.



It is generally accepted that the strict identity view is too extreme a reading of what are unity claims often lacking merely explicit qualification (cf. Graham, 2019). Regarding the view of the unity as being ‘underlying’, we should heed Dilcher’s warning of anachronism. Mourelatos too warns against directly applying Aristotelian substance metaphysics to Heraclitus, because what we find in Heraclitus is but the beginning of a revolution against the NMT (Mourelatos, 2008, 307ff. & 321; Begley, 2021a; cf. Vieira, 2022, p. 191). Mourelatos’ interpretative framework explains why it is not even feasible to interpret Heraclitus as holding that the unity of opposites obtains in virtue of a transcendent or ‘underlying’ unity. The notion of the unity of opposites as an internal relation, intrinsic to opposition, provides a solution in that it avoids the hereditary transcendent reading. Certainly, ‘higher levels’ of unity in a sense play a part insofar as superordinates are involved in markedness neutralisation. Nonetheless, as we have seen, this phenomenon is intimately connected with the relations of opposition themselves and so should not be considered to be apart from them, as to do so would be to misunderstand the nature of opposition.

## Conclusion

In this article, I have attempted to alleviate misunderstanding of the phenomenon of markedness neutralisation in Heraclitus, which led many interpreters away from its significance and connection with the unity of opposites. I have shown that what Mourelatos called the ‘leaning’ of opposites also undermines the second postulate of the NMT, in particular the equality of status between opposites. This brings to the fore the genesis of a *hypotactic metaphysics* of hierarchies and dependencies that conforms to a notion of the world as *logos-textured*, which can be discovered and expressed only indirectly via language as opposed to mere acquaintance or ostension.

Through noticing this pattern of markedness neutralisation in the fragments of Heraclitus, we can see more of the commonality between the examples of opposites that he provides. This in turn

helps in responding to objections against the notion of a unity of opposites thesis (whether or not we are wedded to this phrase), both from those who think that there is no such thesis, and those who think there is no *single* such thesis. Many of these objections arise from misunderstanding of the nature of opposition, which was in part what Heraclitus hoped to dispel in his reaction to the NMT.

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