

arduous investigation is rewarded, and the probability is that he, like Heraclitus, felt himself to be in a special state of insight for this reason. Deichgräber also thought that 186 was intended as the prooemium of the physical doctrine, not of the constructive theology; but it seems most unlikely that the plural of ἀμφὶ θεῶν should be taken literally to mean 'about the gods of conventional religion'; the phrase means simply 'about theology'. The assumption of two distinct poems is, it has been suggested, a dubious one; and this is confirmed by the linking of 'theology' and 'what I say about all things'. The constructive description of the one god must ultimately have come within the scope of 186; it was the antithesis of the mistaken Homeric concept, but, though it might be 'like the truth' in the words of 187, it could not be taken as absolutely certain. Even Xenophanes' special position as one who had given much attention to the subject could not ensure that. However, Xenophanes did not suggest that one could not be certain that a belief was *wrong*; and his destructive criticism of the Homeric gods, based as it was on a demonstrated subjectivity, might be accepted as true.

189 shows that Xenophanes thought about problems of relationship, which were to be especially significant for Heraclitus (pp. 188f.). For Xenophanes the observation about honey (which may have been proverbial) presumably confirmed his beliefs about the limitation of knowledge – again the contrast between god, or gods, and men is conspicuously present. Once again Xenophanes was developing an idea already implicit in popular literature and giving it a special philosophical significance. After the dogmatism of the Milesians (and also of Pythagoras, mocked by Xenophanes in 260 for his extravagant theory of metempsychosis) an appeal to caution was salutary, and from this time on there was certainly more verbal reference to the broadest aspects of epistemology. But Xenophanes' revival of the traditional doctrine of human limitations, this time in a partly philosophical context, did little else that is noticeable to curb the naturally over-dogmatic tendency of Greek philosophy in its first buoyant stages.¹

¹ See also J. Barnes, *op. cit.* 1, ch. VIII, for a fuller and more exuberant discussion of Xenophanean 'scepticism' – although much of what he suggests is possible rather than probable.

Heraclitus of Ephesus

DATE AND LIFE

190 Diogenes Laertius IX, 1 (DK 22A1) 'Ἡράκλειτος Βλόσωνος ἦ, ὡς τινες, 'Ἡράκωντος Ἐφέσιος. οὗτος ἤκμαζε μὲν κατὰ τὴν ἐνάτην καὶ ἐξηκοστὴν Ὀλυμπιάδα. μεγαλόφρων δὲ γέγονε παρ' ὄντιναοῦν καὶ ὑπερόπτης, ὡς καὶ ἐκ τοῦ συγγράμματος αὐτοῦ δῆλον, ἐν ᾧ φησι· (Fr. 40) Πολυμαθὴν νόον ἔχειν οὐ διδάσκει· Ἡσίοδον γὰρ ἂν ἐδίδαξε καὶ Πυθαγόρην αὐτὶς τε Ζενοφάνεά τε καὶ Ἐκαταῖον... (3)... καὶ τέλος μισανθρωπήσας καὶ ἐκπατήσας ἐν τοῖς ὄρεσι διητᾶτο, πτόας σιτούμενος καὶ βοτάνας. καὶ μέντοι καὶ διὰ τοῦτο περιτραπεῖς εἰς ὕδρον κατῆλθεν εἰς ἄστνυ καὶ τῶν ἰατρῶν αἰνιγματωδῶς ἐπυνθάνετο εἰ δύναιντο ἐξ ἐπομβρίας αὐχμὸν ποιῆσαι· τῶν δὲ μὴ συνιέντων αὐτὸν εἰς βούστασιν κατορύξας τῇ τῶν βολίτων ἀλέα ἤλπισεν ἐξατμισθῆσθαι. οὐδὲν δὲ ἀνύων οὐδ' οὕτως ἐτελεύτα βιοῦς ἔτη ἐξήκοντα.

190 Heraclitus son of Blosson (or, according to some, of Herakon) of Ephesus. This man was at his prime in the 69th Olympiad. He grew up to be exceptionally haughty and supercilious, as is clear also from his book, in which he says: 'Learning of many things does not teach intelligence; if so it would have taught Hesiod and Pythagoras, and again Xenophanes and Hecataeus.'... Finally he became a misanthrope, withdrew from the world, and lived in the mountains feeding on grasses and plants. However, having fallen in this way into a dropsy he came down to town and asked the doctors in a riddle if they could make a drought out of rainy weather. When they did not understand he buried himself in a cow-stall, expecting that the dropsy would be evaporated off by the heat of the manure; but even so he failed to effect anything, and ended his life at the age of sixty.

The information that Heraclitus was at his *acme*, i.e. aged forty, in Ol. 69 (504–501 B.C.) was doubtless taken from the chronographer Apollodorus: Heraclitus' middle age is placed about forty years after Anaximenes' assumed *acme* and Xenophanes' departure from Colophon. There is no need seriously to doubt Apollodorus' dating

here, since, as Diogenes tells us, Heraclitus mentioned Pythagoras and Hecataeus as well as Xenophanes;¹ and he was perhaps indirectly referred to by Parmenides (293; also fr. 8, 55ff., 302). Attempts have nevertheless been made to place Heraclitus' philosophical activity later than the Apollodoran dating would reasonably suggest, after 478 B.C. (and even, most improbably, after Parmenides); but they have not won acceptance, and rest on implausible hypotheses such as that no trace of self-government, suggested by the information of fr. 121 that the Ephesians had exiled Heraclitus' friend Hermodorus, would be possible in Ephesus until after its liberation from Persia around 478. Heraclitus might have lived longer than Apollodorus' sixty years (at which age Anaximenes also, and Empedocles according to Aristotle, were said to die); but we may nevertheless provisionally accept that he was in his middle years at the end of the sixth century and that his main philosophical activity had ended by about 480.

¹ The past tense in fr. 40 (quoted in 190), 'would have taught', need not mean that all those mentioned were dead (Xenophanes at any rate lived until after 478), but it implies that they were all widely known at the time of writing. Another fragment, 129 (256; it may be to some extent reworded but is not spurious, see p. 217 n. 1), implies that Pythagoras was already dead. He is said to have 'flourished' in 532/1 B.C. (p. 224), and perhaps died between 510 and 505. The Suda places Hecataeus' birth as late as 520-516 B.C. According to the succession-writer Sotion (Diog. L. IX, 5, DK 22A 1), some claimed Heraclitus as Xenophanes' pupil. Other factors apart, that is hardly suggested by the critical tone of fr. 40.

The rest of 190 is quoted as a sample of the kind of biographical fiction that proliferated round the name of Heraclitus. We are also told by Diogenes that he refused to make laws for the Ephesians but preferred playing with children in the temple of Artemis. Most of these stories are based on well-known sayings of Heraclitus; many were intended to make him look ridiculous, and were invented with malicious intent by Hellenistic pedants who resented his superior tone. For example, extreme misanthropy is deduced from his criticisms of the majority of men (e.g. 194), vegetarianism from a mention of blood-pollution in 241, the fatal dropsy from his assertion 'it is death for souls to become water' in 229. He was known as an obscure propounder of riddles, and this is made out to have cost him his life: the doctors, whom he appeared to criticize in fr. 58 (p. 189), do nothing to save him. He is said to have buried himself in dung because he had said in fr. 96 that corpses are more worthless than dung; 'being exhaled' refers to his theory of exhalations from the sea (pp. 201f. and n.). The only details about Heraclitus' life which it

might be safe to accept as true are that he spent it in Ephesus, that he came of an old aristocratic family,¹ and that he was on bad terms with his fellow-citizens.

¹ Cf. 191 Diog. L. IX, 6 σημείον δ' αὐτοῦ τῆς μεγαλοφροσύνης Ἀντισθένης φησὶν ἐν Διαδοχαῖς ἐκχωρῆσαι γὰρ τὰ δελφῶ τῆς βασιλείας. (*Antisthenes in his Successions quotes as a sign of his [Heraclitus'] arrogance that he resigned the hereditary kingship to his brother.*) There is no apparent reason why this information should be fictitious. Strabo, 14, p. 633 Cas. (DK 22A 2), said that the descendants of Androclus founder of Ephesus were still called 'kings', and had certain privileges like that of front seats at the games.

'THE OBSCURE'

Timon of Phlius, the third-century B.C. satirist, called Heraclitus αἰνικτῆς, 'riddler' (Diog. L. IX, 6). This legitimate criticism of his style later gave rise to the almost invariable epithet σκοτεινός, *obscurus* in Latin (Cicero *de finibus* II, 5, 15, etc.). Another common description in the Roman period was 'the weeping philosopher'. This latter judgement is entirely trivial, being founded partly on humorous references to the idea that all things flow like rivers (cf. e.g. Plato *Crat.* 440c, believers in flux are like people with catarrh), and partly on Theophrastus' well-known attribution to Heraclitus of μελαγχολία (Diog. L. IX, 6), by which, however, he meant 'impulsiveness' (see Aristotle's description at *Eth. Nic.* H8, 1150b25) and not 'melancholy' in its later and its modern sense.

HERACLITUS' BOOK

192 Diogenes Laertius IX, 5 τὸ δὲ φερόμενον αὐτοῦ βιβλίον ἐστὶ μὲν ἀπὸ τοῦ συνέχοντος Περὶ φύσεως, διήρηται δὲ εἰς τρεῖς λόγους, εἰς τε τὸν περὶ τοῦ παντὸς καὶ πολιτικὸν καὶ θεολογικόν. (6) ἀνέθηκε δ' αὐτὸ εἰς τὸ τῆς Ἀρτέμιδος ἱερόν, ὡς μὲν τινες, ἐπιτηδεύσας ἀσαφέστερον γράψαι ὅπως οἱ δυνάμενοι προσίοιεν αὐτῷ καὶ μὴ ἐκ τοῦ δημώδους εὐκαταφρόνητον ἢ... τοσαύτην δὲ δόξαν ἔσχε τὸ σύγγραμμα ὡς καὶ αἰρετιστὰς ἀπ' αὐτοῦ γενέσθαι τοὺς κληθέντας Ἡρακλειτεῖους.

192 The book said to be his is called 'On Nature', from its chief content, and is divided into three discourses: On the Universe, Politics, Theology. He dedicated it and placed it in the temple of Artemis, as some say, having purposely written it rather obscurely so that only those of rank and influence should have access to it, and it should not be easily despised by the populace... The work

had so great a reputation that from it arose disciples, those called Heracliteans.

Ancient biographers and historians of philosophy assumed that all the Presocratics wrote one or more books (though there was doubt over Thales, see pp. 86ff.). They certainly assumed that Heraclitus wrote one, and Diogenes tells us that its title was 'On Nature'. This title was regularly assigned to works by those whom Aristotle and the Peripatetics called 'natural philosophers', and cannot be regarded as necessarily authentic in all cases; see pp. 102-3 n. 1. The division into three sections is unlikely to have been original, and suggests that Diogenes or his source was thinking of an edition or collection of sayings, probably made in Alexandria, which followed a Stoic analysis of the parts of philosophy. Diels maintained that Heraclitus wrote no consecutive book, but merely gave repeated utterance to a series of carefully-formulated opinions or γνώμαι. This view has found few supporters, but perhaps has an element of truth. The surviving fragments have very much the appearance of oral pronouncements put into a concise and striking, and therefore easily memorable, form; they do not resemble extracts from a continuous written work. The obstacle to this view is fr. 1 (194), a structurally complicated sentence which looks very like a written introduction to a book. Possibly when Heraclitus achieved fame as a sage a collection of his most famous utterances was made, for which a special prologue was composed. In any event the fragments we possess (and not all those in DK are fully authentic) were for the most part obviously framed as oral apophthegms rather than as parts of a discursive treatise; this was in keeping with Heraclitus' oracular intentions (see p. 210).¹ It also accords with his views on divine knowledge (205 and 206) and on the inability of most men to respond to the true nature of things, even when helped by a logos or account (revelation) such as Heraclitus' own. The suggestion in 192 that the 'Heracliteans', also mentioned by Plato and Aristotle, were devotees of the book is almost certainly guesswork; its importance lies in its implication that there was no 'school' of direct followers at Ephesus.² No follower of note is known until Cratylus, an older contemporary (probably) of Plato, who developed a debased form of Heracliteanism by exaggerating, and combining together, the Ephesian's belief in the inevitability of change and his belief (quite a common one in his time) in the significance of names.

¹ For an interesting discussion of this whole topic from a slightly different point of view, see Kahn, *The Art and Thought of Heraclitus* (Cambridge, 1979), 3-9.

² In spite of 193 Plato *Theaetetus* 179D πολλοῦ καὶ δεῖ φαῦλη εἶναι (sc. ἡ μάχη), ἀλλὰ περὶ μὲν τὴν Ἴωνίαν καὶ ἐπιδίδωσι πάμπολυ. οἱ γὰρ τοῦ Ἡρακλείτου ἑταῖροι χορηγοῦσι τούτου τοῦ λόγου μάλα ἐρρωμένως. (Cf. *ibid.* 179E, ... αὐτοῖς μὲν τοῖς περὶ τὴν Ἐφεσον.) ([The battle] is far from being a slight one, but in the region of Ionia it is even greatly increasing. For the companions of Heraclitus minister to this argument with might and main. (Cf. ... to those around Ephesus.)) This whole passage is intentionally humorous, as indeed are most of Plato's remarks about Heraclitus, and the local references need not be intended literally; anyone using what Plato would consider to be a Heraclitean type of argument might be ironically associated with Ephesus. Plato's most extreme Heraclitean acquaintance, at any rate, namely Cratylus, was neither an Ephesian nor even from Ionia.

SPECIAL DIFFICULTIES OF INTERPRETATION

As has been seen, Heraclitus was renowned in antiquity for his obscurity. His pronouncements were undeniably often cryptic, probably intentionally so, and little serious attempt seems to have been made by Plato and Aristotle to penetrate his real meaning. Theophrastus, on whom the later doxographical tradition depends, unfortunately based his interpretation on Aristotle's. He does not appear to have had access to a complete book by Heraclitus, or even (to judge, for example, from the omission of all but the barest reference to Heraclitus in his *de sensu*) to a fully representative collection of separate utterances; in fact he complained that Heraclitus' pronouncements were either unfinished or inconsistent. The Stoics further distorted the account by adopting Heraclitus as their ancient authority on physical matters. In some respects they produced an accurate development of his ideas, for example in their ideal of ὁμολογουμένως ζῆν, living in accord with Nature (cf. e.g. 195); in others, however, they radically readapted his views to meet special requirements of their own - for example in their attribution to him of the idea of *ecpyrosis*, the periodical consumption of the whole world by fire. Our sources subsequent to the founder of Stoicism, Zeno of Citium, accepted this particular interpretation of Heraclitus, which can be reconciled with some of the extant sayings and may have been encouraged by Theophrastus, but is incompatible with others and at variance with the basic Heraclitean concept of measure in natural change; see further pp. 194ff. and n. on p. 200.

As for Plato and Aristotle, there is little *verbatim* quotation of Heraclitus in either, nor were they really interested in the accurate *objective* assessment of early predecessors. Plato occasionally mentions him, mainly in a humorous or ironical way and with emphasis on a view freely attributed to him in the dialogues, that 'all things are

in flux' – πάντα ρεῖ or πάντα χωρεῖ. According to Aristotle at *Met.* A6, 987a32, Plato was influenced in youth by the emphasis laid by Cratylus on this kind of view. But all Presocratic thinkers were struck by the dominance of change in the world of our experience. Heraclitus was obviously no exception, indeed he probably expressed the universality of change more clearly and more dramatically than his predecessors; but for him it was the complementary idea of the *measure inhering in change*, the stability that persists through it and controls it, that was of vital importance. Plato may have been genuinely misled, especially by fifth-century sophistic exaggerations, in his distortion of Heraclitus' emphasis here; and Aristotle accepted the Platonic flux-interpretation and carried it still further. Other references to Heraclitus in Aristotle attack him for denying the law of contradiction in his assertions that opposites are 'the same'. Again, this is a misinterpretation by Aristotle, who applied his own tight logical standards anachronistically; by 'the same' Heraclitus evidently meant not 'identical' so much as 'not essentially distinct'.

In view of these defects in the authors of the ancient assessment it is safer to attempt the reconstitution of Heraclitus' thought, in the first instance, on the basis of the extant genuine fragments. Even so one cannot hope for more than a very limited understanding, partly because Heraclitus, as Aristotle found, did not use the categories of formal logic, and tended to describe the same thing (or roughly the same thing) now as a god, now as a form of matter, now as a rule of behaviour or principle which was nevertheless a physical constituent of things. He was, indeed, more of a metaphysician than his Ionian predecessors, less concerned with the mechanics of development and change than with the unifying reality that underlay them.

HERACLITUS' THOUGHT

(1) *Men should try to comprehend the underlying coherence of things: it is expressed in the Logos, the formula or element of arrangement common to all things*

194 Fr. 1, Sextus *adv. math.* VII, 132 τοῦ δὲ λόγου τοῦδ' ἐόντος αἰεὶ ἀξύνετοι γίνονται ἀνθρώποι καὶ πρόσθεν ἢ ἀκοῦσαι καὶ ἀκούσαντες τὸ πρῶτον· γινομένων γὰρ πάντων κατὰ τὸν λόγον τόνδε ἀπίροισιν εἰκόασι, πειρώμενοι καὶ ἐπέων καὶ ἔργων τοιούτων ὁκίωον ἐγὼ διηγέσθαι κατὰ φύσιν διαίρων ἕκαστον καὶ φράζων ὅκως ἔχει· τοὺς δὲ ἄλλους ἀνθρώπους λαμβάνει ὁκόσα ἐγερθέντες ποιοῦσιν ὁκωσπερ ὁκόσα εὐδοντες ἐπιλανθάνονται.

195 Fr. 2, Sextus *adv. math.* VII, 133 διὸ δεῖ ἐπεσθαι τῷ (ξυνῶ)· τοῦ λόγου δ' ἐόντος ξυνοῦ ζῶουσιν οἱ πολλοὶ ὡς ἰδίαν ἔχοντες φρόνησιν.¹

¹ διὸ δεῖ ἐπεσθαι τῷ κοινῶ· ξυνοῦ γὰρ ὁ κοινός· τοῦ... MSS. ξυνοῦ and κοινός are different words for the same idea, the former being the normal epic and Ionic form and that used by Heraclitus. The later form was evidently given in a gloss, and then this gloss replaced the original word, though the appended explanation remained.

196 Fr. 50, Hippolytus *Ref.* IX, 9, 1 οὐκ ἐμοῦ ἀλλὰ τοῦ λόγου ἀκούσαντας ὁμολογεῖν σοφόν ἐστὶν ἐν πάντα εἶναι.

194 Of the Logos which is as I describe it men always prove to be uncomprehending, both before they have heard it and when once they have heard it. For although all things happen according to this Logos men are like people of no experience, even when they experience such words and deeds as I explain, when I distinguish each thing according to its constitution and declare how it is; but the rest of men fail to notice what they do after they wake up just as they forget what they do when asleep.

195 Therefore it is necessary to follow the common; but although the Logos is common the many live as though they had a private understanding.

196 Listening not to me but to the Logos it is wise to agree that all things are one.

These assertions make it plain that Heraclitus regarded himself as having access to, and trying vainly to propagate, an all-important truth about the constitution of the world of which men are a part. The great majority fail to recognize this truth,¹ which is 'common' – that is, both valid for all things and accessible to all men, if only they use their observation and their understanding² and do not fabricate a private and deceptive intelligence. What they should recognize is the *Logos*, which is perhaps to be interpreted as the unifying formula or proportionate method of arrangement of things, what might almost be termed their structural plan both individual and in sum. The technical sense of *λόγος* in Heraclitus is probably related to the general meaning 'measure', 'reckoning' or 'proportion'; it cannot be simply Heraclitus' own 'account' that is in question (otherwise the distinction in 196 between ἐμοῦ and τοῦ λόγου is meaningless), although the *Logos* was revealed in that account and in a manner of speaking coincides with it. The effect of arrangement according to a common plan or measure is that all things, although apparently plural and totally discrete, are really united in a coherent complex

(196) of which men themselves are a part, and the comprehension of which is therefore logically necessary for the adequate enactment of their own lives. Yet 'formula', 'proportionate arrangement' and so on are misleadingly abstract as translations of this technical sense of λόγος. Logos was probably conceived by Heraclitus at times as an actual component of things, and in many respects it is co-extensive with the primary cosmic constituent, fire (see p. 199).

¹ Men are attacked for this failure in many other extant fragments: see fr. 17, 19, 28, 34, 56, 72. But nothing substantial is added there to the content of 194, 195, 196. Analogous rebukes are also hurled at individuals – Homer, Hesiod, Xenophanes, Hecataeus, Archilochus and Pythagoras; see e.g. 190 and 255, where the ground of criticism is that such men (of whom Pythagoras comes in for special attack elsewhere, cf. e.g. 256) pursued the wrong kind of knowledge, πολυμαθίη or the mere collection of disparate and unrelated facts.

² Cf. 197 Fr. 55, Hippolytus *Ref.* ix, 9, 5 ὄσων ὄψις ἀκοή μάθησις, ταῦτα ἐγὼ προτιμῶ. (*The things of which there is seeing and hearing and perception, these do I prefer.*) But observation must be checked by understanding, νοῦς or φρόνησις: this is shown not only by 250 but also by 198 fr. 107, Sextus *adv. math.* vii, 126 κακοὶ μάρτυρες ἀνθρώποισιν ὀφθαλμοὶ καὶ ὠτα βαρβάρους ψυχὰς ἐχόντων. (*Evil witnesses are eyes and ears for men, if they have souls that do not understand their language.*) Here 'barbarian souls' are those that cannot understand the language of, cannot correctly interpret, the senses, but are misled by superficial appearances. An analogous distinction between mere sensation and the intelligent interpretation of sense-data was later made by Democritus (pp. 412–13).

(2) *Different kinds of instance of the essential unity of opposites*

199 Fr. 61, Hippolytus *Ref.* ix, 10, 5 θάλασσα ὕδωρ καθαρῶτατον καὶ μιαρῶτατον, ἰχθύσι μὲν πότιμον καὶ σωτήριον, ἀνθρώποις δὲ ἄποτον καὶ ὀλέθριον.

200 Fr. 60, Hippolytus *Ref.* ix, 10, 4 ὁδὸς ἄνω κάτω μία καὶ ὡυτή.

201 Fr. 111, Stobaeus *Anth.* iii, 1, 177 νοῦσος ὑγιεινὴ ἐποίησεν ἡδὺ καὶ ἀγαθόν, λιμὸς κόρον, κάματος ἀνάπαυσις.

202 Fr. 88, ps.-Plutarch *Cons. ad Apoll.* 10, 106E ταῦτό τ' ἐνὶ ζῶν καὶ τεθηγκὸς καὶ τὸ ἐγρηγορὸς καὶ τὸ καθεῦδον καὶ νέον καὶ γηραιόν· τάδε γὰρ μεταπεσόντα ἐκείνά ἐστι κάκεϊνα [πάλι] μεταπεσόντα ταῦτα.

199 Sea is the most pure and the most polluted water; for fishes it is drinkable and salutary, but for men it is undrinkable and deleterious.

200 The path up and down is one and the same.

201 Disease makes health pleasant and good, hunger satiety, weariness rest.

202 And as the same thing there exists in us living and dead and the waking and the sleeping and young and old; for these things having changed round are those, and those having changed round are these.

These fragments exemplify four different kinds of connexion between evident opposites:

(i) In 199 the same thing produces opposite effects upon different classes of critic; so also fr. 13 (pigs like mud <but men do not>) and fr. 9 (donkeys prefer rubbish to gold, <men gold to rubbish>).

(ii) In 200 different aspects of the same thing may justify opposite descriptions;¹ so also fr. 58 (cutting and burning <which are normally bad> call for a fee when done by a surgeon) and fr. 59 (the act of writing combines straight, in the whole line, and crooked, in the shape of each letter).

(iii) In 201 good and desirable things like health or rest are seen to be possible only if we recognize their opposites, sickness or weariness; so probably fr. 23 (there would be no right without wrong).

(iv) In 202 certain opposites are said to be essentially connected (literally, to be 'the same', a pregnant expression) because they succeed, and are succeeded by, each other and nothing else. So in fr. 126 the hot substance and the cold form what we might call a hot-cold continuum, a single entity (i.e. temperature). So also fr. 57: night and day, which Hesiod had made parent and child, are, and must always have been, essentially connected and interdependent.

These four kinds of connexion between opposites can be further reduced to two main headings: (a) i–iii, opposites which inhere in, or are simultaneously produced by, a single subject; (b) iv, opposites which are connected through being different stages in a single invariable process.

¹ This seems the most probable interpretation of 'the road up and down'. Theophrastus and a few of his followers applied the phrase to the interchanges between world-masses in the cosmic process, and most modern scholars have done the same. But the same words 'one and the same' are used of evident opposites in the formally similar fr. 59; and Hippolytus, a reliable source of *verbatim* quotations from Heraclitus who seems to have used a good handbook in which the philosopher's sayings were grouped by subject, certainly took 'the road up and down' as another illustration of the unity of opposites and not as a cosmological metaphor, to which indeed it is not completely appropriate. We should think of an actual road or path, which is called 'the road up' by those who live at the bottom, 'the road down' by those at the top. Vlastos, *AJP* 76 (1955), 349 n. 26, objects to this interpretation on the grounds of its 'banality'; but fr. 59, for example, on writing, undoubtedly has precisely the same quality.

Reflections such as these (cf. also frs. 103, 48, 126, 99), on objects conventionally treated as entirely separate from and opposed to each other, evidently persuaded Heraclitus that there is *never* any real absolute division of opposite from opposite. (For a more straightforward restatement of this view by Anaxagoras see p. 371.)

(3) *Each pair of opposites thus forms both a unity and a plurality. Different pairs are also found to be inter-connected*

203 Fr. 10, [Aristotle] *de mundo* 5, 396b20 συλλάψεις ὄλα καὶ οὐχ ὄλα, συμφερόμενον διαφερόμενον, συνᾶδον διᾶδον· ἐκ πάντων ἐν καὶ ἐξ ἑνὸς πάντα.¹

¹ συλλάψεις is textually slightly preferable to συνάψεις, which would mean 'things in contact'. A more important question is whether the word is subject or predicate. Snell showed it to be the former, contrary to the common view; neither 'wholes' and 'not wholes' nor 'in tune' and 'out of tune' are typical pairs of Heraclitean opposites, nor indeed do they fall under the classes outlined on p. 189.

204 Fr. 67, Hippolytus *Ref.* ix, 10, 8 ὁ θεὸς ἡμέρη εὐφρόνη, χειμῶν θέρος, πόλεμος εἰρήνη, κόρος λιμός [τάναντία ἅπαντα, οὗτος ὁ νοῦς]: ἄλλοιοῦται δὲ ὄκωσπερ <πῦρ> ὀπτόταν συμμιγῆ θυώμασιν ὀνομάζεται καθ' ἡδονὴν ἐκάστου. [πῦρ suppl. Diels.]

203 Things taken together are wholes and not wholes, something which is being brought together and brought apart, which is in tune and out of tune; out of all things there comes a unity, and out of a unity all things.

204 God is day night, winter summer, war peace, satiety hunger [all the opposites, this is the meaning]; he undergoes alteration in the way that fire, when it is mixed with spices, is named according to the scent of each of them.

In 203 'things taken together' must be, primarily, opposites: what one takes together with night, for example, is day. (Here we may note that Heraclitus expresses what we should call 'quality' in terms of simple extremes, which he can then classify as opposites; so that all change can thus be regarded as that between opposites.) Such 'things taken together' are truly described in one sense as 'wholes', that is, forming one continuum, in another sense as 'not wholes', that is, as single components. Applying these alternative analyses to the conglomeration of 'things taken together', we can see that 'from all things a unity is formed', and also that from this unity (ἐξ ἑνός) there can be separated the superficial, discrete, plural aspect of things (πάντα).

204 asserts a relationship between god and a number of pairs of opposites, each pair separately connected by automatic succession; these, as the glossator saw, probably stand for all pairs of opposites however connected. The relationship in question is a loose predicative one; and Heraclitus, perhaps enlarging on Xenophanes, seems to have regarded 'god' as in some probably undefined way immanent in things, or as the sum total of things.¹ One recalls the Milesian view that the originative material, which may still be represented in the world, is divine. Heraclitus, although not so explicitly corporealistic in his conception of divinity, was little more conventionally religious than the Milesians in that he did not associate 'god' with the need for cult and worship (although he did not utterly reject all cult, see pp. 209f.). The particular point of 204 is that every opposite can be expressed in terms of god: because peace is divine it does not follow that war is not equally divine, is not equally permeated by the directive and unifying constituent which is on occasions equated with the whole ordered cosmos (pp. 187f., 199). God cannot here be essentially different from Logos; and the Logos is, among other things, the constituent of things which makes them opposed, and which ensures that change between opposites will be proportional and balanced overall. God, then, is said to be the common connecting element in all extremes, just as fire is the common element of different vapours (because these were conceived as a compound of fire with different kinds of incense). Change from one to another brings about a total change of name, which is misleading, because only a superficial component has altered and the most important constituent remains. This difficult saying implies that, while each separate pair of contraries forms a single continuum, the several continua, also, are connected with each other, though in a different manner. Thus the total plurality of things forms a single, coherent, determinable complex – what Heraclitus called 'unity'.

¹ The superiority of god to man, and of the divine synthetic view of things to the human chaotic view, is heavily stressed by Heraclitus; e.g. 205 Fr. 78, Origen *c. Celsum* vi, 12 ἦθος γὰρ ἀνθρώπειον μὲν οὐκ ἔχει γνώμας, θεῖον δὲ ἔχει. (*Human disposition does not have true judgement, but divine disposition does.*) See also frs. 79, 82–3, and compare the Hebrew concept: 'As the heavens are higher than the earth, so are my ways higher than your ways, and my thoughts than your thoughts', Isaiah iv. 8f. One saying specifically asserts that for god the separateness implied by opposites does not exist: 206 Fr. 102, Porphyrius in *Iliadem* iv, 4 τῷ μὲν θεῷ καλὰ πάντα καὶ ἀγαθὰ καὶ δίκαια, ἀνθρώποι δὲ ἅ μὲν ἀδίκῃ ὑπειλήφασιν & δὲ δίκαια. (*To god all things are beautiful and good and just, but men have supposed some things to be unjust, others just.*)

(4) *The unity of things lies beneath the surface; it depends upon a balanced reaction between opposites*

207 Fr. 54, Hippolytus *Ref.* ix, 9, 5 ἄρμονιή ἀφανῆς φανερῆς κρείττων.

208 Fr. 123, Themistius *Or.* 5, p. 69 D. φύσις κρύπτεσθαι φιλεῖ.

209 Fr. 51, Hippolytus *Ref.* ix, 9, 1 οὐ ξυνιαῶσιν ὄκως διαφερόμενον ἐωυτῶ ξυμφέρεται· παλίντονος ἄρμονιή ὄκωσπερ τόξου καὶ λύρης.¹

¹ Hippolytus, the fullest source here, and usually a reliable one, has ὁμολογέειν (for ὁμολογέει) and παλίντροπος. ξυμφέρεται is a probable restoration from Plato's version, *Symp.* 187A, and avoids a difficult use of ὁμολογέειν – a verb which could easily have been repeated accidentally, since Hippolytus used it twice in the infinitive just before he quoted the fragment. παλίντονος has as much support as παλίντροπος in the versions (of the second part only) by Plutarch and Porphyry, and is preferred because it gives a fully intelligible sense. G. Vlastos, *AJP* 76 (1955), 348ff., defends παλίντροπος, noting that Diog. L. ix, 7, a summary and often imprecise version of Theophrastus, has the phrase διὰ τῆς ἐναντιοτροπῆς ἠρμόσθαι. This certainly appears at first sight to be based upon παλίντροπος ἄρμονιή; yet the ἐναντιοτροπή (which would have to be ἐναντιοτροπία if derived from an adjectival form -τροπος) probably refers to the τροπαὶ of 218, combined (as they certainly were by Theophrastus, cf. the fuller account of him in Diog. L. ix, 8) with the 'way up and down' interpreted as change between opposites. The παλίντροπος κέλευθος in Parmenides fr. 6 (293) is, of course, perfectly intelligible, and does not necessarily contain a reference to Heraclitus (cf. pp. 247f.), or at any rate to this fragment. For further discussion of the correct reading see Guthrie, *HGP* 1, n. 3 on pp. 439f.

207 An unapparent connexion is stronger than an apparent one.

208 The real constitution is accustomed to hide itself.

209 They do not apprehend how being at variance it agrees with itself [*lit.* how being brought apart it is brought together with itself]: there is a back-stretched connexion, as in the bow and the lyre.

What is stated in **207** is a general rule; comparison with **208** (where φύσις probably means not 'Nature' but 'a thing's true constitution'), and also with **209**, suggests that the rule is intended to apply to the working of the world as a whole, as a sum of constituent parts whose connexion is not apparent at first sight. The unseen connexion of opposites is in fact stronger than other, more obvious types of connexion.¹ **209**, one of Heraclitus' most familiar sayings, contains a characteristic looseness in predication: the subject of ξυμφέρεται is probably not <τὸ> διαφερόμενον, i.e. another example of a specific opposite, but a generalizing διαφερόμενόν <τι>, where 'anything

being carried apart' means something like 'any discrete pair of opposites'. Thus the sense given is similar to that implicit in συμφερόμενον διαφερόμενον in **203**: any pair, or sum of pairs, can be regarded either (a) as heterogeneous and analysable in terms of separate poles or extremes, or (b) as tending together with itself to form a unity. Now comes an important addition: there is (*sc.* in it, i.e. it exemplifies) a connexion or means of joining (the literal sense of ἄρμονιή) through opposite tensions,² which ensures this coherence – just as the tension in the string of bow or lyre, being exactly balanced by the outward tension exerted by the arms of the instrument, produces a coherent, unified, stable and efficient complex. We may infer that if the balance between opposites were *not* maintained, for example if 'the hot' (i.e. the sum of hot substances) began seriously to outweigh the cold, or night day, then the unity and coherence of the world would cease, just as, if the tension in the bow-string exceeds the tension in the arms, the whole complex is destroyed.

¹ A number of fragments imply that it needs both faith and persistence to find the underlying truth. So e.g. **210** Fr. 18, Clement *Strom.* II, 17, 4 ἐάν μὴ ἔλπηται ἀνέλπιστον οὐκ ἐξευρήσει, ἀνεξερεύνητον ἔδν καὶ ἀπορον. (*If one does not expect the unexpected one will not find it out, since it is not to be searched out, and is difficult to compass.*) See also **244**, and fr. 22, 86; compare Xenophanes fr. 18 (188).

² παλίντονος = 'counter-stretched', i.e. tending equally in opposite directions. A tension in one direction automatically produces an equivalent tension in the other; if not, the system collapses.

(5) *The total balance in the cosmos can only be maintained if change in one direction eventually leads to change in the other, that is, if there is unending 'strife' between opposites.*

211 Fr. 80, Origen *c. Celsum* VI, 42 εἰδέναί χρεῖ τὸν πόλεμον ἔοντα ξυνόν, καὶ δίκην ἔριν, καὶ γινόμενα πάντα κατ' ἔριν καὶ χρεών.¹

¹ χρεών Diels, χρεώμενα MS. The emendation is not certain, but is hard to improve; the three extra letters may be connected with the omission of three letters just before, where the unique Vatican MS has εἰ δέ for the obvious original εἰδέναί.

212 Fr. 53, Hippolytus *Ref.* ix, 9, 4 πόλεμος πάντων μὲν πατήρ ἐστι, πάντων δὲ βασιλεύς, καὶ τοὺς μὲν θεοὺς ἐδειξε τοὺς δὲ ἀνθρώπους, τοὺς μὲν δούλους ἐποίησε τοὺς δὲ ἐλευθέρους.

211 It is necessary to know that war is common and right is strife and that all things happen by strife and necessity.

212 War is the father of all and king of all, and some he shows as gods, others as men; some he makes slaves, others free.

Strife or war is Heraclitus' favourite metaphor for the dominance of change in the world. It is obviously related to the reaction between opposites; most kinds of change (except for e.g. growth, which is the accretion of like to like), it may be inferred, could be resolved into change between opposites. At all events, change from one extreme to the other might seem to be the most radical possible. The 'war' which underlies all events is 'common' in 211 in a special sense (Homer had used the term, but to mean 'impartial'): it is universal, and is responsible for different and indeed opposed conditions of men – even for their fate after death, for death in battle (212) could make some into 'gods', cf. 237 and 239. It is also called δίκη, the 'indicated way' (from the same root as δείκνυμι), or the normal rule of behaviour. This must be a deliberate amendment of Anaximander's dictum (110) that things pay retribution to each other for the *injustice* of their alternate encroachments in the processes of natural change. Heraclitus points out that if strife – that is, the action and reaction between opposed substances – were to cease, then the victor in every contest of extremes would establish a permanent domination, and the world as such would be destroyed.¹ Yet just as in a battle there are temporary local stoppages, or deadlocks produced by the exact balance of opposing forces, so Heraclitus must have allowed that temporary stability is to be found here and there in the cosmic battlefield, so long as it is only temporary and is balanced by a corresponding state elsewhere. This would not diminish the validity of the domination of strife (which, as for Anaximander, provides a metaphorical motive for change), but it allows the principle to be applied to the world of our actual experience, in which all things must eventually change but some things are for the time being obviously stable.

¹ Cf. 213 Aristotle *Eth. Eudem.* H1, 1235a25 καὶ Ἡράκλειτος ἐπιτιμᾷ τῷ ποιήσαντι Ὡς ἔρις ἕκ τε θεῶν καὶ ἀνθρώπων ἀπόλοιτο (= *Il.* 18, 107): οὐ γὰρ ἂν εἶναι ἀρμονίαν μὴ ὄντος ὀξείας καὶ βαρέας οὐδὲ τὰ ζῶα ἄνευ θήλεος καὶ ἄρρενος ἐναντίων ὄντων. (*Heraclitus rebukes the author of the line 'Would that strife might be destroyed from among gods and men': for there would be no musical scale unless high and low existed, nor living creatures without female and male, which are opposites.*) Here ἀρμονία has its special sense of 'musical scale'.

(6) *The river-image illustrates the kind of unity that depends on the preservation of measure and balance in change*

214 Fr. 12, Arius Didymus *ap.* Eusebium *P.E.* xv, 20, + fr. 91, Plutarch *de E* 18, 392b ποταμοῖσι τοῖσιν αὐτοῖσιν ἐμβαίνουσιν ἕτερα καὶ ἕτερα ὕδατα ἐπιρρεῖ (= fr. 12).¹...σκιδνησι καὶ...συν-άγει...συνίσταται καὶ ἀπολείπει...πρόσεισι καὶ ἄπεισι (= fr. 91).

214 Upon those that step into the same rivers different and different waters flow... They scatter and... gather... come together and flow away... approach and depart.

¹ The words καὶ ψυχὰι δὲ ἀπὸ τῶν ὑγρῶν ἀνασθμῶνται, which follow ὕδατα ἐπιρρεῖ in Arius, are counted as part of fr. 12 by most editors; but they are almost certainly part of an attempt by Cleanthes to find an exhalation of soul in Heraclitus as in Zeno; see Kirk, *Heraclitus, the Cosmic Fragments*, 367ff. The pairs of verbs which form fr. 91 occur in Plutarch immediately after a summary by him (in Platonic terms) of the main river-statement; see further p. 197.

According to the Platonic interpretation, accepted and expanded by Aristotle, Theophrastus and the doxographers, this river-image was cited by Heraclitus to emphasize the absolute continuity of change in every single thing: everything is in perpetual flux like a river. So 215 Plato *Cratylus* 402a λέγει που Ἡράκλειτος ὅτι πάντα χωρεῖ καὶ οὐδὲν μένει, καὶ ποταμοῦ ῥοῆ ἀπεικάζων τὰ ὄντα λέγει ὡς δις ἐς τὸν αὐτὸν ποταμὸν οὐκ ἂν ἐμβαίης. (*Heraclitus somewhere says that all things are in process and nothing stays still, and likening existing things to the stream of a river he says that you would not step twice into the same river.*) It is to this interpretation that Aristotle refers in 216 Aristotle *Phys.* Θ3, 253b9 καὶ φασὶ τινες κινεῖσθαι τῶν ὄντων οὐ τὰ μὲν τὰ δ' οὐ, ἀλλὰ πάντα καὶ αἰεὶ, ἀλλὰ λαυθάνειν τοῦτο τὴν ἡμετέραν αἴσθησιν. (*And some say not that some existing things are moving, and not others, but that all things are in motion all the time, but that this escapes our perception.*) Aristotle here makes explicit what is implicit in Plato, that many things (those that appear to be stable) must be undergoing *invisible* or unnoticed changes. Can Heraclitus really have thought that a rock or a bronze cauldron, for example, was invariably undergoing invisible changes of material? Perhaps so; but nothing in the extant fragments suggested that he did, and his clearly-expressed reliance on the senses, provided they be interpreted intelligently, may suggest that he did not.¹ Before Parmenides and his apparent proof that the senses were completely fallacious – a proof that was clearly a shock to his contemporaries – gross departures from common sense should, we believe, only be accepted when the evidence for them is quite strong. In the present case it is conceivable that Plato was misled by post-Heraclitean exaggerations and distortions of Heraclitus' emphasis on eventual change; in particular, perhaps, by Cratylus, who is said by Aristotle to have influenced Plato as a young man (*Met.* A6, 987a32).

¹ See 197, 198. It is true that Melissus in fr. 8 (537) drew attention to the appearance that some 'stable' things do change: iron is worn away by the finger, and so on. This observation occurs in a context which perhaps has verbal

references to Heraclitus (e.g. τὸ τε θερμὸν ψυχρὸν γίνεσθαι καὶ τὸ ψυχρὸν θερμὸν, cf. fr. 126). Yet there is no reason to think that Melissus meant that change must in this case be *continuous*, even though it can be *invisible*. Every time the finger rubs, it rubs off an invisible portion of iron; yet when it does not rub, what reason is there to think that the iron is still changing? Melissus' point is rather that appearances show that everything, even the apparently stable, is *subject to change*. This is precisely what Heraclitus must have thought; he may or may not have mentioned *infra-visible* changes, but in any case would only accept them when they were deducible – and continuous change is not deducible in many apparently stable objects. Melissus' argument, of course, was that the senses must be fallacious; for between Heraclitus and himself had come Parmenides. With Empedoclean effluences (pp. 309f.) the situation changes again.

Most scholars, however, do not accept this view, because they feel that Plato must be right – partly because of his importance, partly because of his date (which is relatively early compared with that of Arius Didymus, the source of fr. 12), partly because Aristotle believed him, and partly because Cratylus' amendment ('you could not step into the same river *even once*', Aristotle *Met* Γ5, 1010a13) seems to depend on the Platonic form of what Heraclitus said, or something like it. But Plato can often be seen making Socrates distort his predecessors for his own, or Plato's own, reasons; and Cratylus' amendment does not necessarily depend on the Platonic version, but could easily be rephrased as a comment on that of Arius. Perhaps, then, one should admit the general development of ideas about perception and change into the calculation, and also the implication of Heraclitus' other fragments. But there is also the question of the apparently Heraclitean diction of fr. 12, with its Ionic dative plurals and its archaic 'different and different waters'. Guthrie (like Vlastos in *AJP* 76, 1955, 338ff.) objects that it is less pithy and paradoxical, and therefore less Heraclitean, than the Platonic version, but in sum we feel that fr. 12 has every appearance of belonging to Heraclitus, being in natural and unforced Ionic and having the characteristic rhythm of archaic prose; while the latter looks Platonic, and could more easily be a reformulation of fr. 12 than vice versa.

The matter is hard to be certain about; one interpretation is presented here quite forcefully, the other is argued in e.g. Guthrie, *HGP* I, 449–54. Further reflection on the underlying implications of the alternative versions may strengthen the case advanced here. The Platonic formulation implies that the river is never the same in successive moments (and so Cratylus was really right), and is accompanied by a categorical statement that everything in nature resembles the river in that respect – οὐδὲν μένει, 'nothing stays still'. The Arius formulation, that of fr. 12, is less drastic; there is such a

thing as the same river, but it is also different, in a way. This draws a contrast between 'same' and 'different' in a specific instance, and therefore belongs with the list of Heraclitus' concrete examples of the coincidence of opposites. But if its intention is more than that (as Plato at least implies), then the meaning is not that every single object must be like a river, but rather that a complex whole, like the world, might remain 'the same' while its constituent parts are for ever changing – which would have a reassuring similarity to Heraclitus' physical views discussed in §7 below. Seen in this light, the addition to fr. 12 (in 214) of the verbs which compose fr. 91 (which the context, and their own nature, seem to indicate as describing the flow of water, with special attention to the regularity of its replacement) brings out what is implicit in fr. 12: that the *unity* of the river as a whole is dependent upon the *regularity* (also suggested by the repetition ἕτερα καὶ ἕτερα) of the flux of its constituent waters. The river, then, may provide an image of the balance of constituents in the world. Obviously, a rock or a mountain or a table is temporarily static, and will remain so, perhaps, for a long time; what matters for Heraclitus' theory of balanced reaction and strife is that *eventually* it should change and so help to maintain the process of world-constituents. Meanwhile the stability of a mountain, for example, is balanced by a corresponding stability elsewhere of corresponding masses of sea, and of fire or aither (the mountain being mostly earth); on which see the next section.

(7) *The world is an ever-living fire, parts of which are always extinguished to form the two other main world-masses, sea and earth. Changes between fire, sea and earth balance each other; pure, or aitherial, fire has a directive capacity*

217 Fr. 30, Clement *Strom.* v, 104, 1 κόσμον τόνδε [τὸν αὐτὸν ἀπάντων]¹ οὔτε τις θεῶν οὔτε ἀνθρώπων ἐποίησεν, ἀλλ' ἦν αἰεὶ καὶ ἔστιν καὶ ἔσται· πῦρ αἰεζῶον, ἀπτόμενον μέτρα καὶ ἀπτοσβεννύμενον μέτρα.

218 Fr. 31, Clement *Strom.* v, 104, 3 πυρὸς τροπαί· πρῶτον θάλασσα, θαλάσσης δὲ τὸ μὲν ἡμισυ γῆ τὸ δὲ ἡμισυ πρηστήρ... <γῆ> θάλασσα διαχέεται, καὶ μετρέεται εἰς τὸν αὐτὸν λόγον ὁκοῖος πρόσθεν ἦν ἢ γενέσθαι γῆ.

219 Fr. 90, Plutarch *de E.* 8, 388D πυρὸς τε ἀνταμοιβῆ τὰ πάντα καὶ πῦρ ἀπάντων ὁκωσπερ χρυσοῦ χρήματα καὶ χρημάτων χρυσός.

220 Fr. 64, Hippolytus *Ref.* ix, 10, 6 τὰ δὲ πάντα οἰακίζει κεραυνός.

217 This world-order [the same of all] did none of gods or men make, but it always was and is and shall be: an everliving fire, kindling in measures and going out in measures.

218 Fire's turnings: first sea, and of sea the half is earth, the half 'burner' [*i.e.* lightning or fire]... <earth> is dispersed as sea, and is measured so as to form the same proportion as existed before it became earth.

219 All things are an equal exchange for fire and fire for all things, as goods are for gold and gold for goods.

220 Thunderbolt steers all things.

¹ Vlastos, *AJP* 76 (1955), 344ff., argues that 'the same of all' is original, and contrasts the real physical world of common experience with the deceptive private imaginings of men who do not follow the Logos (cf. 195 etc.). This would be possible enough if (what does not seem particularly probable) fr. 30 followed directly upon a reference to men's delusions; but neither Plutarch nor Simplicius, who also quote the first part of the fragment, gives the debated phrase. More important, Vlastos does not mention that Clement in the context of the quotation is following some Stoic source in endeavouring to explain away this fragment's inconsistency with the Stoic *ecpyrosis*-interpretation (on which see further p. 200n.), by arguing that 'this world-order' in Heraclitus is the all-inclusive, eternal system, τὸν ἐξ ἀπάσης τῆς οὐσίας ἰδίως ποιῶν κόσμον as Clement had just said, and not this particular world. Thus the interpolation is very strongly motivated; see further Kirk, *Heraclitus, the Cosmic Fragments*, 307ff.

Fire is the archetypal form of matter. The world-order as a whole can be described as a fire of which measures are being extinguished, corresponding measures being rekindled; not all of it is burning at the same time. It always has been, and always will be, in this condition (217). Cosmogony in the Milesian sense is therefore not to be found in Heraclitus. Fire cannot be an originative stuff in the way that water or air was for Thales or Anaximenes, and according to Aristotle and his followers it is no longer indefinite or infinite (cf. Theophrastus *ap. Simpl. in Phys.* 24, 1, DK 22A5); it is nevertheless the continuing source of the natural processes in 218. Regarded as a part of the cosmos, fire is on a par with sea (presumably representing water in general, as in Xenophanes) and earth, as one of the three obvious world-masses. The pure cosmic fire was probably identified by Heraclitus with αἰθήρ (aither), the brilliant fiery stuff which fills the shining sky and surrounds the world; this aither was widely regarded both as divine and as a place of souls.¹ The idea that the soul may be fire or aither, not breath as Anaximenes had thought, must have helped to determine the choice of fire as the controlling form of matter (cf. p. 161). 220 shows that Heraclitus' fire – the purest and brightest sort, that is, as of the aitherial and divine thunderbolt –

has a directive capacity. In part this reflects the divinity assigned to aither in the popular conception; more important, perhaps, is the fact that all fire (even the lower, mundane sort), by the regularity with which it absorbs fuel and emits smoke, while maintaining a kind of stability between them, patently embodies the rule of measure in change which inheres in the world process, and of which the Logos is an expression (pp. 187f.). Thus it is naturally conceived as the very constituent of things which actively determines their structure and behaviour – which ensures not only the opposition of opposites, but also their unity through 'strife'.

¹ Cf. e.g. 221 Aristotle *de caelo* B1, 284a11 τὸν δ' οὐρανὸν καὶ τὸν ἄνω τόπον οἱ μὲν ἀρχαῖοι τοῖς θεοῖς ἀπένειμαν ὡς ὄντα μόνον ἀθάνατον... (*The ancients assigned to the gods the heaven and the upper region as being the only immortal place...*) 222 *Inscriptiones Graecae*² 1, 945, 6 (Athens, 5th cent. B.C.) αἰθήρ μὲν ψυχᾶς ὑπέδεξατο, σώμα[τα δὲ χθών]. (*Aither received their souls, earth their bodies.*) 223 [Hippocrates] *de carnibus* 2 δοκέει δὲ μοι ὁ καλέσμεν θερμὸν ἀθάνατον τε εἶναι καὶ νοεῖν πάντα καὶ ὄρῃν καὶ ἀκούειν καὶ εἶδέναι πάντα, ἔοντα τε καὶ ἐσόμενα. τοῦτο οὖν τὸ πλεῖστον, ὅτε ἐταράχθη ἔπιαντο, ἐξεχώρησεν εἰς τὴν ἀνωτάτω περιφορῆν, καὶ αὐτὸ μοι δοκέει αἰθέρα τοῖς παλαιοῖς εἰρησθαι. (*What we call 'hot' seems to me to be immortal and to apprehend all things and to see and hear and know all things, both present and future. This, then, the most of all, when all things became confused, went out to the furthestmost revolution, and seems to me to have been what was called aither by the men of old.*) Cf. also Euripides fr. 839, 9ff., fr. 941 (Nauck²), *Helen* 1014ff.; Aristophanes *Peace* 832f. None of these passages, of course, is as early as Heraclitus, and 223 clearly shows the influence of Anaxagoras and Diogenes of Apollonia. But the belief is described as ancient in 221 and 223 and is so widely represented in fifth-century poetry that it must have been well established and widely known by then. It is comparable with the belief in the divinity of the sun, which must be of great antiquity.

The cosmos consists, broadly, of the masses of earth (interpenetrated with secondary fire, as in volcanoes) and sea, surrounded by the bright integument of fire or aither. This fire, we may conjecture on the basis of 218, was regarded by Heraclitus as the motive point of the cosmological processes: from its region appears to come rain, which ultimately nourishes the sea, and it is itself replenished (for fire 'consumes' moisture) by the moist evaporation ascending from the sea. Sea, as Xenophanes had shown, turns into earth, and earth at other times and places merges into water. Thus sea and earth are what cosmic or aitherial fire 'turns to' (218).¹ Changes between the three world-masses are going on simultaneously in such a way that the total of each always remains the same. If a quantity of earth dissolves into sea, an equivalent quantity of sea in other parts is condensing into earth, and so with changes between sea and 'burner' (fire); this seems to be the sense of 218. The λόγος or proportion remains the

same – again it is the measure and regularity of change, this time of large-scale cosmological change, that is stressed. The only surprising thing about this cosmology is its apparent avoidance of analysis into opposites and of the relation of opposites to fire–sea–earth. The probable explanation is that the opposites are invoked in the logical examination of change, but that in the consideration of large-scale changes a more empirical description can be retained, particularly as the Logos is closely related to fire. The connexion between the two types of analysis is the underlying concept of measure and proportion, but fire in itself (as Guthrie observes, *HGP* i, 457) is an extreme, not a potential mediator like the Milesians' water, Indefinite or air.

¹ Or 'is exchanged for' in the phrase of 219. Note that 217 and 219 both tend to invalidate the Stoic ascription to Heraclitus of a periodic *ἐκπύρωσις* or consumption of the world by fire (which is supported, however, by Kahn, *The Art and Thought of Heraclitus*, 134ff.). The world-order *is and shall be* an ever-living fire kindling and going out in measures (simultaneously, that is); and in the trade-image of goods and gold the situation could not arise that all the goods (the manifold world) are simultaneously absorbed into gold (fire), so that there is all gold and no goods. Theophrastus, after referring to this image, added 'He makes an order and a definite time of the change of the world according to some destined necessity' (*Simpl. in Phys.* 24, 4ff., DK 22A5), possibly in relation to Aristotle's remark (*de caelo* A10, 279b14, DK 22A10) that Empedocles and Heraclitus made the world fluctuate between its present condition and destruction. But Aristotle may have been thinking of a great-year cycle of 10,800 years apparently mentioned by Heraclitus (DK 22A13); this may have applied to a cycle of favoured souls, or more probably to the time taken for a single portion of fire to pass through all its stages, and in either case could have been misleading if presented incompletely. Plato (*Sophist* 242D, DK 22A10) clearly distinguished between Heraclitus' *simultaneous* unity and plurality of the cosmos and Empedocles' separate *periods* of Love and Strife. At the same time, they are mentioned together as both alike believing in the unity and plurality of the cosmos; and Aristotle's coupling of the two might conceivably have been motivated by the Platonic comparison, the important distinction between them being overlooked. See also Guthrie, *HGP* i, 455f. and 458, with further references, and D. Wiggins, 'Heraclitus' conceptions of flux, etc.', in *Language and Logos*, ed. Schofield and Nussbaum (Cambridge, 1982), 1ff.

(8) *Astronomy. The heavenly bodies are bowls of fire, nourished by exhalations from the sea; astronomical events, too, have their measures*

224 Diogenes Laertius IX, 9–10 (DK 22A1) τὸ δὲ περιέχον ὁποῖόν ἐστιν οὐ δηλοῖ· εἶναι μέντοι ἐν αὐτῷ σκάφας ἐπεστραμμένας κατὰ κοῖλον πρὸς ἡμᾶς, ἐν αἷς ἀθροιζομένας τὰς λαμπρὰς ἀναθυμιάσεις ἀποτελεῖν φλόγας, ἃς εἶναι τὰ ἀστρα. (10) λαμπροτάτην δὲ εἶναι τὴν τοῦ ἡλίου φλόγα καὶ θερμωτάτην. . . . ἐκλείπειν τε ἡλίον καὶ σελήνην ἄνω στρεφομένων τῶν σκαφῶν· τοὺς τε κατὰ μῆνα τῆς σελήνης σχηματισμοὺς γίνεσθαι στρεφομένης ἐν αὐτῇ κατὰ μικρὸν τῆς σκάφης.

225 Fr. 6, Aristotle *Meteor.* B2, 355a13 ὁ ἡλιος . . . νέος ἐφ' ἡμέρη ἐστίν.

226 Fr. 94, Plutarch *de exil.* 11, 604A Ἥλιος οὐχ ὑπερβήσεται μέτρα· εἰ δὲ μή, Ἐρινύες μιν Δίκης ἐπικούροισι ἐξευρήσουσιν.

224 He does not reveal the nature of the surrounding; it contains, however, bowls turned with their hollow side towards us, in which the bright exhalations are collected and form flames, which are the heavenly bodies. Brightest and hottest is the flame of the sun. . . . And sun and moon are eclipsed when the bowls turn upwards; and the monthly phases of the moon occur as its bowl is gradually turned.

225 The sun . . . is new each day.

226 Sun will not overstep his measures; otherwise the Erinyes, ministers of Justice, will find him out.

No extant fragment clearly reveals Heraclitus' ideas on the nature of the heavenly bodies; but Theophrastus evidently gave a moderately detailed if subjective account of his views, the non-Peripatetic parts of which might be moderately accurate – although Heraclitus was probably not so concerned with exact astronomical details as the Milesians had been. Diogenes preserves the fullest version of this account, of which 224 is a part; for the rest (the stars are further from the earth than the sun, the moon nearer) see DK 22A1. The heavenly bodies are solid bowls filled with fire. This fire is maintained by moist exhalations or evaporations from the sea, which are somehow collected in them and burned as fuel.¹ This is presumably the way in which water changes into fire in the balanced interaction between world-masses described in 218. The idea that, since moisture is evaporated by fire, fire is physically nourished by it is a naïve and popular one. Similarly the solid celestial bowls are probably a quasi-scientific elaboration of the popular myth that the sun each night sails from west to east *in a golden bowl* round the northern stream of Okeanos (see 7). Eclipses and phases of the moon were explained by the turning away of the bowls; but no true cause (as opposed to a mere mechanism) was given, and Diogenes (IX, 11, DK 22A1), presumably still following Theophrastus, stated that Heraclitus said nothing about the constitution of the bowls; indeed he seems to have been content with adaptations of popular accounts so long as his general theory of cosmological change was preserved. 225 is consonant with Theophrastus' account of the celestial bowls; the sun is 'new' every day in the sense that its fire is replenished each night with entirely fresh exhalations. Naturally, this replenishment and

consumption form a regular cycle, though one which could admit slight variations. The principle of measure in natural change is illustrated also in 226, where the sun is restrained by Dike, the personification of normality and therefore regularity, from exceeding its measures – for example from coming too close to the earth or shining beyond its proper time.

¹ Theophrastus and his followers usually attributed *two* exhalations, a moist and a dry one, to Heraclitus. This is most probably a misunderstanding based upon Aristotle's own dual-exhalation explanation of meteorological (as opposed, in his case, to astronomical) events. Aristotle seems to have elaborated the theory out of Heraclitus' ideas on the importance of the exhalation from the sea and other terrestrial waters; but it appears from passages in his *Meteorologica* that Aristotle considered the dry exhalation from the earth to be his own discovery (Kirk, *Heraclitus, the Cosmic Fragments*, 273ff.). Yet, because it is kindled, he can treat Heraclitus' exhalation as fiery; see p. 204 n. 1. The explanation of night and day (as well as winter and summer) as due to the alternating prevalence of the dark and bright exhalations, ascribed to Heraclitus in Diogenes' Theophrastean account, is unlikely; Heraclitus knew as well as anyone that day is due to the sun, and declared in fr. 99 that 'if there were no sun, it would be night'.

(9) *Wisdom consists in understanding the way the world works*

227 Fr. 41, Diogenes Laertius ix, 1 ἐν τῷ σοφόν ἐπίστασθαι γνώμην, ὅκη κυβερνᾶται πάντα διὰ πάντων.¹

¹ ὅτη κυβερνήσαι P¹B, ὅτ' ἐγκυβερνήσαι F; ὅτη ἐκυβέρνησε Diels, DK, ὅπῃ κυβερνᾶται Gigon, Walzer, ὅτη κυβερνᾶται Vlastos, ὅκη κυβερνᾶται scripsi. The feminine form ὅτη is not, in fact, found; ὅκη is one obvious source of corruption. This involves taking γνώμην as internal accusative with ἐπίστασθαι, after Heidehl: 'to be acquainted with true judgement how all things are steered through all'. This would be a development of Solon fr. 16 Diehl: γνομσοῦνης δ' ἀφανὲς χαλεπώτατόν ἐστι νοῆσαι / μέτρον, ὃ δὴ πάντων πείρατα μόνον ἔχει ('Most hard is it to apprehend the unapparent measure of judgement, which alone holds the limits of all things'). On the other hand the Stoics took γνώμην in Heraclitus' saying as direct object of ἐπίστασθαι (cf. Cleanthes *Hymn to Zeus* 34f.), as representing their own familiar idea of divine Reason; that they should place this interpretation on the dictum is not surprising, in any case. But that *Heraclitus* should have used γνώμη by itself, with no definite article and no possessor expressed, to stand for Fire or Logos (cf. 220), has seemed improbable to some. Each of the two alternative interpretations has its difficulties, but the resulting sense in each case is not very different: wisdom consists in understanding how the world works – which in any event involves understanding the divine Logos.

228 Fr. 32, Clement *Strom.* v, 115, 1 ἐν τῷ σοφόν μόνου λέγεσθαι οὐκ ἐθέλει καὶ ἐθέλει Ζηνὸς ὄνομα.

227 The wise is one thing, to be acquainted with true judgement, how all things are steered through all.

228 One thing, the only truly wise, does not and does consent to be called by the name of Zeus.

227 gives the real motive of Heraclitus' philosophy: not mere curiosity about nature (although this was doubtless present too) but the belief that man's very life is indissociably bound up with his whole surroundings. Wisdom – and therefore, it might be inferred, satisfactory living – consists in understanding the Logos, the analogous structure or common element of arrangement in things, embodying the μέτρον or measure which ensures that change does not produce disconnected, chaotic plurality. Absolute understanding here can only be achieved by god (228; cf. also 206), who in some respects, therefore (but not of course in anthropomorphism and in the demand for cult), resembles the Zeus of the conventional religion. God, with his synoptic view, is thus 'the only thing that is (completely) wise'. Fire (220) and the Logos itself (196) are to a large degree co-extensive with, or different aspects of, this completely wise thing.

It remains to describe Heraclitus' views about men – their soul, institutions and ideas. But for Heraclitus this subject was in no way separate from the study of the outside world; the same materials and the same laws are found in each sphere. 227 clearly depends upon this assumption, which was implicit also in 194 (fr. 1).

(10) *The soul is composed of fire; it comes from, and turns into, moisture, total absorption by which is death for it. The soul-fire is related to the world-fire.*

229 Fr. 36, Clement *Strom.* vi, 17, 2 ψυχῆσιν θάνατος ὕδωρ γενέσθαι, ὕδατι δὲ θάνατος γῆν γενέσθαι· ἐκ γῆς δὲ ὕδωρ γίνεται, ἐξ ὕδατος δὲ ψυχῆ.

230 Fr. 118, Stobaeus *Anth.* iii, 5, 8 αὕτη ψυχὴ σοφωτάτη καὶ ἀρίστη.

231 Fr. 117, Stobaeus *Anth.* iii, 5, 7 ἀνὴρ ὀκόταν μεθυσθῆ ἄγεται ὑπὸ παιδὸς ἀνήβου, σφαλλόμενος, οὐκ ἐπαῖων ὅκη βαίνει, ὑγρὴν τὴν ψυχὴν ἔχων.

232 Fr. 45, Diogenes Laertius ix, 7 ψυχῆς πείρατα ἰὼν οὐκ ἂν ἐξεύροιο, πᾶσαν ἐπιπορευόμενος ὁδόν· οὕτω βαθύν λόγον ἔχει.

229 For souls it is death to become water, for water it is death to become earth; from earth water comes-to-be, and from water, soul.

230 A dry soul is wisest and best.

231 A man when he is drunk is led by an unfledged boy, stumbling and not knowing where he goes, having his soul moist.

232 You would not find out the boundaries of soul, even by travelling along every path: so deep a measure does it have.

Anaximenes had probably drawn cosmological conclusions from the nature of the soul, which, following the Homeric view, he envisaged as breath. Heraclitus abandoned this idea in favour of another popular conception of the soul, that it was made of fiery aither. On this foundation he built up a rationalistic psychological theory, in which for the first time (unless Pythagoras himself went further in this direction than we suspect) the structure of the soul is related not only to that of the body, but also to that of the world as a whole.

The soul in its true and effective state is made of fire; in 229 it replaces fire in a list of what might otherwise be taken for the main interactions of the world-masses (cf. 218). The implication is not only that soul is fiery, but also that it plays some part in the great cycle of natural change. It comes into being from moisture (and, if it is analogous to cosmic fire, is maintained, at least in part, by some kind of moisture – see p. 201), and is destroyed when it turns entirely into water.¹ The efficient soul is dry (230), that is, fiery. A soul that is moistened, for example by excessive drinking as in 231 (which well illustrates the still naïve character of Heraclitus' psychology), is diminished in capacity and makes its owner behave childishly, without either wits or physical strength. Thus intellect is explicitly placed in the soul. The soul, which can move to all parts of the body at need,² has limits that cannot be reached (232); probably the thought here is not so much of the problem of self-consciousness as of the soul being a representative portion of the cosmic fire – which, compared with the individual, is obviously of vast extent. Thus it could be conceived as an adulterated fragment of the surrounding cosmic fire,³ and so as the possessor in some degree of that fire's directive power (218). All this, as has been indicated, is a development of what may be reasonably taken as a popular conception of the nature of aither (n. 1 on p. 199); but a simpler and more empirical indication of the fiery nature of soul was at hand, since it must have been commonly observed that warmth is associated with the living body and that the dead, soulless body is cold (so Vlastos, *op. cit.* 364f.).

¹ A Stoic reformulation of 229, in which air is characteristically added to the three genuinely Heraclitean world-masses (to produce the four 'elements' of post-Empedoclean speculation), gives 'the death of fire is the birth of air', etc.; this appears as fr. 76 in DK, but is totally misleading for Heraclitus. He appears to have ignored air as a major cosmic constituent, despite Anaximenes; though the exhalation from the sea, by which sea turns to fire, might have been termed ἀήρ. Aristotle (*de an.* A2, 405a24, DK 22A 15) wrote that Heraclitus made soul the same as the material principle, namely 'the exhalation from which he compounds the other things'. Aristotle himself accepted two kinds of exhalation, one being fiery, so that the 'exhalation' here represents fire; see also the first n. 1 on p. 202.

² According to the scholiast on Chalcidius (fr. 67a in DK) Heraclitus compared the soul to a spider which rushes to any part of its web which is damaged. The soul is described as 'firme et proportionaliter iuncta' to the body; the idea of proportion is appropriate to Heraclitus. Cf. on Anaximenes, pp. 158ff.

³ So Macrobius *S. Scip.* 1.4, 19 (DK 22A 15), 'Heraclitus said that the soul is a spark of the essential substance of the stars' (*scintillam stellaris essentialis*) – the stars being no doubt conceived as concentrations of aither.

(11) *Waking, sleeping and death are related to the degree of fieriness in the soul. In sleep the soul is partly cut off from the world-fire, and so decreases in activity*

233 Fr. 26, Clement *Strom.* IV, 141, 2 ἀνθρωπος ἐν εὐφρόνῃ φάος ἀπτεται ἑαυτῷ [ἀποθανῶν] ἀποσβεσθεὶς ὄψεις, ζῶν δὲ ἀπτεται τεθνεῶτος εὐδων [ἀποσβεσθεὶς ὄψεις], ἐγρηγορῶς ἀπτεται εὐδοντος. (Text as in DK, after Wilamowitz.)

234 Sextus *adv. math.* VII, 129 (DK 22A 16) τοῦτον οὖν τὸν θεῖον λόγον καθ' Ἡράκλειτον δι' ἀναπνοῆς σπᾶσαντες νοεροὶ γινόμεθα, καὶ ἐν μὲν ὕπνοις ληθαῖοι, κατὰ δὲ ἐγερσιν πάλιν ἐμφρονες· ἐν γὰρ τοῖς ὕπνοις μυσάντων τῶν αἰσθητικῶν πόρων χωρίζεται τῆς πρὸς τὸ περιέχον συμφύτας ὁ ἐν ἡμῖν νοῦς, μόνῃ τῆς κατὰ ἀναπνοὴν προσφύσεως σωζομένης οἰονεὶ τινος ρίζης, χωρισθεὶς τε ἀποβάλλει ἢν πρότερον εἶχε μνημονικὴν δύναμιν. (130) ἐν δὲ ἐγρηγόρσει πάλιν διὰ τῶν αἰσθητικῶν πόρων ὡσπερ διὰ τινων θυρίδων προκύψας καὶ τῷ περιέχοντι συμβαλὼν λογικὴν ἐνδύεται δύναμιν...

233 A man in the night kindles a light for himself when his vision is extinguished; living he is in contact with the dead, when asleep, and with the sleeper, when awake.

234 According to Heraclitus we become intelligent by drawing in this divine reason [*logos*] through breathing, and forgetful when asleep, but we regain our senses when we wake up again. For in sleep, when the channels of perception are shut, our mind is sundered from its kinship with the surrounding, and breathing is the only point of attachment to be preserved, like a kind of root; being sundered, our mind casts off its former power of memory. But in the waking state it again peeps out through the channels of perception as though through a kind of window, and meeting with the surrounding it puts on its power of reason...

The light kindled at night in 233 must be what a man sees in dreaming, when the actual darkness seems to be illuminated; we are also told that 'sleepers are workers' (fr. 75) and that 'what we see when asleep is sleep' (fr. 21). Naturally this light is deceptive: see the last sentence of fr. 1 (194). It is an individual, private illumination

which supplants the real illumination of the *Logos* which is common to all (195). In sleep a man is 'in contact with' death (there is a typical Heraclitean word-play in 233 between the two senses of ἀπτεσθαί, 'kindle' and 'touch'); his soul-fire is burning low, is almost extinguished, and in most respects he resembles a dead man. Sleep, then, is a medial state between waking life, and death.

Sextus' information in 234 is obviously important, but must be treated with caution; he naturally imposed Sceptic epistemological interpretations upon Heraclitus, for whom his sources were, in addition, Stoic-influenced. Yet he goes on to make clearly accurate quotations of the long fr. 1 and of fr. 2 (194 and 195). It is to be expected from 229 that the soul-fire has some kind of physical affinity, and therefore connexion, with the cosmic fire outside. Sextus tells us that in the waking state the connexion is provided by a direct contact through the senses with the eternal fire – with the 'surrounding', in his own terminology, by which it may be inferred that the surrounding aither is meant; or rather the *Logos*-element in things, which may be envisaged as a direct offshoot of the pure aitherial fire. Sight is presumably of particular importance among the senses, since it receives and absorbs the fiery impressions of light. In sleep the only possible contact is provided by breathing; it may be wondered whether this draws in fire so much as moisture (though cf. n. 3 on p. 208), since 'souls come from water' (229) and should draw nourishment from moisture. According to Aetius IV, 3, 12, DK 22A 15 (where there is some Stoic influence), souls are nourished by both external and internal exhalations; the internal exhalations, if they exist, would be from blood and other bodily liquids, the external ones would be those absorbed by breathing, and likewise moist. Unfortunately the extant fragments are no help here.¹ It is possible that in sleep the moist nourishment of the soul-fire, no longer balanced by the direct fiery accretions received in waking through the senses, subdues the soul and brings it into a death-like state. It may be noted that the intelligent condition consequent upon the apprehension of the *Logos* (see fr. 1, 194) would mean in psychological terms that the active, fiery part of the soul has made contact with the fiery *Logos*-constituent of the objective situation, and has been increased by it.²

¹ Sextus went on to compare the resuscitation of the soul-fire by restored contact with the universal *Logos* (here expressed in Stoic-Sceptic terms) with the way in which embers glow again when brought near to a live fire. This image, already perhaps used by Xenophanes (p. 174), may well have been reused by Heraclitus. Conceivably the word ἀγγιβασίη, 'going near to', which Heraclitus used (fr. 122) according to the *Suda*, belonged to the same image.

² Chalcidius, probably after Posidonius, ascribed to Heraclitus a view quite different from Sextus', according to which the soul only has contact with the cosmic reason when free in sleep from the interruption of the senses (*in Tim.* ch. 251, DK 22A 20). The 'cosmic reason' is Stoic, and the rest mainly Platonic, though compare Pindar fr. 131b.

(12) *Virtuous souls do not become water on the death of the body, but survive to join, eventually, the cosmic fire*

235 Fr. 25, Clement *Strom.* IV, 49, 3 μόροι γὰρ μέζονες μέζονας μοίρας λαγχάνουσι καθ' Ἡράκλειτον.

236 Fr. 63, Hippolytus *Ref.* IX, 10, 6 †ένθα δ' έόντι† έπανίστασθαι καί φύλακας γίνεσθαι έγερτί ζώντων καί νεκρών.

237 (Fr. 136), Σ Bodl. ad Epictetum, p. lxxxiii Schenkl
ψυχαι άρηίφατοι καθαρώτεραι η ενί νούσοις.

235 For better deaths gain better portions according to Heraclitus.

236 †To him [or it], being there,† they rise up and become guardians, wakefully, of living and dead.

237 Souls slain in war are purer than those [that perish] in diseases.

The 'better portions' which are won in 235 must belong to the soul alone, since after death the body is 'more fit to be cast out than dung' (fr. 96). Therefore not all souls can equally undergo the 'death' (229) of becoming water, that is, of ceasing to be soul, which is essentially fiery. 236 (whose first words are probably corrupt) seems to suggest that certain souls survive death and become daimons; this is manifestly developed from a famous passage in Hesiod.¹ The key to Heraclitus' belief here may be provided by 237, which is clearly not a *verbatim* quotation but a verse summary of perhaps considerably later date than Heraclitus himself (although we know from Diog. L. IX, 16, DK 22A 1, that Scythinus made a metrical version of Heraclitus in the late fourth or third century B.C.). It probably owes something to fr. 24, 'Gods and men honour those slain in battle', but the comparison with those who die from illness is new, and is unlikely to have been simply invented after Heraclitus. How can the souls of those dying in battle be 'purer' than the souls of those dying from disease? The answer may be that the latter are moistened and inefficient, and their possessors are in a semi-conscious and sleep-like condition. Those slain in battle, on the contrary, are cut off at their most active, when their souls are fiery from virtuous and courageous activity.² At the moment of death the enfeebled souls of the sick lose

their last residue of fieriness and become completely watery, so that they cease to exist as souls; while the souls of those slain in battle (almost instantaneously, for the most part) are predominantly fiery. It seems plausible, then, that the latter avoid the soul-death of becoming water.³ They leave the body and, we may guess, are reunited with the aetherial fire. Before this happens they probably remain for a time as disembodied daimons after the Hesiodic pattern. But there can be no idea of individual survival apart from this, or indeed of perpetual survival as aetherial fire; for measures of that fire are constantly being drawn into the cosmological process, and undergo the changes of 218 (see n. on p. 200 for a possible soul-period of some kind). Thus Heraclitus does not appear to be indebted here to Pythagoras.

¹ 238 Hesiod *Works and Days* 121ff. (of the golden race) αὐτὰρ ἐπεὶ δὴ τοῦτο γένος κατὰ γαῖ' ἐκάλυψε / τοὶ μὲν δαίμονες εἰσι Διὸς μεγάλου διὰ βουλὰς / ἔσθλοιοι, ἐπιχθόνιοι φύλακες θνητῶν ἀνθρώπων. (But when the earth hid this race, they are noble daimons through the counsels of great Zeus, guardians on earth of mortal man.) See also *ibid.* 252ff. Another saying of Heraclitus preserved by Hippolytus is very obscure; it evidently has some connexion with the doctrine of opposites, but also suggests the deification of some souls (cf. 213): 239 Fr. 62, Hippolytus *Ref.* ix. 10, 6 ἀθάνατοι θνητοί, θνητοὶ ἀθάνατοι, ζῶντες τὸν ἐκείνων θάνατον τὸν δὲ ἐκείνων βίον τεθνεώτες. (Immortal mortals, mortal immortals [or mortal immortals, immortal mortals; or immortals are mortal, mortals are immortal; or immortals are mortals, mortals are immortals, etc.], living their death and dying their life.) It is interesting that one of the bone tablets from Olbia, of the fifth century B.C. (see p. 30), had scratched on it 'Dio(nysos)', 'Orphikoi' and βίος θάνατος βίος. Heraclitus, therefore, may be giving a special interpretation of an alternation between life and death that was broadly accepted in exotic mystery-cults of Bacchic or Orphic flavour.

² Though it has been ingeniously suggested by W. J. Verdenius that another saying implies that θυμός, anger or emotion, entails a fiery expenditure or decrease of the soul-fire (compare 'flashing eyes', 'breathing fire', etc. in our own idiom): 240 Fr. 85, Plutarch *Coriol.* 22 θυμῷ μάχεσθαι χαλεπὸν· ὃ γὰρ ἂν θέλη ψυχῆς ὀνεῖται. (It is hard to fight with anger; for what it wants it buys at the price of soul.) It is difficult to control anger because the soul-fire (which presumably does the controlling) has been diminished by anger. This is probably correct; but in virtuous anger or emotion (as in the heroic conception of battle) this loss might be more than made up by an increase of fire.

³ Fr. 98 describes souls as 'using smell in Hades': this, too, suggests that some souls, at least, exist after the death of the body. 'Hades' should not be taken too literally. The point of this cryptic saying is perhaps that those souls which survive death are surrounded by dry matter (in other words, fire); for it was a common view that the sense of smell operates on objects drier than the smelling organ ([Hippocrates] *de carnibus* 16; Aristotle *de sensu* 5, 444a22). It is possible, however, that the fragment is quite naïve in implication: simply that soul according to one popular view is breath, that smell is inhaled with the breath, and therefore that smell is the sense used by the soul when the other organs have perished with the body. If that is so the saying could be ironic, or an attack on the idea of the breath-soul.

(13) *The uses of conventional religion are foolish and illogical, although on occasion they accidentally point to the truth*

241 Fr. 5, Aristocritus *Theosophia* 68 καθαίρονται δ' ἄλλως (<αἷμα>) αἵματι μαινώμενοι ὅσον εἴ τις εἰς πηλὸν ἐμβὰς πηλῷ ἀπονίζοιτο. μαινέσθαι δ' ἂν δοκοῖη, εἴ τις αὐτὸν ἀνθρώπων ἐπιφράσαιτο οὕτω ποιέοντα, καὶ τοῖς ἀγάλμασι δὲ τουτέοισιν εὐχονται, ὅκοιον εἴ τις δόμοισι λεσχηνεύοιτο, οὐ τι γινώσκων θεοῦς οὐδ' ἥρωας οἵτινές εἰσι. [<αἷμα> D. S. Robertson.]

242 Fr. 14, Clement *Protrepticus* 22 τὰ νομιζόμενα κατ' ἀνθρώπους μυστήρια ἀνιερωστὶ μιεῦνται.

243 Fr. 15, Clement *Protrepticus* 34 εἰ μὴ γὰρ Διονύσω πομπὴν ἐποιούντο καὶ ὕμνον ἕσμα αἰδοίοισιν, ἀναιδέστατα εἴργαστ' ἄν' αὐτὸς δὲ Ἄϊδης καὶ Διόνυσος, δτέφ μαινόνται καὶ ληναίζουσιν.

244 Fr. 93, Plutarch *de Pyth. or.* 21, 404E ὁ ἄναξ οὐ τὸ μαντεῖόν ἐστι τὸ ἐν Δελφοῖς οὔτε λέγει οὔτε κρύπτει ἄλλὰ σημαίνει.

241 They vainly purify themselves of blood-guilt by defiling themselves with blood, as though one who had stepped into mud were to wash with mud; he would seem to be mad, if any of men noticed him doing this. Further, they pray to these statues, as if one were to carry on a conversation with houses, not recognizing the true nature of gods or demi-gods.

242 The secret rites practised among men are celebrated in an unholy manner.

243 For if it were not to Dionysus that they made the procession and sung the hymn to the shameful parts, the deed would be most shameless; but Hades and Dionysus, for whom they rave and celebrate Lenaeon rites, are the same.

244 The lord whose oracle is in Delphi neither speaks out nor conceals, but gives a sign.

Heraclitus followed Xenophanes in ridiculing the anthropomorphism and idolatry of the contemporary Olympian religion. Yet the last words of 241 (and also, e.g., 204 and 236) show that he did not reject the idea of divinity altogether, or even some conventional descriptions of it. 242 implies that mysteries would not be utterly worthless if they were correctly celebrated. 243 suggests how this is so: such rituals can possess (and sometimes accidentally do so) a positive value, because they guide men indirectly to the apprehension of the Logos. The precise grounds on which Hades and Dionysus are here identified are not known, but presumably the former represents death, the latter

exuberant life; and it is the implied identification of these especially significant opposites (cf. 202, 239) that prevents the cult from being utterly shameful.¹ The method adopted by Apollo in his Delphic pronouncements is praised in 244, because a *sign* may accord better than a misleadingly explicit *statement* with the nature of the underlying truth, that of the Logos (cf. 207-9). Probably Heraclitus intended by this kind of parallel to justify his own oracular and obscure style.²

¹ A possible reference to Orphic/Dionysiac rites was suggested in n. 1 on p. 208; another of the Olbia tablets, again with an abbreviation of 'Dionysos', contains the words 'war peace truth falsehood', once more with a Heraclitean ring about them.

² Cf. 245 Fr. 92, Plutarch *de Pyth. or.* 6, 397A Σίβυλλα δὲ μαινομένῳ στόματι καθ' Ἡράκλειτον ἀγέλαστα καὶ ἀκαλλώπιστα καὶ ἀμύριστα φεγγομένη χιλίων ἐτῶν ἐξικνεῖται τῇ φωνῇ διὰ τὸν θεόν. (*The Sibyl with raving mouth, according to Heraclitus, uttering things mirthless, unadorned and unperfumed, reaches over a thousand years with her voice through the god.*) It is impossible to determine precisely how much of this is a *verbatim* quotation; H. Fränkel, for example, thinks that only down to στόματι is. I would conjecture that down to φεγγομένη (with the possible exception of καὶ ἀκαλλώπιστα καὶ ἀμύριστα) is probably by Heraclitus, the rest is a loose paraphrase by Plutarch. The saying looks like a justification of the unadorned oracular method of exegesis; but precise interpretation is impossible. Heraclitus himself certainly combined the terseness of the gnomic style with the obscurity of the related oracular style; his underlying meaning was sometimes reinforced by word-plays (e.g. ξὺν νόῳ-ξυνῶ in 250) and etymological periphrases. A similar use is seen in Aeschylus, whose choral style, especially in the *Oresteia*, has some affinities with Heraclitus.

(14) *Ethical and political advice; self-knowledge, common sense and moderation are ideals which for Heraclitus had a special grounding in his account of the world as a whole*

246 Fr. 101, Plutarch *adv. Colotem* 20, 1118C ἐδιζησάμην ἔμεωυτόν.

247 Fr. 119, Stobaeus *Anth.* iv, 40, 23 ἦθος ἀνθρώπων δαίμων.

248 Fr. 43, Diogenes Laertius ix, 2 ὕβριν χρή σβεννύναι μάλλον ἢ πυρκαϊήν.

249 Fr. 44, Diogenes Laertius ix, 2 μάχεσθαι χρή τὸν δῆμον ὑπὲρ τοῦ νόμου ὀκωσπερ τείχεος.

250 Fr. 114, Stobaeus *Anth.* iii, 1, 179 ξὺν νόῳ λέγοντας ἰσχυρίζεσθαι χρή τῷ ξυνῶ πάντων, ὀκωσπερ νόμῳ πόλις καὶ πολὺ ἰσχυροτέρως· τρέφονται γὰρ πάντες οἱ ἀνθρώπειοι νόμοι ὑπὸ ἐνὸς τοῦ θεοῦ· κρατεῖ γὰρ τοσοῦτον ὀκόσον ἐθέλει καὶ ἐξαρκεῖ πᾶσι καὶ περιγίνεται.

246 I searched out myself.

247 Man's character is his daimon.

248 Insolence is more to be extinguished than a conflagration.

249 The people must fight on behalf of the law as though for the city wall.

250 Those who speak with sense must rely on what is common to all, as a city must rely on its law, and with much greater reliance. For all the laws of men are nourished by one law, the divine law; for it has as much power as it wishes and is sufficient for all and is still left over.

Heraclitus' ethical advice is gnomic in form, and for the most part similar in general content to that of his predecessors and contemporaries; sometimes it is expressed more graphically and often more savagely.¹ It stresses the importance of moderation, which itself depends upon a correct assessment of one's capacities. But this kind of advice (with which one naturally compares the Delphic maxims 'Know thyself' and 'Nothing too much') has a deeper significance in Heraclitus because of its grounding (not explicitly stated but clearly implied in 194 etc.) in his physical theories, and because of his belief that only by understanding the central pattern of things can a man become wise and fully effective; see 194, 196, 227, 234. That is the real moral of Heraclitus' philosophy, in which ethics is for the first time formally interwoven with physics.

¹ Heraclitus was undoubtedly of a strongly critical temperament, and his abuse can hardly have made him popular with his unfortunate fellow-citizens: cf. e.g. 251 Fr. 29, Clement *Strom.* v, 59, 5 ἀρεῦνται γὰρ ἐν ἀντι ἀπάντων οἱ ἀριστοί, κλέος ἀένασον θνητῶν· οἱ δὲ πολλοὶ κεκόρηνται ὀκωσπερ κτήνεα. (*The best choose one thing in place of all else, 'everlasting' glory among mortals; but the majority are glutted like cattle.*) His political ideas seem to have been anti-democratic, though perhaps from empirical rather than ideological motives: 'One man is as ten thousand for me, if he is best', he said (fr. 49), and abused the Ephesians for exiling his friend Hermodorus on the ground of his exceptional ability (fr. 121). Himself of noble birth, he refused his traditional privileges (191).

Thus 'searching out oneself' in 246 leads, it may be inferred, to the discovery that the soul ranges outside oneself (see 232, 234). 247 is a denial of the view, common in Homer, that the individual often cannot be held responsible for what he does. δαίμων here means simply a man's personal destiny; it is determined by his own character, over which he has some control, and not by external and often capricious powers acting perhaps through a 'genius' allotted to each individual by chance or Fate. Helen traditionally blamed Aphrodite for her own weakness, but for Heraclitus (as indeed for

Solon, who had already reacted against the moral helplessness of the heroic mentality) there was a real point in intelligent and prudent behaviour. 248 has no special overtones; it shows how conventional the practical side of Heraclitus' ethics often was, and also that he did not always think of human behaviour in terms of the *fiery* nature of the soul (for ὕβρις should involve a moistening of the soul, not its conflagration). By contrast, the insistence on respect for law in 249, though again expressed in conventional terms, takes on a far deeper significance, and is given a profound justification, in the light of 250 (which should be compared with 194, 195 and 196). Human laws are nourished by the divine universal law; they accord with the Logos, the formulaic constituent of the cosmos. 'Nourished' is mainly, but not completely, metaphorical; the contact between human laws and the Logos is indirect, though not without material basis, since good laws are the product of wise men with fiery souls (230) who thereby understood, as Heraclitus himself does, the proper relation of men with the world.

CONCLUSION

In spite of much obscurity and uncertainty of interpretation, it does appear that Heraclitus' thought possessed a comprehensive unity which (conceivably because of the lack of information about Anaximander) seems completely new. Practically all aspects of the world are explained systematically, in relation to a central discovery – that natural changes of all kinds are regular and balanced, and that the cause of this balance is fire, the common constituent of things that was also termed their Logos. Human behaviour, as much as changes in the external world, is governed by the same Logos; the soul is made of fire, part of which (like part of the whole world-order) is extinguished. Understanding of the Logos, of the true constitution of things, is necessary if our souls are not to be excessively moistened and rendered ineffective by private folly. Heraclitus' relation of the soul to the world was more credible than that of Pythagoras, since it was more rational; it pointed a direction which was not, on the whole, followed until the atomists and, later, Aristotle. In the intervals a new tendency, towards the rejection of nature, flourished with the Eleatics, Socrates and Plato.

PHILOSOPHY IN THE WEST

The first two philosophers known to have taught in the Greek cities of South Italy were two emigrants from Ionia, Xenophanes and Pythagoras, who flourished towards the end of the sixth century B.C. But the philosophies which developed in South Italy were from the outset very different in motive and character from those of the Milesians. Whereas the Milesians were impelled by intellectual curiosity and dissatisfaction with the old mythological accounts to attempt a systematic physical explanation of physical phenomena, the impulse underlying Pythagoreanism was a religious one, and the Eleatics Parmenides and Zeno propounded metaphysical paradoxes which cut at the roots of belief in the very existence of the natural world. The only major thinker in the west to continue the Ionian tradition of enquiry into nature in anything like the Ionian spirit was the Sicilian philosopher Empedocles. Yet he was deeply influenced both by Pythagoreanism and by Parmenides' thought; and his system is marked by metaphysical and religious preoccupations, as well as by a bold (not to say bizarre) imagination which is utterly individual.

It is tempting to conjecture that these differences between western Greek and Ionian philosophy are connected with, or even functions of, differences in the social and political conditions of life in these distant parts of the Greek world. Certainly South Italy and Sicily were the home of mystery cults concerned with death and with worship of the gods of the underworld, whereas we hear little of this sort of religious activity in the cities of the Ionian seaboard. And it has been suggested that the cities of the west were inherently less stable, and the commitment of their citizens to the characteristic political values of the Greek *polis* less firmly rooted, than elsewhere in Greece (certainly warfare between Italian and Sicilian states seems to have been unusually bitter, leading to the deportation of whole populations and the razing of their homes to the ground: the destruction of Sybaris in 510 B.C. was the most celebrated of these atrocities). Whatever truth there may be in these speculations, it was in South Italy, not Ionia, that the two most distinctive elements in the modern conception of philosophy were born. Pythagoras is the archetype of the philosopher considered as the sage who teaches men the meaning of life and death, and Parmenides the founder of philosophy understood not as a first-order enquiry into the nature of things (that is now the province of the natural sciences), but as a second-order study of what it means to say that something exists or is in motion or is a plurality. It is significant that from the first these two preoccupations were associated with two very different types of mind, yet remained characteristic of one and the same calling, philosophy.