SYMMETRY IN THE EMPEDOCLEAN CYCLE

According to the traditional view of Empedocles' cosmic cycle, there are two creations of plants and animals, one under the dominion of increasing Strife and one under the dominion of increasing Love. At the point at which Strife holds complete sway the four elements are completely separated and all life is destroyed; at the point at which Love is completely dominant there is also a destruction of the biological world, this time because the elements are blended into a perfectly homogeneous mixture. This interpretation of the cosmic cycle, which has prevailed almost since it was developed by Friedrich Panzerbieter (1844) and seconded by authority of Eduard Zeller (1856)1 was challenged by Paul Tannery (1887) and then by H. von Arnim (1902).2 Long after these essentially programmatic critiques, three independent studies published in 1965 by Jean Bollack, Uvo Hölscher and Friedrich Solmsen mounted a vigorous challenge to the received view.3 However, in a detailed monograph devoted to Empedocles' cosmic cycle, Denis O'Brien (1969) brought to bear an impressive array of scholarly evidence and critical acumen in support of the traditional view (or rather a modified version of it).4 Several challenges to the traditional view have appeared since O'Brien's book, 5 of which the most significant is that of A. A. Long, who, while criticizing attempts of some opponents of the

- ¹ F. Panzerbieter, Beiträge zur Kritik und Erklärung des Empedokles (Meiningen, 1844). See D. O'Brien, Empedocles' Cosmic Cycle (Cambridge, 1969), pp. 157f., on the origin of the now traditional interpretation of the cosmic cycle; Zeller's account 'remains essentially unchanged' in E. Zeller, Die Philosophie der Griechen, 6th ed., W. Nestle, ed., Teil 1, Hälfte 2 (Leipzig, 1920), pp. 969-79.
- pp. 969-79.

 ² P. Tannery, 'La cosmogonie d'Empédocle', Revue philosophique de la France et de l'étranger 24 (1887), 285-300; H. von Arnim, 'Die Weltperioden bei Empedokles', in Festschrift Theodor Gomperz (Vienna, 1902).
- ³ J. Bollack, *Empédocle*, vol. 1 (Paris, 1965); U. Hölscher, 'Weltzeiten und Lebenskyklus', *Hermes* 93 (1965), 7–33; F. Solmsen, 'Love and Strife in Empedocles' Cosmology', *Phronesis* 10 (1965), 109–48.

 ⁴ D. O'Brien, *Empedocles' Cosmic Cycle* (Cambridge, 1969).
- ⁵ Cf. J. C. Lüth, Die Struktur des Wirklichen im empedokleischen System über die Natur (Meisenheim, 1970), which, however, does not take account of O'Brien's study (presumably because it appeared when Lüth's book was in press). Lüth mainly follows Hölscher (see pp. 5, 32, and n. 42, 59f.), but does give one original argument, pp. 61–5. His interpretation contrasts with Long's in an interesting way because he takes the theme of B17.1–13 to be living things rather than the elements. However, his reading of the passage seems forced, in particular because he takes the subject of lines 9–10 and 12 to be the elements while the subject of 11 and 13 is living things. The only evidence for this shift of subjects is the predicate adjective $d\kappa i\nu \eta \tau o_i$, which can be understood in another way (see n. 9 below).
- J. Mansfeld, 'Ambiguity in Empedocles B17, 3-5: an Interpretation', *Phronesis* 17 (1972), 17-39, proposes understanding $\delta o i \eta$ of line 3 as meaning 'ambiguous'. On this reading the confluence of elements satisfies the reference of $\gamma \epsilon v \epsilon \sigma \iota s$ while doing away wth the sense of the term. This interpretation seems forced. It requires us to read into B17 a sophisticated semantic theory for which there is no evidence in the text, a theory which is patently anachronistic. And even given the semantic theory, Empedocles is made to say something wrong-headed. For to say that the confluence of all things creates and destroys genesis is to make a use/mention error: what is destroyed on Mansfeld's reading is not genesis but 'genesis'.

See also N. van der Ben, *The Proem of Empedocles' Peri Physios* (Amsterdam, 1975), 29-32, 78-84.

Note that while many distinguished scholars have attacked the traditional view, there are serious problems with all the revisionary reconstructions of Empedocles, and there is almost no consensus among anti-traditionalists. See criticisms of other anti-traditionalists by Mansfeld, 20-4, and A. A. Long (1974, 409-12; see following note).

⁶ A. A. Long, 'Empedocles' Cosmic Cycle in the 'Sixties,' in A. P. D. Mourelatos, ed., *The Pre-Socratics* (Garden City, N. Y., 1974).

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traditional view, produced some novel and interesting arguments against it. Although the traditional view continues to enjoy the support of authorities such as Jonathan Barnes and M. R. Wright, there is a decided shift in favour of revisionary views. Nevertheless recent advocates of a revisionary interpretation do not provide detailed refutations of the traditional view; Long's arguments remain the strongest objections to the traditional view, and they have never been refuted. Will they stand up to scrutiny?

Long builds his study on the premise that any solution to the problem should be grounded in the text of the fragments rather than testimonia. His own interpretation grows out of a careful reading of fragment 17. Since most proponents of the traditional view support their interpretations by referring to B17, usually in conjunction with testimonia, Long's challenge is a serious one. And since studies of the doxography have produced no agreement but only further areas of dispute, the only hope for progress in the question seems to lie in the direction indicated by Long. I believe, however, that a close reading of B17 and some related fragments will support the traditional view. In this paper I shall (I) examine Long's reading of B17, (II) investigate the structure of the fragment, and (III) consider the evidence of fragments 21, 26 and 35.

First, I wish to clarify some points of terminology. Since for Empedocles, elements, compounds, living things, and the cosmos itself all are generated in some way or other, it is easy to confuse senses of terms like 'generation' and 'creation'. The real debate between the traditional and revisionary views concerns the generation of living things. In order to keep questions of this specialized kind of generation separate from general questions, I shall reserve the term 'creation' for the generation of living things. I shall refer to the traditional view as the Double Creation view (DC) and the competing view – of which there are several variants – as the Single Creation view (SC). Sometimes the views are contrasted as the four-stage versus the two-stage view, but since some defenders of SC also recognize four stages in the cosmic cycle, the distinction is not helpful. It also would be misleading to call DC the double cosmogony view, since in perhaps its most defensible version it posits only one cosmogony.¹⁰

I

According to Long, a close reading of B17 supports SC. The crucial lines are the first 13:

I shall speak a double tale: at one time they11 grew to be one alone

- ⁷ J. Barnes, *The Presocratic Philosophers*, rev. ed. (London, 1982), M. R. Wright, *Empedocles: The Extant Fragments* (New Haven, 1981). The traditional view is rejected by Malcolm Schofield in G. S. Kirk, J. E. Raven and M. Schofield, *The Presocratic Philosophers* (Cambridge, 1983), p. 288 n. 1, and Catherine Osborne, 'Empedocles Recycled', *CO* 37 (1987), 24–50, at 38ff.
- ⁸ Wright's reply (1981, pp. 48f. n. 147) to Long and other critics is so compressed as to be unintelligible.
- ⁹ According to Hölscher (1965, 11f., 15), Aristotle holds the traditional view because of a misreading of B26. Solmsen (1965, 130–2) holds that he is guilty of a 'misconstruction' based on B26, but that he is inconsistent in his interpretation. Bollack (1965, 102–6) and Long (1974, 420–4) hold that the tradition does not contradict the single creation view. On the other hand, proponents of the double creation view generally hold that the doxographic tradition supports them.
- ¹⁰ Cf. Wright (1981), p. 46. Here I mean 'cosmos' to denote 'just the physical frame of the world', as Long expresses it (1974, 400).
- The pronoun is not stated; it could be either singular or neuter plural. Empedocles may be imitating the practice of Parmenides B2, B8, who omits the subject of $\epsilon \sigma \tau \iota$ probably because

from more, and at another time it grew apart to be more from one.

And double is the birth of mortal things, and double the demise;
for the confluence of all things begets and destroys the one [generation],
while the other having been nurtured while things were growing apart fled away.

And these things never cease continually alternating,
at one time all coming together into one by Love,
at another time each being borne apart by the enmity of Strife.

Thus, inasmuch as they are wont to become one from more

and in turn with the one growing apart they become more

they are born and they do not enjoy a steadfast life;
but inasmuch as they never cease continually alternating,
they

they are ever immobile in the cycle.

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Long makes two interpretive points which have far-reaching implications. (1) The context of the fragment is discussion of the principles of change in general, and we should not jump to a conclusion about what the $\theta\nu\eta\tau\dot{a}$ 'mortal things' referred to in line 3 are. When we examine the lines which follow, we find that mortal conditions apply both as things unite and as they separate: things are born, and they do not enjoy a steadfast life (1974, 402–3). But what are these mortal things? The later lines of the fragments tell us:

Toward the end of fr. 17 Empedocles writes that 'all these things are equal and of like age in origin' (line 27). From the context it seems clear that he means the four elements plus Love and Strife. He goes on to say that they have different prerogatives and their own character; that they prevail in turn as time comes round. 'And in addition to them,' he says, 'nothing else *comes to be* or *ceases to be*; for if they perished utterly they would no longer exist' (lines 27–31). (p. 403, Long's italics)

The six entities come to be as they are separated from the one, and cease to be as they perish into it; although their material is imperishable 'they only exist as individual things ($\xi \kappa \alpha \sigma \tau \alpha$) when they are sundered from the one' (p. 404, Long's italics). Thus the six entities qualify as mortal things.

(2) $\delta\iota \epsilon \pi \tau \eta$ ('flees' or 'fled') in line 5 should be understood as temporally past. Long translates line 5 as follows: 'The other, having been nurtured by things growing apart again, fled away' (p. 405). He makes the point that 'it is by no means certain that what "fled away" did so because things continued to grow apart. Ceasing to grow apart (i.e. coming together) could be the reason why that way of birth and decline "fled away" (ibid., Long's italics). By treating $\delta\iota \epsilon \pi \tau \eta$ as a temporal agrist ('fled away')

he wishes the verb to be understood as part of a sentence frame: 'x is' or 'x is F' (see A. P. D. Mourelatos, *The Route of Parmenides* [New Haven, 1970], pp. 47ff.). Empedocles does not have the same intent, but he probably does wish the vagueness of the phrase to convey a notion of identity of the one and the many: it is ultimately indifferent what pronoun one uses, for the one becomes the many and the many the one. The same remarks apply to 'it' in line 2. I have supplied pronouns corresponding to the number of beings at the beginning of the change.

 12 θρεφθεῖσα διέπτη is an emendation of θρυφθεῖσα δρεπτή (θρεφθεῖσα: Panzerbieter, διέπτη: Scaliger). The reading works remarkably well (cf. O'Brien 1969, 164–7). Alternative readings have been unconvincing, e.g. θρυφθεῖσα διέπτη (von Arnim, Hölscher) or downright tendentious, e.g. δρυφθεῖσ' ἀποδρύπτει (Bollack). For criticisms, see O'Brien, ibid., and Long (1974, 409f.).

13 This line, missing in quotations, is supplied from a parallel portion of B26 quoted in Aristotle, Ph. 8.1.250b30 (see Ross text).

¹⁴ It is unclear why Empedocles shifts to the masculine-feminine form $d\kappa i\nu \eta \tau o\iota$ here. E. Bignone, I poeti filosofi della Grecia: Empedocle (Turin, 1916), ad loc. suggests that $\theta \epsilon o\iota$ be understood; cf. Diels in apparatus of Diels-Kranz, who refers to B6. H. Munding, 'Zur Beweisführung des Empedokles', Hermes 82 (1954), 129-45, at 134, argues that the antecedent is $\theta \nu \eta \tau o\iota$, as does Lüth (1970, 63f.).

¹⁵ All translations are my own except as noted.

rather than a gnomic aorist ('flees' or 'fled' in a generalized sense, as 'killed' in 'curiosity killed the cat'), as it is usually taken, Long makes it possible to see the process described in line 5 as taking place before that described in line 4. He also refuses to take the participle $\delta\iota a\phi\nu o\mu\acute{e}\nu\omega\nu$ as having causal force, thus removing the implication that separation is the cause of the second genesis.

On the basis of the above interpretations, Long produces the following scheme of the stages of the cosmic cycle:

- (a) The Sphere, in which all the elements are perfectly blended;
- (b) The violent shattering of the Sphere by Strife;
- (c) (line 5) The process 'from maximum Strife to incipient Love';
- (d) (line 4) The process 'from weakening Strife toward maximum Love' (p. 406, using my own lettering system).

Thus, instead of a cycle in which increasing Strife creates one world and increasing Love creates another, Long envisages a cycle in which the shattering of the Sphere is followed by a continuous process of unification, divided into a stage of decreasing Strife and a stage of increasing Love. Long's point (1) disarms the implications of line 3 that there is a double creation, and point (2) disarms the implication that separation creates a second world of mortal creatures after the process of unification. (2) enables Long to transpose (d) and (c) from the traditional order in which they are taken, and to defend SC while recognizing four stages of the cycle.

I wish to show that the context of lines 3-5 of B17 does not decide against DC. Consider what the function of the fragment is in the argument of the poem. The obvious intent of the first two words is to point the hearer to the message of the poem: the opening lines seem to have a programmatic function. Empedocles is telling us what to expect in terms of the content and perhaps the form of the exposition – he is laying out a programme which the remainder of the work is intended in some way to fulfil. The commentators inform us that the fragment came at the beginning of the poem, 16 that is, just where we would expect it to come if it were a programmatic statement. The use of such a statement of the argument is in keeping with conventions of philosophic composition of the time. Heraclitus' book began with a statement of his intentions.¹⁷ More significantly, Parmenides, who in so many respects provides a model for Empedocles' work, ends his proem by announcing the overall structure of his argument, with its division into what were later called the Way of Truth and the Way of Opinion (B1.28-32, cf. B8.50ff.). He also begins his B8 with a programmatic statement which very rigorously conforms to the structure of the argument in the same fragment. 18 In fact, Empedocles' own remarks later on in B17 show that he takes lines 1-2 seriously and intends to follow up on them: lines 16-17 repeat 1-2 after Empedocles has said 'as I spoke before manifesting the threads of the tales $[\pi\iota\phi\alpha\dot{\nu}\sigma\kappa\omega\nu \ \pi\epsilon\dot{\nu}\rho\alpha\tau\alpha \ \mu\dot{\nu}\theta\omega\nu]$ ' (line 15). An abstract translation of the last phrase

¹⁶ Simplicius in Ph. 161.14, Clement, Strom. 5.15 cited in the prologue to B17 in Diels–Kranz. ¹⁷ Heraclitus B1; Aristotle, Rh. 3.5.1407b16 = 22A4; Sextus, Adv. Math. 7.132 = A16. Cf. C. H. Kahn, The Art and Thought of Heraclitus (Cambridge, 1979), pp. 7–9. Heraclitus' proem does not detail a formal structure, but it does prefigure key themes (logos, human ignorance, the limitations of perception), and it does promise analyses of reality – ὁκοίων ἐγὼ διηγεῦμαι κατὰ φύσιν διαιρέων ἔκαστον καὶ φράζων ὅκως ἔχει – and anticipate diagnoses of human cognitive frailties.

 $^{^{18}}$ G. E. L. Owen, 'Eleatic Questions', CQ 10 (1960), 84–102, Mourelatos (1970 [see n. 11], 95 and n. 2). Cf. Wright (1981, 48), who, although she cites the programmatic remarks of Parmenides as a model, does not anchor Empedocles' programme to any one passage.

indicates the strong suggestion that Empedocles has a programme in mind: 'declaring the ends of the account'. However, a more concrete translation captures better the spirit of the line and accords better with Empedocles' conscious cultivation of the Homeric ethos. In fact, the concrete translation I have given supports the notion of a programme in a direct, if more iconic, way. R. B. Onians¹⁹ has shown that the root meaning of $\pi \epsilon \hat{i} \rho \alpha \rho$ is 'cord' or 'band', and that the term may possibly denote the woof-threads of a woven fabric (p. 340). He places the present passage of Empedocles alongside Il. 3.212, μύθους ὑφαίνειν (p. 341) and notes similar figures in Pindar, for whom the metaphors of weaving and embroidery become almost commonplaces for poetic expression.²⁰ To these parallels we can add the striking etymological play of Bacchylides 5.9f., ὑφάνας ὕμνον 'weaving a web of song'. 21 Common to these poetic figures is the image of a poet creating a texture by the use of threads. Onians points out that the sense of 'outline' is also a distinct possibility for Empedocles' $\pi\epsilon i \rho a \tau a$ (p. 341, cf. 317). Thus Empedocles may be calling our attention either to his creation of a fine texture or to his creation of a design in the poetic fabric. In either case he clearly wishes to suggest that there is a connection between his philosophical objectives and his poetic medium. His composition will be no less artfully contrived than a well-wrought tapestry.

Let us return, then, to examine the structure of lines 1-13 as prefiguring the design of Empedocles' poem. The lines seem to fall into four parts: (i) there is the initial claim that Empedocles has a double tale to tell concerning a temporal alternation between a process of unification and a process of division (lines 1-2); (ii) this is followed by an assertion of a double genesis and destruction of mortal things, whatever that may signify, apparently caused by the uniting and separating of things (3-5); (iii) Empedocles makes the claim that the alternation never ceases, and that Love is the agent of unification and Strife of separation (6–8); (iv) finally, he remarks that things do not have a secure life insofar as they are involved in the alternate processes of unification and separation, but insofar as the processes are iterated endlessly, things enjoy an unmoved life (9-13). These four divisions are fairly clearly marked by sense, rhetorical structure, and punctuation (each section is commonly punctuated as a separate sentence). The difficulty comes in trying to decide the interrelation between the sections. However, the particles, as usual in Greek composition, give us a good indication of the connections. Line 3 is marked by $\delta\epsilon$ 'and', suggesting that (ii) is a further point in addition to (i). Some defenders of SC argue that (ii) is just a consequence of (i), 22 that is, that the unification and separation processes have a double aspect of creating and destroying something, namely what is unified and what is destroyed. It is difficult to see how the weak connective $\delta\epsilon$ can convey this sense;23 if this is the correct reading it cannot be discerned from the language alone. (iii) is fairly obviously a further consideration introduced by καί, while (iv) is an inference from (iii) marked by ουτως 'thus'.

Empedocles seems to be making three main points which have a corollary (iv). (1) There are alternating opposite processes of unification and separation (2) leading to a double genesis and destruction and (3) the alternating processes never cease, so (4)

¹⁹ The Origins of European Thought (Cambridge, 1954), pp. 310ff.

²⁰ P. 340 and nn. 3 and 4 cite fr. 179, Nem. 4.44, Pyth. 4.275, schol. on Nem. 7.79, Nem. 8.15, Pyth. 9.77.

The etymology is a false one (see H. Frisk, *Griechisches etymologisches Wörterbuch*, vol. 2 [Heidelberg, 1973] s.v. $\ddot{\nu}\mu\nu\sigma_s$) but revealing of the poet's intuitive connection of song composition with weaving.

22 Solmsen (1965, 140), Long (1974, 411).

²³ Of the use of $\delta \epsilon$ for $o \bar{\nu} \nu$ J. D. Denniston, *The Greek Particles*, 2nd ed. (Oxford, 1954), p. 170, says: 'In general, there are few examples, and none are striking'.

things are mortal and immortal in different respects. Now it seems likely from the content of the sections that the main programme consists of (1) and (2), and that (3) clarifies (1) while (4) is a consequence of (3). If this is so, we would expect to find that there are two main theses of the poem, one concerning the alternation of cosmic processes, the other concerning the comings-to-be and destructions which somehow are entailed by those processes. (3) and (4) would be illustrated in the portrayal of (1). Whether (i–iv) prefigure the actual structure of the poem is a further question; here I shall only maintain that they state the theses of the poem.

When we get to lines 14-35 of B17, we observe an interesting correlation with section (i). Lines 14-15 recall lines 1-2, which are then repeated verbatim in lines 16-17 - an obvious resumption of the first item of the programme. Then the subject of line 17 (= line 2), which has until now remained an undefined neuter plural, is stated in an expansion. The things referred to are fire, water, earth, air, Strife and Love. Empedocles expounds the attributes and powers of Love as well as her names and haunts (common items of expansion for the hymn genre)²⁴ (lines 20-6), after which he exhorts the hearer to attention (26). After observing the equality of authority among the elements (27-9) and arguing for the completeness of the list of elements (30-3), he adumbrates the process by which the elements become differentiated into compounds. Lines 14-35 can be seen as a development of ideas mentioned in lines 1-2. Specifically, they identify the heretofore unidentified subjects of the lines and discuss their interrelations. The final couplet of the fragment prepares us for a further discussion of the way in which the elements become (γίγνεται) differentiated and hence looks forward to an examination of genesis as promised in line 3.

If this analysis is correct, we may now see that Long's interpretation of $\theta\nu\eta\tau\dot{\alpha}$ in line 3 is not compelling. He argues that the context of the line shows us that specifically biological items are not under discussion, but rather the one and the many alone. But we have seen that lines 14ff. recall only lines 1–2 and hence do not illuminate at all what Empedocles has in mind by referring to $\theta\nu\eta\tau\dot{\alpha}$ in line 3. His discussion of genesis has yet to take place. Thus we still do not know what Empedocles intends by $\theta\nu\eta\tau\dot{\alpha}$, and while we cannot rule out Long's suggestion, the immediate context does not decide in favour of it.

Moreover, a closer look at lines 9-13 may show us that there is some reason for doubting Long's interpretation of $\theta\nu\eta\tau\dot{a}$. There Empedocles argues that in one respect the many (and the one also?) are unstable, namely in that they come to be and perish, while in another respect they are stable, namely that they enjoy what I shall call cyclical invariability – they recur endlessly at the same point in the cycle. The obvious consequence of this seems to be that they are not unqualifiedly mortal or immortal. Consequently, it seems misleading to use the term 'mortal' for them as if they were mortal simpliciter. Perhaps Empedocles would be willing to apply the term 'mortal' to the many because he is discussing them under the aspect of things that come to be. Even so, the term in that use seems unprepared for, given that there will be a tendency to understand the term in a more conventional way.

Let us see how Empedocles uses the term $\theta\nu\eta\tau\delta$ in other passages. I shall exclude from consideration a number of passages in which the term has the usual meaning 'mortal man' in order to concentrate on the non-standard usages. In B8, Empedocles states that there is no birth (here: $\phi \iota \delta \iota \iota \iota$) or death of $\theta \nu \eta \tau \delta \iota$, but only mixture and dissolution. He obviously intends for the term to apply generally to compounds,

 24 Cf. Hymn. Hom. 4.1-3, 5.1-6, 6.1-5 – with an etymological play on Aphrodite's name, line 5 – and 9.1-6.

perhaps specifically to living things, but in any case not to the one and the many, since it is the many which go to make up the $\theta\nu\eta\tau\dot{a}$. B71 mentions the shapes and surfaces or colours of mortal things coming to be from the four elements as they are fitted together by Aphrodite. Again the $\theta\nu\eta\tau\dot{a}$ are the products of composition from the four elements. A more detailed description occurs in B35: all things come together under the influence of Love 'and by their mixture the myriad races of mortal creatures²⁵ are poured out' (line 7 = line 16). And as Love advances to take the field abandoned by retreating Strife, 'quickly those things grew to be mortal which before were wont $[\mu\dot{a}\theta\nu]$ to be immortal' (line 14). What makes the immortal things (i.e. the elements) mortal is their intermingling to produce compounds, which compounds are unstable and easily destructible.

In all of these passages, the property of mortality is connected with composition. Since, according to B8, there is no real birth or death, the term 'mortal' acquires a new, quasi-technical, meaning. It applies (inter alia) to those things which one would call mortal in a non-technical sense. But the true nature of these things involves a combination of elements, and it is because of the instability of composition that they appear to us to be mortal. In fact, things we ordinarily call mortal are in reality no different from mixtures which we ourselves make, so that in the quasi-technical sense these, too, can be called mortal. B22 confirms this view by speaking of the four elements as being alike with those parts 'which by nature have wandered apart among mortal things' (line 3). The world of mortal things is the world of compounds; those portions of the elements join the world of mortality which separate themselves from their own place and their own kind and enter into relations of composition with other elements.

Nowhere in the fragments do we find $\theta\nu\eta\tau\dot{o}_{S}$ being used to denote the one or the four elements. Indeed, we see that the elements only become $\theta\nu\eta\tau\dot{a}$ when they mix together. Thus, there is further reason to doubt that the term as used in B17.3 denotes the one and/or the many.²⁶ In general, we have seen that a close reading of B17 does not support Long's challenge to the traditional interpretation of line 3.

Π

There is still some significant evidence to support DC in B17 which has so far been overlooked by scholars, with one exception, ²⁷ because it is of such a different nature from the other evidence. For it lies in the literary and rhetorical structure of the fragment rather than in the logic of the argument. Since at least Aristotle's time there has been a critical prejudice against considering the poetic architecture of the work: 'Homer and Empedocles have nothing in common except the metre; thus, although we should call the former a poet, we should call the latter rather a natural philosopher' (*Poetics* 1.1447b17–20). But the counsel to ignore a literary form in a consciously literary work is at best premature. It would be ruinous for instance to apply the restriction to Heraclitus, for whom more than any other Presocratic the medium is the message.²⁸ And it would be only slightly less risky thus to restrict our

²⁵ For the motif of the races of mortal creatures, cf. B26.4, B115.7.

²⁶ Contrast also Kirk, Raven and Schofield (1983), p. 288 n. 1.

²⁷ The one scholar who has seriously considered the literary structure of the work in relation to its content is Munding (1954) [see n. 14 above]. He recognizes some important structural patterns (esp. 136), but he fails to see their significance. In the end he does not make effective use of the structural evidence.

²⁸ See C. Kahn, 'A New Look at Heraclitus', *American Philosophical Quarterly* 1 (1964), 189–203.

examination of Empedocles. For his vivid hexameters often threaten to overwhelm the ever tenuous thread of argument. I would like to suggest that for Empedocles as for Heraclitus, the meaning lies in the depths.

Consider a distinction that is made with varying degrees of precision in the criticism of literature, music and art. Any recurring symbol in a composition has an impact not only as a sign with an intentional meaning, but as a motif.²⁹ Insofar as we treat a symbol as a motif, we prescind from its immediate descriptive content (if any) and consider it merely as a structural element in the design of the work itself - i.e. as a syntactic rather than a semantic element. The original home of the term 'motif' is the world of music theory, in which the term is used of a recurrent pattern of notes in the overall composition. By discussing the pattern of notes we do not ipso facto discuss the possible variations in significance of the notes in the different contexts in which they appear. The musical motif as such is simply an element of design, and any recognition of the motif's meaning must occur at a different level of analysis. But of course a discussion of symbols as motifs is only preliminary to such an analysis of meaning, and so we look for ways in which the motifs contribute to the overall meaning of the work. At a level of meaning analysis, the element under consideration is the theme, and a theme is often conveyed in part by the use of motifs. In other words, at the same time as symbols are elements of design, i.e. motifs, they may be bearers of the meaning of a work: they may serve as semantic elements, as signs. Just how the motif contributes must be determined by a consideration of the symbol as both motif and sign, and by a consideration of the various meaning relations the sign enters into in the several contexts in which it occurs. Note that any symbolic unit at any level of integration, whether word, phrase, sentence, statement, image, or complete story, may function as a motif given the proper context of iteration in a larger setting.

B17 is marked by a recurrent image. Line 1 presents a process of unification; line 2 presents a process of separation. Line 4 presents a process of unification, line 5 of separation. The same pattern is repeated in lines 7-8, 9-10, and 16-17 (which repeat 1-2 verbatim). If we designate the image of the unification process as motif A and the separation process as motif B, we have a two-line AB pattern repeated no less than five times – occupying 10 lines of the first 17. The literary structure is so obvious as to make it difficult to comprehend how it has been ignored so completely. One of the few recognitions of this structure is that of Millerd, 30 and she does not appreciate the formal structure, i.e. the symbols as motifs. She says, referring to the order of the cycle implied - to the theme rather than the motif - 'Brief incidental statements of this sort are a significant indication of the way the matter lies in the writer's mind' (p. 53 n. 2). The order is indeed significant, but there is nothing incidental about the statements. The AB motif recurs in B21.9-10 and B26.5-6, and it appears in expansions of more than two lines, B20 lines 2-3 (A) and 4-5 (B), B22 lines 4-5 (A) and 6-9 (B). The unification-separation image is used as an element of design - as a motif – throughout the poem, and its frequency in B17 indicates that in particular that passage is structured by means of the motif. Indeed, a closer look shows that the language which expresses the unification-separation image is carefully chosen to emphasize the parallelism of the process. In lines 1 and 2 (and 16 and 17), $\tau o \tau \hat{\epsilon} \mu \hat{\epsilon} \nu$ is balanced against $\tau \circ \tau \in \delta' \circ \alpha \hat{v}$, and both phrases occur in the same metrical position, after the caesura of the second foot. In lines 4–5, Empedocles balances $\tau \dot{\eta} \nu \, \mu \dot{\epsilon} \nu$ against $\dot{\eta}$ $\delta \dot{\epsilon}$, using phrases with different grammatical structure but a similar word order and

²⁹ N. Frye, Anatomy of Criticism (Princeton, 1957), pp. 73f.

³⁰ C. E. Millerd, On the Interpretation of Empedocles (Chicago, 1908).

Empedocles stresses the antithesis between A and B by underlining the difference rhetorically and poetically. Rhetorically, he uses such devices as the $\mu \hat{\epsilon} \nu \dots \delta \hat{\epsilon}$ particles which provide the Greek language with such versatile resources for expressing antithesis. Moreover, his antitheses gain further emphasis by means of anastrophe (the beginning of successive phrases with the same word) and even symploce (the beginning and ending of successive phrases with the same respective words) – thus $\tau o \tau \hat{\epsilon} \dots \hat{\epsilon} l \nu a \iota$ (lines 1–2, 16–17). One finds also a clever use of anaphora in line 3 to stress the duality of the processes: by repeating the word $\delta o \iota \dot{\eta}$ 'two-fold', he creates a line which reflects his message by exhibiting a two-fold structure, and is at the same time both a subtle echo of a Homeric line³¹ recalling a theme of mortality and an echo of a Parmenidean motif.³² Lines 7–8 embody a chiasmus which adds further dimension to the play of motifs:

ἄλλοτε μὲν Φιλότητι συνερχόμεν' εἰς εν ἄπαντα, ἄλλοτε δ' αὖ δίχ' ἔκαστα φορεύμενα Νείκεος ἔχθει.

Line 7 shows an abc pattern (dative of means/participle/adverb phrase), 33 while line 8 follows with cba. In addition to these syntactic and prosodic patterns there is a consistent morphological contrast of $\sigma\nu\nu$ - and $\delta\iota\alpha$ - (specifically $\delta\iota\alpha\phi\dot{\nu}\epsilon\sigma\theta\alpha\iota$) compounds noticed by Solmsen (1965, 126): the former occur regularly in expressions of motif A, the latter in the B-motif. These subtle patterns tend to indicate that B17 is not a casual list of facts about the cosmic cycle but a highly wrought texture of motifs such as Empedocles seemed to imply in his phrase $\pi\iota\phi\alpha\dot{\nu}\sigma\kappa\omega\nu$ $\pi\epsilon\dot{\nu}\rho\alpha\tau\alpha$ $\mu\dot{\nu}\theta\omega\nu$. But what is their significance, that is, the semantic or thematic value of the syntactic pattern?

The message of the lines embodying the unification—separation motif is adequately conveyed by any one of the couplets. What is gained by repetition is an increase not of cognitive content but of poetic force. At a basic descriptive level these lines describe the alternation of a process of unification with a process of separation. At a higher level of poetic integration they not only describe the process but *imitate* it. Empedocles structures B17 around the iterated motif of unification—separation, so that the endless recurrence of processes shows itself in the structure of the narration. Things come together into one, they separate into more, they come together into one, only to separate again. The sense of eternal recurrence is conveyed more subtly but more powerfully by the repetition of motifs than it can be by a mere statement. Yet Empedocles makes a statement too: 'and these things never cease continually alternating' (line 6). From a standpoint of literary analysis, line 6 not only makes a statement but also expresses a theme, the very theme for which the motif of unification—separation is a vehicle.

We see then that Empedocles is not content to state a principle of eternal recurrence, but at the same time he thematizes the principle and represents it by weaving a texture of motifs which embody the principle. Thus B17 must be read as more than an argument or a programme for an argument: it is also a mimetic structure which portrays the world condition which it describes. As the cosmos

³¹ A. H. Griffiths, cited in Long (1974, 401 n. 9), has noticed how the passage echoes *Iliad* 6.146ff.

³² Parmenides B1.7f. mentions δοιοὶ κύκλοι, a motif that seems to resonate with any number of pairs in the poem: the mares, the doors, the two routes, the two bodies of the Way of Opinion.

³³ In the first occurrence a prepositional phrase is functioning as an adverb.

endlessly traces out its cycles, so the present passage reiterates the order of development. From this analysis we may infer that the occurrences of the motif in other passages at least recall the nature of the cosmic cycle and are meant to remind the hearer of the eternal recurrence of the cycle.³⁴

There is one other important dimension to the structure of the motifs in B17: their symmetry. As we have seen, Empedocles carefully balances the utterances that express the motifs. Choosing an antithetical structure, he evenly measures out the verbal units, line by line, phrase by phrase, word by word, and metrical foot by metrical foot. The result is a close parallelism of structure, with some stylistic variations, between the A-clause and the B-clause of the motif. Again the pattern is not incidental but artful. The obvious thematic value of the parallel structure is to convey a sense of the parallelism in structure of the opposing processes of unification and separation. Even the chiasmus we noted in lines 7–8 may now be seen as not merely a stylistic variation but a vivid portrayal of the physical order within the process. Events that succeed one another in abc order in the unification process are produced in cba order in the separation of the elements. Love draws things together, Strife separates them. The chiasmus shows in its syntactic arrangement the reversal of situation – the *peripeteia*, to use Aristotle's expression – implied in thematic contrast of the many-to-one, one-to-many movements.

We may say on the basis of this thematic analysis that symmetry is one of the important properties of the cosmic cycle. This observation does not immediately decide in favour of DC as opposed to SC, since, at least in Long's version, the cosmic cycle is claimed to be symmetrical. It does rule out several versions of SC which do not offer a symmetrical cycle as well as Hölscher's view, which recognizes no cosmic cycle. To the proponents of these views we may say that their interpretation does not capture one important dimension of meaning in B17.

Let us consider Long's position in regard to symmetry. After reviewing O'Brien's account of the cosmic cycle, Long observes:

It is true that such an interpretation yields a symmetrical pattern of movement for both lines [4 and 5]: A, growth of Love; B, growth of Strife. But the scheme I propose above is equally symmetrical: A, incipient-maximum Love; B, maximum-declining Strife. (p. 408)

It is unclear in what sense Long's unusual interpretation of the stages in the cycle provides for a symmetrical pattern. Are incipient-maximum Love and maximum-declining Strife symmetrical movements? The former represents an increase of Love, the latter a decrease of Strife. In effect, they both describe a movement in the same direction, namely toward greater integration. If this is the case, the processes seem to be continuous rather than symmetrical in the strict sense. For symmetry typically involves a directional transformation such that the directions of one limb of a symmetry are opposite to those of another; in other words, we expect one side to be a mirror image of the other. Thus we would say that vectors ba and ab are symmetrical, but not that ab and bc are. In effect, Long's processes display the pattern ab:bc, since according to him B immediately precedes A and A takes up where B leaves off. This account certainly seems to conflict with the thematic support we have found for the many-one:one-many movement.

³⁴ As another instance of poetic mimesis note how Empedocles builds to a thematic climax in line 13 by inserting $d\kappa i\nu \eta \tau o\iota$ after the caesura: the term provides an oxymoron while the three consecutive long syllables retard the metre to a halt, after which the image of the circle resolves the conundrum. I am indebted to Daniel R. Blickman for the analysis.

³⁵ Contrast most recently Osborne (1987, 40) [see n. 7 above]: 'the process of increasing plurality is open-ended, and thus there need be no superficial symmetry between the work of Love and that of Strife.'

Actually, Long applies the BA order only to lines 4–5, and does so because of the way in which he reads the aorist tense of the main verb of line 5 as temporally past and hence having a reference to a time prior to the events of line 4. As soon as we notice this, we have grounds for another objection. In each case in which the AB motif occurs in B17, the order of lines reflects the order of events – with the possible exception of lines 4–5. But why should lines 4–5 be an exception? The iteration of the AB motif creates a kind of momentum which makes it highly implausible to read one of the occurrences of the motif as thematically implying a BA order. In fact, Long has no strong arguments for his reading of the aorist $\delta\iota\epsilon'\pi\tau\eta$. His defence of the reading is confined to a single remark:

This use of the aorist tense may have a generic rather than a temporal aspect [i.e. it may have a present general rather than a past meaning]; but I think the line is most naturally taken to refer to events which have preceded and will subsequently $(\pi \acute{a} \lambda w)$ follow those described in line 4. (p. 405)

But in the larger context of B17, the reading is not natural at all. It destroys the parallelism with lines 1–2 which precede and the anticipation of motif occurrences which follow. In every other case the order of events obviously shows itself in the order of lines. Thus on Long's interpretation, although Empedocles five times represents the cyclical order as AB, he means us to learn from his use of a single aorist verb in line 5 that the real order is BA. But since the use of the aorist is ambiguous anyway, the evidence for a sudden hysteron-proteron is slight at best. The balance of evidence from the structure of Empedocles' exposition in B17 is against Long's view.

Overall, B17 is more coherent and comprehensible on a traditional reading of line 5. And the pattern of motifs in B17 lends thematic support to the traditional interpretation of the fragment which finds in the passage evidence for a double creation. I turn now to some closely related fragments.

Ш

Fragment 35 describes the process which takes place as Love gains ascendency:

... when Strife reached the innermost depth of the vortex, and Love comes³⁶ to be in the middle of the circle. there all these things come to be one thing alone, 5 not suddenly, but standing together willingly each from its own place. When these things are mingled the myriad races of mortals flow out, and many things stay unmixed in contrast to the things that are being mixed, which Strife still holds suspended; for not completely yet had he³⁷ withdrawn to the uttermost bounds of the circle, 10 but some of his limbs remained within while some had withdrawn. As far as he would run ahead, so far would advance the gentle immortal press of blameless Love. And suddenly those things grew mortal which before were wont to be immortal and what was before unmixed became mixed³⁸ exchanging paths. 15 When these things are mingled the myriad races of mortals flow out, fitted with all sorts of shapes, a marvel to behold.

³⁶ The appearance here of the subjunctive $\gamma \epsilon \nu \eta \tau a\iota$ is difficult after the aorist indicative $\tilde{\iota}\kappa \epsilon \tau o$ in the preceding line. However, we seem to have here a switch to a present general statement, which is not too extreme a turnabout if $\tilde{\iota}\kappa \epsilon \tau o$ is understood as a gnomic aorist. Cf. Wright ad loc. She is wrong, however, to claim that the occurrence of $\gamma \epsilon \nu \eta \tau a\iota$ implies that Love moved into the centre from elsewhere. Empedocles simply uses the verb to mean 'comes to be confined'. Cf. n. 38 below.

³⁸ The text is corrupt, but the general sense is one of contrast as the context indicates. I am reading Wright's ζωρά τε πρὶν κεκρήτο.

At the end of his period of expansion, Strife holds dominion over the whole cosmos with the exception of its core, where Love has been confined.³⁹ But he is overextended, and Love has concentrated her forces so as to be able to recover her lost territory. As she expands the elements come together into compounds and living things are created. By implication, no living things, or compounds of any sort, existed at the end of Strife's expansion, so that Love is the agent of creation. The real question for us must be whether there was another creation before the one mentioned here – or more correctly, after it, since Empedocles treats the stage of expanding Love as first in the cycle.

But before we go on to this question, we should note a problem for Long's reconstruction of the cycle. According to his scheme, A (declining Strife-maximum Love) follows B (maximum Strife-incipient Love). Presumably the point of departure of B35 is the changeover from Long's B to A. Yet we find that at this point Strife occupies the whole cosmos except for the very centre. Now according to Long, Love has already been active in uniting the masses of earth, water, air and fire, and so has been active in the creation of the cosmos. But since Empedocles equates physical influence with territorial rule, it appears that Love has been almost totally excluded from the cosmos. Does Love combine the elemental masses, desert them, retreat to the centre, and then begin combining masses into compounds? If she deserts them, why do the elemental masses not disintegrate into the dissociated particles that Long sees as characteristic of the point of maximum Strife? Furthermore, if we take the AB motif as imitative of the order of the cycle, note that there is an implied break between the separation process (B) and the unification process (A). For if B and A were continuous, as they are for Long, B is logically the starting point for a description of the cycle: the separation process creates the cosmos, making possible a creation of living things during the unification process. But in the motifs the unification always is the first step in the process, and this suggests that the point of maximum entropy is that between B and A, a time of complete and destructive separation of the four elemental masses, now each in its proper sphere.

If the view I have been defending is correct, the time of maximum Strife is not a point immediately after the unity of the homogeneous Sphere has been shattered and a chaos of dissociated elemental particles results, but the time when these particles have been completely combined into the four cosmic masses of earth, water, air and fire. There are serious objections to this view. Long quotes B21.7–10 as follows:

In Strife they are all different in form and divided, but in Love they come together and desire one another. For from them sprang up all that was and is and will be, trees, men and women... (p. 413)

This is the interpretation of W. K. C. Guthrie, A History of Greek Philosophy, vol. 2 (Cambridge, 1965), p. 179, and O'Brien (1965, pp. 116f.); cf. n. 36 above. It makes good military sense as a conflict between a besieger and a besieged, with alternate advances and retreats. Wright's view (1981, 207) that Love 'strikes at the centre from her position at the $\tilde{\epsilon}\sigma\chi\alpha\tau\alpha$ $\tau\hat{\epsilon}\rho\mu\alpha\tau\alpha$ $\kappa\hat{\nu}\kappa\lambda\delta\sigma$ ' leads to the curious supposition that there was a power vacuum in the centre of the cosmos before Strife moved in, and envisions the curious strategy of engaging the centre of a position without breaching the perimeters. Or, if we suppose that Strife has not quite secured the centre in his advance, we find Love rushing in to engage the front of a phalanx when the rear is exposed. Perhaps we could save the conception by comparing the surreptitious capture of an acropolis by a faction; but nothing in the text supports this interpretation. In general, the Guthrie–O'Brien view seems to be less problematic and to accord with the sort of territorial invasions and repulses that Anaximander already had found to be expressive of the strife of elements.

He then observes:

The clear implication of the text is that the sun, air, earth, and water – the main cosmic masses which correspond with the four elements – each consist now of aggregates of like elements put together by Love. (ibid., Long's italics)

Now although Empedocles does refer to sun, rain and earth in the fragment I do not think that he is making the point Long attributes to him. Sun, rain and earth are just stand-ins for three of the four elements. Empedocles is notorious for his variations on the names of the elements (see Wright 1981, table on p. 23). Here his terms must designate the elements because the sun, for example, is not a component from which all things spring; but fire is. Empedocles is not concerned with the 'cosmic masses' here but with the elemental powers which predominate in them. 'For there are just these things,' line 13 (Long's translation) continues, 'but running through one another they become different in appearance: so much does mixing change them.' Empedocles obviously understands 'these things' to be the elements, which change appearance in chemical combinations (cf. B17.34f., B26.3f, with their contexts). Thus Empedocles' point is not that Love joins portions of the same element but that she joins portions of different elements. Behind Long's argument and those of some other proponents of SC are some assumptions which need to be made explicit. They assume that any combination, whether of unlike or of like, must be the work of Love, and any separation the work of Strife. The assumption is plausible enough, but there are some reasons to doubt it. Aristotle criticized Empedocles on just the ground that he was not consistent in his application of Love and Strife to combination and separation, since Love separates portions from the elements and Strife combines these. 40 Aristotle's criticism indicates that the problem is inherent in the text, and is not the creation of modern interpretations. Perhaps, however, the problem is not so much that Empedocles is inconsistent as that we do not understand his conception.

According to Long's interpretation, the births referred to in B17.3 are those of the many and the one. He believes that the many (elements) are born when the Sphere is shattered. But just how does Empedocles conceive the birth of the elements? Is just their differentiation into recognizable particles a birth for them? There is evidence that it is not. Empedocles speaks of the four elements as having parts which can stray (B22.1), as the Sphere (B31), Strife (B30.1) and the sun (B27.1) have limbs. If we personify the elements and the forces, we are led to look at quantities of the elements as portions of the whole body. From this point of view, the appearance of some quantity of an element is not the coming to be, i.e. the birth, of the element; it is only the coming to be of a part of the element. The element is not born until all parts of it have come to be and presumably been joined together as well. In this way the birth of the elements takes as long as the birth of the Sphere, so that the symmetry of the cycle is maintained. The birth of the many does not occur in the shattering of the sphere, but rather in the confluence of the separate parts or limbs of the elements. Note that I do not hold that the elements are among the $\theta\nu\eta\tau\dot{\alpha}$ of B17.3, but Empedocles does clearly say that they come to be (B17.11), and I take it that they only fully come to be when they are separated into their cosmic masses.

If this interpretation is correct, we must take the personification of elements more seriously than commentators usually do. The personification of the elements is in keeping with mythological antecedents of the philosophical tradition. To Empedocles' elements we might compare Hesiod's Gaia, Ouranos, and Pontos, which both possess

⁴⁰ Met 1.4.985a21ff. = A37; GC 2.6.333b19ff. = A40.

elemental powers and occupy eponymous areas of the cosmos while retaining categorial attributes of persons. However, this comparison may suggest that Empedocles' characterization of the elements is atavistic. It is not. His characterization is in keeping with sophisticated semantic views concerning the terms which designate elemental masses. Speaking of the types of words which terms for the elements fall under, W. V. Quine says, 41

So-called *mass* terms like 'water', 'footwear', and 'red' have the semantical property of referring cumulatively: any sum of parts which are water is water. Grammatically they are like singular terms in resisting pluralization and articles. Semantically they are like singular terms in not dividing their reference.... But semantically they do not go along with singular terms... in purporting to name a unique object each.

All that is needed to turn a mass term into a proper name is to omit the qualification that it does not purport to name a unique object. And if one is inclined, as are Empedocles and the early Presocratic tradition, to individuate entities by reference to their powers as well as to their spatio-temporal configurations, ⁴² the move to a conception of the elements as individuals is natural. As 'Gaia' designates both the powers of the earth and the cosmic body (as well as the mythical personality) for Hesiod, so 'gaia' for Empedocles will refer to the cosmic body with its powers – and primarily to the body as constituted of all portions of earth when they are aggregated in one spatial whole. For as we have seen, Empedocles tends to confound portions of the elements with *parts*, and to think of the elements as incomplete when the parts are separated.

If the elements proper are born only when the portions of elemental substance that constitute their limbs unite into a single entity, and if the processes of coming to be of elements and of the Sphere are symmetrical, there is a time of the complete separation of elements, and hence no continuity of biological processes from the shattering of the Sphere to its reappearance. But is there a creation during the process of increasing Strife? B26 suggests that there is:

They rule in part of the revolving cycle and they dwindle into each other and grow in part of the period. For these are the realities, and running through each other they become men and the other races of beasts, at one time when by Love they come into one order, at another time each being borne apart by the enmity of Strife, until growing together into one they become completely subjected.

5

I omit the last five lines of the fragment, which repeat verbatim B17.9–13. Scholars debate the meaning of these lines as hotly as the meaning of B17, so that some attention to the details is necessary. The debate revolves around the context of the utterance in lines 3–6: is it a discussion of the formation of a microcosm within a single stage of the cycle, or does it contrast the macrocosmic formations in two stages of the cycle? On the first view, lines 3–6 describe how the elements come together to create a single organism and dissociate on its death; on the second, the lines describe the creation of two whole generations, one during increasing Love, the other during increasing Strife. Lines 1–2 seem to support the first interpretation since line 1 recalls B17.29, a line which describes the seasonal domination of single elements within one stage of the cycle. Furthermore, line 7 seems to set the term of a single cycle and hence

⁴¹ Word and Object (Cambridge, Mass., 1960), p. 91.

⁴² See A. P. D. Mourelatos, 'Heraclitus, Parmenides, and the Naive Metaphysics of Things', in E. N. Lee et al., edd., *Exegesis and Argument* (Assen, 1973).

to suggest that the context of the fragment is one stage of a cycle within which individual animals come to be.

There are, however, some weighty considerations on the other side. (1) Line 4 talks of men and races of beasts. The expression is echoed in B35.7, where the context is clearly a whole biological creation. According to the microscopic reading of the passage, Empedocles intends to discuss the growth of a single organism. But the passage certainly deals with the creation of at least a number of creatures, not just one. (2) Moreover, the second interpretation can account for the parallelism in lines 5 and 6, whereas the first cannot. On the macroscopic interpretation the lines simply describe different stages of the cycle. But on the microcosmic interpretation it is unclear how the birth of men and beasts can result from the separation of elements described in line 6. In the context of the creation of an individual the separation of all things is the breakdown of the limbs and tissues. How then does an individual come to be under such circumstances? Finally, (3) lines 8-12 are appended by means of a $o\tilde{v}\tau\omega_S$ 'thus' which introduces a conclusion. That conclusion is the constancyamid-change theme which attributes to the one and the many cyclical invariance. This follows from the second interpretation, but not from the first, for the first by hypothesis does not deal with the cosmic cycle.

These three considerations seem to me to tip the scale in favour of the macrocosmic reading. But the macrocosmic reading in turn strongly supports DC, for it finds in B26 a reference to two distinct stages of the world cycle in which there is a biological creation. On this interpretation B26 confirms and extends the results we have found so far by analyzing B17 and B35. We have seen that (1) Empedocles correlates one genesis of $\theta \nu \eta \tau \dot{\alpha}$ with the cosmic unification process and one with the separation process. (2) Such evidence as we have indicates that the $\theta\nu\eta\tau\dot{\alpha}$ are at least compounds. (3) The cosmic processes of unification and separation are symmetrical in some strong sense. (4) There is a creation of compounds under Love during the unification process. (1)-(4) would seem to entail that (5) some kind of compound is created during the separation process.⁴³ But we have the even stronger claim that (5a) biological compounds, specifically men and beasts, are created both during the unification process and during the separation process (B26). One possibility remains of avoiding the conclusion. Perhaps there is no real end to creation between the separation and the unification process, so that while creation goes on both under Strife and under Love, there are not really two distinct creations: the creation is continuous. The evidence of B35 counts heavily against this interpretation, since that fragment portrays a situation in which there are no compounds at the beginning of Love's rule. Furthermore, this interpretation ignores Empedocles' order of exposition: he always puts the rule of Love before the rule of Strife. The major break in the cycle, the endpoint, comes after the rule of Strife. This is the point of maximum entropy, from which the cosmos recovers to return to a peak of harmony in the Sphere. The creation which takes place during the increase of Strife, then, is separate from the creation under Love.

The vigorous challenge Long and others have raised to the Double Creation view has forced a critical rethinking of the very structure of Empedocles' world view: but at the same time it has exhibited the remarkable tenacity of DC. Perhaps part of the reason for the persistence of DC is the failure of its opponents to reach a consensus or provide a coherent alternative. But I cannot help thinking that, for all its

⁴³ Even Solmsen grants this much, p. 140.

philosophic imprecision, Empedocles' text itself implicitly resists SC. What Empedocles failed to state perspicuously he nevertheless succeeded in conveying in vibrant imagery and poetic design. The verbal structure of his poem is after all not dispensable in the way Aristotle thought it was, for it is in poetic form that Empedocles most unmistakably reveals the eternal recurrence of the cosmic cycle and its fearful symmetry.⁴⁴

Brigham Young University

DANIEL W. GRAHAM

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