

5 Heraclitus

I. THE APPROACH TO HERACLITUS

1.1. Heraclitus of Ephesus must have been active around 500 B.C. Nothing is known of the external events of his life; the later biographical reports are fiction. Of Heraclitus' book, around one hundred fragments survive. It seems to have consisted of a series of aphoristic statements without formal linkage. The style is unique.¹ Heraclitus' carefully stylized and artfully varied prose ranges from plain statements in ordinary language to oracular utterances with poetical special effects in vocabulary, rhythm, and word arrangement. Many statements play with paradoxes or hover teasingly on the brink of self-contradiction. Many seem intended as pungently memorable aphorisms. (Translations in this chapter try to capture some of the ambiguities, where this is reasonably possible.)

1.2. The meaning and purpose of Heraclitus' book has always been found to be problematic, even by those who read it in its entirety. The Peripatetic Theophrastus (D.L. IX.6) diagnosed Heraclitus as "melancholic" (manic-depressive), on the grounds that he left some things half-finished, and contradicted himself; later Greeks named him "the obscure." Certainly Heraclitus did not always aim at expository order and clarity as usually understood. What remains shows that he often was deliberately unclear. Like a riddle or an oracle, he practised a deliberate half-concealment of his meanings, goading the reader to participate in a game of hide-and-seek.

The overt content of Heraclitus' remarks ranges from the internal politics of his native city to the nature and composition of the soul and the cosmos. He is repeatedly polemical, scornfully rejecting the beliefs of "the many" and the authority of those they follow,

principally the poets.² Others, less popular but with claims to wisdom or knowledge (Xenophanes, Hecataeus, and Pythagoras, DK 22 B40), are attacked also.³ In one place Heraclitus explicitly claims to have made an advance in understanding on *all* previous authorities known to him (B108). Only one person is praised for wisdom: the obscure sage Bias of Priene (B39).

Such polemics imply that Heraclitus is addressing himself to all who will listen, and has himself some positive teaching, with grounds for rejecting the traditional authorities and claiming a better access to the truth – on the same subjects that they had dealt with. In fact, the fragments contain many positive statements too as well as clear signs of a systematic way of thinking.

Since Aristotle, Heraclitus has often been grouped with the Ionian “natural philosophers” (*physiologoi*).⁴ This is at least partly correct. Heraclitus was concerned with cosmic processes, and with the “natures” of things: he describes himself as “marking off each thing according to its nature, and pointing out how it is” (B1). It may be significant that he does not attack any of the Milesians by name.⁵

Yet the great range of his subject matter suggests that he is more than a natural philosopher. This chapter presents the evidence for seeing Heraclitus as pursuing a broader and a recognisably *philosophical* project: a radical critique and reformulation of cosmology, and indeed of all knowledge, on a new and surer foundation. In the process, he tries to overcome the systematic problems that dogged the Milesian enterprise: those of monism and pluralism and of the foundations of knowledge.

2. EXPERIENCE, INTERPRETATION, RATIONALITY

2.1. By what authority does Heraclitus claim to know better than the many and the poets? In the first place, he appeals to the knowledge gained by firsthand experience:

All of which the learning is seeing and hearing: that I value most (B55).
[Those who seek wisdom] must be inquirers into a good many things (B35).

Here Heraclitus aligns himself with the empiricism of two contemporaries, Xenophanes and Hecataeus of Miletus. The practice of

firsthand inquiry (*historiê*), and the criticism of tradition and myth on the basis of common experience, were part of their programme. Xenophanes' parsimonious empiricism refused, in the realm of nature, to postulate any unobserved entities, or to contradict or go beyond the realm of common experience in its explanations. It demythologised the natural world implicitly, as Hecataeus of Miletus did explicitly. These same epistemic attitudes can be observed (cf. sections 4 and 5) in Heraclitus' cosmology and psychology.⁶

2.2. Yet Heraclitus also singles out these two by name for criticism, coupling them (a twist of the knife) with two others of whom they themselves were highly critical:

Much learning does not teach the mind; otherwise it would have taught Hesiod and Pythagoras, and again Xenophanes and Hecataeus (B40).

Though "much learning" is necessary, it is not sufficient to "teach the mind"; that is, to produce genuine understanding. This point marks the second stage in Heraclitus' construction of new foundations. The mind must be properly "taught," or equivalently the soul must "speak the right language": otherwise the evidence presented to the senses, on which all else depends, will not only not be understood, but it also will be mistakenly reported *even by the senses themselves*:

Bad witnesses are eyes and ears to people, when they have souls that do not speak the right language (B107).

Heraclitus is aware that the testimony of the senses is already shaped by our preconceptions. This makes it easier for him to explain how people, paradoxically, can fail to see what is before their eyes and hear what is filling their ears, as he thinks they constantly do:

The fools hear but are as though deaf; as the saying has it, they are absent though present (B34).

They do not know how to listen nor to speak (B19).

The analogy with language turns out to be omnipresent in Heraclitus, who himself exploits all the resources of the Greek language in his effort to represent the way things are.⁷ The possibility of understanding is correlated with the existence of a meaning. It

implies the need for *interpretation* of what is given in experience, as though it were a riddle or an oracle:

The lord whose oracle is in Delphi neither speaks nor conceals: he gives a sign (B93).

People are deceived in the knowledge of what is manifest, much as Homer was (though he was the wisest of the Greeks); he too was deceived by boys who were killing lice, when they said "those we took we left behind, those we did not take we carry with us" (B56).

2.3. If important messages come in the shape of riddles or oracles, the implications look discouraging: the true reality of things must be hidden, and there can be no system or fixed rules for discovering it – even though, when discovered, it will turn out to be something that in a sense has been known all along. One must be open to every hint.

Latent structure [*harmonîê*] is master of visible structure (B54).

Nature [*physis*] likes to conceal itself (B123).

If one does not hope, one will not find the un hoped-for; it is not to be tracked down or reached by any path (B18).

2.4. The finding of the "latent structure," of the "nature"⁸ of things, is the solving of the riddle. Heraclitus himself claims to have read the riddles of the world and of human existence. He is asking his audience to listen to his solution. Once again the question of authority presents itself: what guarantee can he give that he has guessed right? Heraclitus, who so brutally dismisses the claims of traditional authorities, cannot evade this demand.

When one listens, not to me but to the *logos*, it is wise to agree [*homologeîn*] that all things are one (B50).

Logos, which appears here and elsewhere in significant contexts in Heraclitus, was a commonly used Greek word. It basically meant "what is said," that is, "word" or "story"; however, even in ordinary Greek speech it had rich ramifications of meaning. It had acquired the secondary senses of "mathematical ratio," and more generally "proportion," "measure" or "calculation"; in a further extension from these senses, it appears by around the time of Heraclitus in compounds with the sense of "right reckoning," or "reasonable proportion."⁹

Characteristically, Heraclitus both revels in the multiplicity of senses, and wants to bind them together into one. For him, *logos* has a special significance, in which each of its ordinary uses is allowed some resonance and is exploited as occasion serves. At the most basic level, Heraclitus' *logos* coincides with what Heraclitus is saying: it is his story about the way things are. Yet, as in the remark just cited (B50), it must also be distinguished from Heraclitus' words: it is not *as* Heraclitus' "story," that it commands assent, but because it shows what it is *wise* to think. (It is, though, still something that speaks, and that can be listened to; it still is the story of somebody or something, with language as its vehicle.) Heraclitus is not laying claim to any merely private revelation or purely personal authority.¹⁰

Just what kind of authority does he claim for the *logos*?

Though the *logos* is shared, the many live as though they had a private source of understanding (B2).

Those who speak with mind must affirm themselves with what is shared by all – as the city does with a law, and much more strongly. . . (B114, part).

The *logos* is something "shared by all": publicly accessible, not the product of private fantasy. Its authority, deriving from these properties, makes those who use it "strong" in their affirmations, as the law makes a city strong by being impersonal, universal, and impartial. (On cosmic "justice," cf. section 6.) The oppositions between these properties and the private illusions and misunderstandings of "people," are elaborated in the programmatic declaration which stood at the beginning of the book:

Of this *logos* which is always people prove to have no understanding, both before they hear it and when once they have heard it. For though all things come about according to this *logos*, [people] are as though they had no experience, though they experience such words and deeds as I set forth, marking off each thing according to its nature and pointing out how it is. But other people do not notice what they do when awake – just as they do not notice all the things they forget about when asleep (B1).

The oblivion of the public, shared world in sleep is shown by the substitution for it of private, unshared, and illusory dreams (a supposed "private source of understanding"), as confirmed by a later paraphrase: "Heraclitus says that for those who are awake there is

one shared world, but that each sleeper turns aside into a private world" (B89).¹¹

2.5. What then is this authority that the *logos* enjoys, and which is characterised sharply if obliquely in these statements? It can be none other than the impersonal kind of authority that is intrinsic to *reason* or *rationality*. Nothing short of that fits in with what is claimed of it, and *logos*, as already noted, was at this time already developing connotations of "reasonableness" and "proper proportion." It is consonant too with the riddle and oracle analogies: when once the solution to a good riddle is found, there is no doubt left that it *is* the solution, because everything fits, everything makes sense, though in an unexpected way.

Heraclitus, then, is claiming that his way of seeing things is the only *rational* way. How much work he is prepared to do to support this claim in detail, remains to be seen. At the least, it shows that he is committed to the recognition that there is a system, though a concealed one, in things, and a systematic way of thinking about them, once the clue, the "latent structure," has been found. For Heraclitus, the clue consisted in the structural pattern that may conveniently be called "unity-in-opposites." This is what gives substance to his claim that "all things are one."

3. UNITY-IN-OPPOSITES

3.1. Among the surviving sentences of Heraclitus, one group stands out as showing an intended common pattern, both verbal and conceptual. This is the pattern which it is convenient to refer to as "unity-in-opposites."¹²

Unity-in-opposites appears in Heraclitus in three distinct ways: (1) He presents, in suitably plain language, mostly without comment, *examples* of the pattern taken from everyday experience; (2) he *generalises* from these examples, in statements where the language verges on the abstract, seemingly in an attempt to state the pattern in itself; and (3) he *applies* the pattern in the construction of theories, in particular to cosmology (section 4) and to the theory of the soul (section 5).

3.2. First, the examples from everyday life. These are visibly two-faced. They are (where the original wording is preserved) mostly so arranged that the first word specifies, with emphasis, the one single

thing, in which both the opposites are manifest. This recurrent verbal pattern helps to draw attention back from the interesting and paradoxically related opposites to the one thing, the “unity,” in which they coexist.

A road: uphill, downhill, one and the same (B60).

Beginning is together with end [on a circle] (B103).

The path of carding-rollers [cylindrical rollers used in carding felt], straight and crooked (B59).

Into rivers, the same ones, on those who step in, different and different waters flow (B12).

The barley-drink too comes apart if *not* stirred (B125).

Disease it is that makes health pleasant and good, hunger fullness, weariness rest (B111).

Physicians cut and burn people, and ask for a fee on top of that (B58).

Donkeys would choose garbage rather than gold (B9).

... “Those we took we left behind, those we did not take we carry with us.” (B56, part).

All of these remarks might be the material for riddles, as the last one was (cf. section 2.2). In play or in philosophy, they are examples of something amusing, disconcerting, and even confusing: that opposites, by means of which we structure and find our way about so much of our experience, are not purely and simply opposed and distinct. They are not to be thought of, as in Homer’s and Hesiod’s myths, as pairs of distinct individuals who simply hate and avoid each other. On the contrary, they are found in ordinary life to be copresent, interdependent, liable to change into one another, tacitly cooperating. If there were no such thing as disease, not only would we not find health enjoyable, there would be no such thing as health. Roads could not go uphill if they did not also, and at the same time, go downhill. Rivers can never stay the same except by a constant change of water. The paradoxical behaviour of doctors – who expect rewards for doing unpleasant things to people – and of donkeys – who prefer humanly worthless garbage to humanly valued gold – shows that the same thing can at the same time be both valued and rejected for the very same qualities.

Such remarks have sometimes been read as implying (a) that the oppositions in question are unreal, because the opposites are either

illusory or in fact identical; or (b) that they are merely relative, to a point of view or a context.

(A) For the reading on which oppositions are *unreal*, there is no support in Heraclitus' own words. When he claims that day and night "are one" (B57), he does not mean that they are *identical*, but, as B67 makes clear, that they are "one thing" in being the same substratum in different states.¹³ In fact, as will be seen, Heraclitus' thinking presupposes both the reality, and the real opposedness, of opposites.

(B) The reading on which opposites are always *relative* fails, equally, to account for the theoretical weight Heraclitus ultimately wishes to give to opposites. It is true that some examples show Heraclitus exploiting phenomena that are naturally explained by relativity: the different preferences of donkeys and human beings, or those of cattle, pigs, poultry, or apes (B4, 13, 37, 82), in contrast with those of human beings. So too the observations about disease and health, and so on, might just be pointing at the relativity of our assessments of what is pleasant and good. Such a reading could then go on to relativise the other examples: the road's being uphill or downhill is relative to the direction of travel; the river's being the same or different is relative to whether it is considered as a single river or as a collection of water.

What is at issue here is whether or not Heraclitus wants to distinguish the way opposites are usually perceived from the way they actually are. His interest in latent structure, his contempt for the mental habits of "most people" and for their lack of understanding, suggest that the distinction is important for him. A further "everyday" remark is relevant here.

Sea: purest and most polluted water, for fish drinkable and life-sustaining, for people undrinkable and death-bringing (B61).

Here the manifest effects of seawater are relative to the drinker. But, from that fact, Heraclitus explicitly infers that the sea is, simultaneously without qualification, both "purest" and "most polluted." This supports a reading on which the observable relativities of "perception" or "valuation" are used by Heraclitus as evidence for a

nonrelative copresence of opposites.¹⁴ It remains to be seen, though, just what that might mean, and whether it does not collapse into self-contradiction.

3.3. Next, the generalisation. By piling up everyday examples, as we have seen, Heraclitus draws attention to the unity-in-opposites pattern. A sage might have left matters there, leaving the audience to draw their own conclusions. Heraclitus lives up to the standards he has set himself by his own appeal to the force of reason: he offers his own explicit statement in general terms of what he takes to be essential in the pattern he has noted.

They do not understand how the diverging agrees with itself: a structure turning back on itself [*palintropos harmoniê*], such as that of the bow or of the lyre (B51).

The evidence so far suggests three theses:

(1) *The unity is more fundamental than the opposites.* The programmatic declaration, in connection with the *logos* (cf. section 2), that “all things are one” (B50), already suggests that Heraclitus harbours monistic ambitions. In revealing his ultimate description of the pattern as a *harmoniê* or “unified structure,”¹⁵ and in presenting the bow and the lyre as everyday examples of such structure, Heraclitus focuses attention on the underlying unity, and on the way in which it incorporates and manifests the opposites.

(2) *The opposites are essential features of the unity.* In whatever way the opposites are present in the unity, what matters is that their presence is of the essence of the unity. The unity could not be what it is without them. Both the word *harmoniê* and the bow and lyre examples point to the notion of something constituted by a *functional* unity. The functioning demands that this unity “turn back on itself” in some way; the turning back, and therefore the opposites that are manifested in the turning back, are essential features. (In the case of the bow, the turning back lies in the movement of the parts, both relative to one another and to their own previous movements, when the bow is used. In the case of the lyre, the turning back may be that of the vibrating strings, or of the up-and-down movement of the melody, or both.)

(3) *The manifestation of the opposites involves a process, in which the unity performs its essential function.* This holds for the examples

of the bow and lyre. In general, the words “diverging” and “turning back” imply at least movement,¹⁶ while *harmonîê* itself suggests a built-in teleology (see n.13).

3.4. Various objections can be made to a reading of this kind. First of all, it must be admitted that the senses in which the unity is “more fundamental” than the opposites, and the opposites are “essential” to the unity, have been left indeterminate. Heraclitus had no ready-made logical toolkit and vocabulary at his disposal. On the kind of reading that is being worked out here, he saw the need for something like the notions of *essence* and of *ontological priority* and responded to the need by providing (a) everyday examples of what he meant, and (b) words drawn from the everyday vocabulary, but transfigured into something like technical terms by the use he made of them. The interpreter of Heraclitus must try to gather as much of his intentions as is possible from his surviving words, and to make them comprehensible in modern terminology, without importing into the interpretation assumptions and problems that were absent from his mind.

Next to the objection of indeterminacy is the objection of incoherence or self-contradiction. How can the opposites be essential features of the unity without being copresent in it in a self-contradictory way? To recur to the example of seawater: to say at the same time both that the sea is “most pure” and that it is “most polluted” is to contradict oneself, since genuine opposites are mutually exclusive. On this ground, Aristotle (*Metaph.* IV.7 1012a24-26) concluded that Heraclitus must inevitably fall foul of the principle of Non-Contradiction, and therefore collapse into incoherence.

The Aristotelian objection is crucial. The way to meet it is shown by the statement about seawater. For that makes one thing clear: Heraclitus does not wish to say that the presence of purity means that the sea is pure in its manifest effects for all animals all the time. Neither does the presence of pollution mean that the sea is polluted in its manifest effects for all animals all the time. So it is necessary to distinguish between the *presence* of the opposites in a unity, and their *manifestation* in it. We have been prepared for this distinction, by the observation about the importance of latent structure.

The presence of the opposites in a unity is therefore, to borrow Aristotelian terminology, a matter of *potentiality*. It belongs to the essence of seawater, for example, that it has both the potentiality

to be life-sustaining and the potentiality to be death-bringing. So a thing's very being may require the coexistence within it of diametrically opposed potentialities, an "ambivalence of essence."

This thought offers a solution to the debate between monism and pluralism: namely, that unity-in-opposites shows that the dichotomy is not exhaustive. That this was part of Heraclitus' motivation is confirmed by a key passage of Plato (*Soph.* 242d7-e4):

[Heraclitus and Empedocles] realised that it is safer to weave together both [monism and pluralism] and to say that what is, is both one and many, and is held together by enmity and friendship; for "diverging is always converging" [says Heraclitus], but [Empedocles] relaxed the demand that that should always be so . . .

If Heraclitus was indeed thinking along such lines, we expect him to say more about the way in which the potentialities manifest themselves. Point (3) of the present interpretation claims that this is done by means of a process unfolding in time. It may be objected that many of the everyday remarks do not involve any process in time, yet the opposites are still manifest. For example, we can see at one glance that a road is both an uphill road and a downhill one. And yet, neither the uphill-ness nor the downhill-ness are fully manifested until someone actually travels along the road. They may be simultaneously manifested to different travellers, or successively manifested to the same traveller; in either case, there are two distinct processes.¹⁷ (The very word *hodos*, "road," also means "journey"; many other words used by Heraclitus show an analogous doubling of sense (see section 4).)

The central role of processes becomes even more obvious when Heraclitus applies the unity-in-opposites to cosmology and psychology. Here, the opposites are clearly not just potentialities but contending powers. The unity's "functioning" also becomes more than mere schematism: we find that the unity unites, controls, and gives meaning to the opposites.

4. THE COSMOS AS PROCESS

4.1. Heraclitus' cosmology cannot be understood in isolation from the rest of his thinking. It is dependent on unity-in-opposites; it leads on, in turn, to psychology and theology.

No god and no human being made this cosmos, but it was always and is and will be an ever-living fire, getting kindled in measures and getting quenched in measures (B30).

It is natural to think of the “ever-living fire” as a process. If so, then the cosmic constituents too – the familiar “world masses”: earth, sea, air, and celestial fire – will be stages of the process; for they are “turnings of fire” (B31). “Turnings,” like many other nouns in Heraclitus, is ambiguous as between process and product. Likewise, with the same ambiguity in “exchange”:

All things are an exchange for fire and fire for all things, as gold is for goods and goods for gold (B90).

This primacy of process in the observable world is compatible with later testimony about a theory of “flux.” Both Plato (*Crat.* 402a4-11, *Tht.* 152d2-e9) and Aristotle (*Topics* I.11 104b21-22; *De caelo* III.1 298b29-33) report that Heraclitus held that “the whole universe is in flux like a river” or that “all is in flux” or “in progression” or “in change.” Embedded in this testimony is a story about the self-styled “Heraclitean” Cratylus, a philosopher of the later fifth century. Cratylus denied the possibility of any kind of sameness through time. To make his point, he foisted on to Heraclitus the remark that “you could not step twice into the same river” (B91a); apparently for the sake of trumping it with his own claim that one could not even step *once* into the same river (Aristotle, *Metaph.* IV.5 1010a10-15).

Cratylus’ version of the sentence about rivers must be rejected as un-Heraclitean. The rest of Plato’s and Aristotle’s testimony can be accepted: they do not attribute to him the extreme views of Cratylus.¹⁸ They show that, for him, process is the basic form of existence in the *observable* world; although something, not directly observable, persists throughout:

[Heraclitus says] that while other things are in process of becoming and flux, and none exists in a well-defined way, one thing alone persists as a substrate, of which all these [other] things are the natural reshapings (*De caelo* III.1 298b29-32).¹⁹

4.2. Not “the world is everything that is the case,” but “the observable world is everything that is coming to be the case” might

then have been Heraclitus' slogan. Space does not permit a discussion of Heraclitus' cosmology. The following is a summary of a possible view.²⁰ The overall cosmic process, "fire," was subdivided into the opposed episodes of "kindling" and "quenching." These in turn were subdivided into two subprocesses: one of "warming" and "drying," and one of "cooling" and "moistening." This made room for the four classical cosmic opposites (hot, cold, wet, and dry) and for the four world masses constructed from pairs of the opposites (earth = cold and dry, sea = cold and wet, and so on). All processes repeated with multiple periodicity, accounting for the day-night cycle, the annual cycle, and one or two cycles with longer periods. At some point in the longest cycle, the entire cosmos was in a fiery phase (at the extreme of hot and dry).

Besides unity-in-opposites, a further structural principle is evident. Heraclitus insists on the preservation of fixed "measures" or "proportions" in the processes.

... being kindled in measures and being quenched in measures (B30, part).
All things are an exchange for fire, and fire for all things, as goods are for gold and gold for goods (B90).

... [sea] is measured out in the same proportion as was previously (B31, part).

Gold's use as a medium of exchange depends on the existence of a (more or less) fixed exchange rate; that means a constant proportion between quantities of gold and quantities of goods in the exchanges. Hence a "conservation principle" is valid throughout all cosmic changes: a certain constant amount of "fire equivalent" is preserved. This is a first example in Heraclitus of a principle of lawlikeness (cf. section 6) as a constraint on the course of cosmic processes.

4.3. The theory of the observable cosmos, as so far reconstructed, obeys the principles of Xenophanean empiricism. It introduces into the observable world no new entities that are not actually observed: the processes and cycles mentioned are all familiar or deducible from ordinary experience. It gives full weight to sense appearances: the sun is indeed, as it looks to be, "the width of a human foot" (B3). And it excludes speculation about what is wholly beyond human experience: the question of what might lie beyond our cosmos is not even raised.

And yet, to the extent that it stays close to the observable world, the theory cannot be a complete example of unity-in-opposites. The

underlying structure should be at least partly latent, and not itself a process. So the "ever-living fire" cannot itself be the ultimate unity that ensures that "all things are one." It must be the manifestation, the activity of something else.

God: day night, winter summer, war peace, plenty famine; but it becomes of another kind, as (fire), when it is mingled with incense, is named according to the savour of each (B67).

Here Heraclitus corrects the mistaken view of Hesiod (B57). Day and night are "one thing," not two separate things. The analogy of the altar fire, the centre of the ritual process, on which different kinds of incense were successively burnt, shows that the ordinary naming of things is deceptive. Sniffing the smoke, the bystanders say (for example) "that's frankincense"; what they ought to say is: "that's fire mixed with frankincense." So too one should speak, strictly, not of "day" and "night," but of "god in diurnal state" and "god in nocturnal state." (The opposites "war-peace" and "plenty-famine" probably refer to longer-term cosmic cycles.) Given the importance Heraclitus attaches to language, it is no surprise that he finds ordinary ways of speaking in need of reform.

But who or what is this "god" (*theos*)? As implied by the word, something that is alive (its activity is the ever-living fire), intelligent, purposive, and controlling: "Thunderbolt steers all things" (B64). Plato's and Aristotle's testimony (cited in section 4.1) points in the same direction. The introduction of a living and intelligent being as the latent unity adds a further level of complexity. Heraclitus' theory of "soul" must next be considered.

5. THE THEORY OF SOUL

5.1. Heraclitus operates with an untraditional concept of soul (*psychê*).²¹ In Homer, the soul is of no importance during life; it leaves the body at death, to carry what is left of the person's individuality to a shadowy existence in Hades. For Heraclitus, it is clear that during life the soul is the carrier of personal identity and character, and the organising centre of intelligence and action. It is what the person really is; the theory of soul is the theory of human nature.

Not surprisingly, the soul is identified as the underlying unity in a complex unity-in-opposites structure. So it should manifest itself

in processes: presumably one of living, and a contrary one of dying. There should be physical constituents as phases of these processes, corresponding to earth, water, and so on. There should also be sub-processes, corresponding to the two physical dimensions, hot-cold and wet-dry. The evidence confirms some of this:

Dry light-beam is soul at its wisest and best (B118).
It is death to souls to become moist (B77).²²

The dry-wet dimension accounts for intelligence and its opposite: a drunk man's lack of knowledge and awareness is due to the fact that "his soul is moist" (B117). The ability to act effectively is also connected with dryness in this remark; and "soul . . . at its best (*aristê*)" also suggests a soul *in action* (when *aristê* is taken with its traditional associations of active male excellence). As for the hot-cold dimension in relation to souls, the very word *psychê* suggests something not hot (it is naturally etymologised from the verb *psychein*, "cool," "breathe"); and a "dry light-beam" is presumably clearest when neither hot nor cold. To confirm this, heat is associated with a bad quality:

Arrogance needs to be quenched more than wildfire (B43).

5.2. Dying is the natural process opposed to living. The word *thanatos* (death), most often refers, not to the state of being dead but to the process or event of dying. For this reason Heraclitus can identify it with "becoming moist." For a soul this must mean increasingly poor functioning both in mind and action. But there can be no permanent state of death; to be dead can be but a momentary phase at an extreme point of the cycle.

It is the same that is present as living and dead, as waking and sleeping, as young and old; for these by change of state become those, and those by change of state become these (B88).

This alternate "living" and "dying" of souls can only partly correspond to living and dying in the usual sense. (The secondary cycle of waking and sleeping, with dreams, introduces further complications.) For Heraclitus, the natural decline in mind and body after the prime of life will already count as dying. By contrast, a violent death in one's prime will not count as dying at all. The soul, though separated from the body, will be in its best state. Some evidence suggests, cryptically,

that death in battle, in particular, was rewarded by a place of honour for the soul outside the body, perhaps as a star.²³ In all cases, the mere corpse of a human being (the body without the soul) is valueless:

Corpses are more fit to be thrown away than dung (B96).

5.3. If souls by nature live and die, in the new senses, alternately, then they may be described both as "mortal," being always subject to dying, and "immortal," being always able to return to life. This gives Heraclitus a new, piquant case of unity-in-opposites:

Immortals are mortals, mortals are immortals, living the others' death, dying the others' life (B62).

This is a first suggestion (cf. section 6) that the difference between the gods and humanity, traditionally almost unbridgeable, is for Heraclitus inessential. Souls are of their own nature both mortal and immortal. Whether they exist in manifest shape as human beings, or as something like traditional gods, may well be a matter of chance and of their momentary position in the cycle of living and dying. (Heraclitus' remarks on traditional Greek religion are, as might be expected, cryptically ambivalent.) Other degraded forms of being, like the traditional Hades, may also occur for souls in a bad state. The cryptic statement that "souls have the sense of smell in Hades" (B98) may indicate some kind of minimal sensory existence.

5.4. If the soul in its best state is intelligent and rational, why do most people fail even to try to understand things? Are their souls not in the best possible state, or do they fail to use their capacities? An element of choice, at least, comes into the way the soul behaves in this life.

The best choose one thing instead of all else: the ever-flowing renown of mortals; but the many are gluttoned like cattle (B29).

It is character [*êthos*] that is a person's *daimôn* (B119).

The word *êthos* has etymologically the suggestion of "habit," and descriptively picks out what is *characteristic*. It must not be equated with *physis* (nature or essence). The thought that a person's habits and character form one another reciprocally is found in archaic Greece (Theognis 31–36). This makes superfluous the popular fatalistic

belief, that the quality of one's life was determined by one's allotted individual *daimôn*. Rather, the divine aspect of each person is manifested in and as character.²⁴

Since individual choices, in an Aristotelian way, both proceed from and determine the character and state of the soul, an explanation can be given for the general failure of human intelligence.

Human character [*êthos*] does not have understanding, but divine character does (B78).

A man is called "infant" [*nêpios*: literally, "wordless"] by a *daimôn*, just as a child is by a man (B79).

Here again we need not read in an unbridgeable gulf between human and divine *natures*. It is a matter of character not of nature; and the child-man analogy implies that a man can "grow up" to become a *daimôn*. That human nature is perfectly capable of achieving real understanding is shown, not only by Heraclitus' claims on behalf of his own thinking, but also by explicit statement:

All share the capacity to understand (B113).

All human beings share in the capacity to know themselves and to be of sound mind (B116).

Why, then, are human beings so prone to form bad habits in thinking and living, and to make bad choices? There are no direct indications of Heraclitus' answer, but the struggle between good and bad in any individual must presumably be connected with, and isomorphic to, its cosmic counterpart.²⁵

5.5. The intelligent soul will want to understand everything: including itself. Heraclitus tells us: "I looked for myself" (B101). This suggests introspection, in which the mind has privileged and direct access to itself. Whatever Heraclitus' preferred method of looking for himself, he is aware of the paradoxical and elusive nature of the quest.

The bounds of soul you would not find by going about, though you travelled over every road; so deep a *logos* does it have (B45).

To the soul belongs a *logos* that increases itself (B115).

The "bounds" are spatial only within the metaphor of "travelling." They are *logical* limits, that "mark off" the nature of the soul from

that of other things. Correspondingly, the *logos* of the soul is the true, rational account of the soul, but it can also be understood as the account given *by* the soul. This points up the paradox that the soul is here talking about itself. The regresses of reflexivity now intrude. The soul must talk about itself and therefore about its own talk about itself, and so on. The story of the soul is an unlimitedly self-increasing one.

6. ULTIMATE QUESTIONS

6.1. Unity-in-opposites gives Heraclitus a theory of the cosmos and one of the soul. But did he aim at overall theoretical unity and closure?²⁶ (1) Is the individual soul not merely analogous to, but essentially the same as, the latent unity, the god or ever-living fire of the cosmos? (2) Is unity-in-opposites meant to extend to all opposites of any importance? (3) Is there any other principle as fundamental as unity-in-opposites, or anything else more basic than the cosmic unity?

On question (1), there are signs (though ambiguous and not supported by direct statement) that individual souls are, indeed, fragments of the cosmic unity.²⁷ This would be a theoretically satisfying equation. The nature, purpose, and destiny of a human being can then be understood in cosmic terms.

On the other questions too, certainty is hardly possible. Heraclitus' manifesto statement that "all things are one" (B50) justifies an assumption that he aimed at maximal theoretical unity, but, as to just how he tried to achieve it, the evidence is incomplete. This section offers a review of such further evidence as there is on such ultimate questions and some consequent suggestions about the overall shape of Heraclitus' system.

6.2. Unity-in-opposites is a unified conception that overcomes the apparently unbridgeable oppositions of monism and pluralism. It is therefore an example of itself. Heraclitus seems to be aware of this curious state of affairs:

Comprehendings: wholes and not wholes; in unison, not in unison; and from all things one and from one all things (B10).²⁸

This remark uses the usual unity-in-opposites pattern in talking about "comprehendings" (*syllapsies*), with the usual process-product

ambiguity: the products or the processes both of "taking together" and "understanding." These must be cases of unity-in-opposites, which considered abstractly exemplify the very same pattern.

This reading suggests why unity-in-opposites is fundamental and central. First, it is a phenomenon so all-embracing that it even embraces itself. Next, it is necessarily the pattern that structures thought and language, because it is the pattern of understanding. Any sentence has many different words with syntactic functions "moving different ways," but a single meaning making it a unity. The *logos*, whatever it is, is something that is expressible only in language and intelligible only because it is so expressible. The structure of language and thought is necessarily also the structure of reality: this is the conclusion to which Heraclitus seems to be pointing.

6.3. Unity-in-opposites, as displayed in cosmos and soul, exemplifies another higher-level opposition: that between conflict and law.

If opposites such as hot and cold are forces, genuinely opposed, there must be real conflict between them:

Heraclitus rebukes the poet [Homer] who said: "Would that strife might perish from among gods and men!"; for there would be no fitted structure (*harmonia*) if there were no high-pitched and low-pitched, nor would there be animals without the opposites male and female (Aristotle, *Eudemian ethics* VII.1 1235a 25-29).

War is father of all, king of all: some it shows as gods, some as human; some it makes slaves and some free (B53).

But if the processes are to be intelligible, they must also be law-like (cf. section 2.4 on the analogy of the *logos* with law in a city). Heraclitus not only emphasises both opposed aspects, but he also proclaims that they constitute a unity.

Sun will *not* overstep measures: otherwise, the Furies [*Erinyes*], helpers of justice, will find him out (B94).

But one must know that war is the same for all [*xynon*], and that justice is strife, and that all things happen according to strife and necessity (B80).

How, then, can the cosmic process constitute both strife and justice at one and the same time? The Heraclitean solution is perhaps preserved in an unusually enigmatic remark:²⁹

Everlasting (*Aiôn*) is a child at play, playing draughts:³⁰ to a child belongs the kingdom (B52).

The child is a boy playing a board game for two players; no opponent is mentioned, so the assumption must be that the boy is playing both sides. This can still be a free and genuine conflict, in which skill is exercised and sharpened. It is lawlike in procedure: the rules (which are freely accepted by the players, not imposed from outside) define the game and are impartial as between the sides. It is lawlike in outcome since, if each side plays equally well, it will win equally often in the long run – though the outcome of any one game will not be predictable. In the short-term there are (as gamblers know) alternating runs of luck on one side and the other. True to his habits of thought, Heraclitus seeks to show, by a model drawn from everyday experience, that strife and justice can coexist, interdependently, without becoming denatured.³¹

Here, if anywhere, we seem to glimpse where Heraclitus located the meaning of life for the individual: in participation in the inner and the cosmic struggle.

6.4. To the analogy of the board game, it can be objected that the boy who plays both sides has two plans in his head, not a single unified plan. For the underlying unity just to manifest itself alternately in opposites is not enough. There must also be an underlying unity of purpose, as implied by the talk of “steering” and of a plan. In connection with these, Heraclitus speaks cryptically of “the wise”:

One thing only is wise, being skilled in the plan, how all things are steered through all (B41).

Of all whose words I have heard, none has got so far as to recognise what is wise, distinct from everything (B108).

The one only wise is unwilling and willing to be called by the name *Zên* (B32).

The wise (*to sophon*), a neuter adjective used as a substantive, might be taken abstractly as “wisdom,” or concretely as “the (only) wise thing.” The word *sophos* was not, at this time, exclusively intellectual in application, being used for anyone with any specialized skill. In B41, the skill (knowing how) aspect is prominent, in the art of cosmic steersmanship and in the verb *epistasthai* (understand, be

skilled in). The intellectual or strategic aspect (knowing that/why) appears in the mention of a "plan" or "piece of knowledge" (*gnômên*). The function of the wise is to understand the cosmic plan and to get it put into action.

One cannot straightforwardly identify the wise with the cosmic god. It is not simply the same as *Zên* (a form of *Zeus*, implying an etymology from *zên*, "live"). It is "distinct from everything," and unique. At the same time, it consists in understanding, which includes both knowing how and knowing that, and apparently might be acquired even by human minds.

We must then take the wise as something that stands above and apart from both cosmic opposites and cosmic unity, yet manifests itself both in the cosmic god and in individual souls. "It is characteristic of a god to have understanding" – but not part of its *nature*. Craftsmanship has to be learned and refreshed by practice, and the craft is logically prior to the craftsman.

7. CONCLUSION: THE PAST AND FUTURE OF HERACLITUS

7.1. The response to Heraclitus has always been mixed. As a philosophical pioneer, whose insights outrun his technical equipment, he has suffered the predictable fate of being misunderstood. The loss of his book at the end of the ancient world caused his long eclipse, which was aggravated by the long domination of the history of ancient philosophy by Platonic and Aristotelian texts and assumptions. (Both Plato and Aristotle were more indebted to Heraclitus than they admitted; both treated him with condescension). Against these obstacles, the canonisation of Heraclitus by Stoics and some early Christian writers hardly helped.³² It ensured the survival of precious information but dipped it in an alien dye, adding an extra layer of misunderstanding.

The revival of a truer appreciation needed a combination of improved historical and philosophical understanding. It began in Germany at the end of the 18th century: Schleiermacher was the father (and Hegel the godfather) of renewed Heraclitean scholarship.³³ Since Schleiermacher's work, there has been real, if intermittent, progress on the scholarly front. What is more, Heraclitus has become widely known and appreciated, even if, as always, his influence is elusive.

7.2. What are the prospects for Heraclitus in the third millennium? Much basic scholarly work remains to be done. For example, study of the reception of Heraclitus in later antiquity has made only limited progress, so far.³⁴ Above all, there is still a need for the systematic application of textual, linguistic, literary, and doxographical expertise to the entirety of the fragments and testimony.³⁵

Even as scholarship in the narrow sense progresses, there remain perennial questions of interpretation. Heraclitus is, recognisably, a philosophically active mind. He will always be misunderstood by those who are deaf to the call of philosophy, while philosophers will always want to annex him to their own particular concerns.

The present chapter has aimed (1) to take him seriously as a pioneering philosopher; and (2) to treat every part of his thought as part of a whole and not in isolation. (The interpreter has to construct Heraclitus as a Heraclitean unity-in-opposites, with the systematic and the aporetic as his opposed aspects.) A third task, to locate him in the intellectual context of his own time, is too specialized to be attempted here, though required for any full account of Heraclitus.³⁶

7.3. Heraclitus' claim to the continued interest of philosophers is that he is a pioneer of philosophical and scientific thoughts and of logical devices. And behind what he actually expresses, there seem to lie certain ideas that determine his thinking. Among these are: that reality must be something that can be lived and understood from the inside; and that the structure of language is the structure of thought, and therefore of the reality that thought describes. Whether Heraclitus himself could or would have formulated these ideas in such terms, is quite uncertain. What the tone and the mastery of his fragmentary work does put beyond doubt, is that he was already, in Ryle's phrase, a self-moving philosopher.³⁷

NOTES

- 1 See Most in this volume p. 357.
- 2 Polemic explicit and implicit against: Homer (DK 22 B42; Aristotle *Eudemian ethics* VII.1 1235a25-28 = A22; B94); Hesiod (B40, 57, 67); Archilochus (B17, 42); "singers of the people" (B104). Against popular and traditional opinions: B2, 17, 20(?), 27, 28, 29, 47, 56, 70, 74, 86, 104, 110, 121, 127(?), 128(?).
- 3 See in this volume Long, p. 9, and Most, p. 338.

- 4 Aristotle, *Metaph.* I.3 984a5-8; but both Aristotle (*Metaph.* IV.7 1012a24-26) and Plato (*Soph.* 242c4-e3) are aware of other aspects (logical, ontological) of Heraclitus.
- 5 Thales was mentioned (B38); Anaximander implicitly corrected (B80).
- 6 On the empiricism of Xenophanes and Hecataeus, see Fränkel [97] 325–49; Hussey [246] 17–28; Leshner [189] 149–86; on Heraclitus' epistemology, Hussey [245] 33–42; Leshner [250] and in this volume, p. 232.
- 7 On Heraclitus' linguistic devices and their intention, see (e.g.) Hölscher [153] 136–41 = Mourelatos [155] 229–34; Kahn [232] 87–95; Hussey [245] 52–57.
- 8 *Physis* in early usage is tied closely to the verb *einai* and means "what something really is": see D. Holwerda, *Commentatio de Vocis quae est φύσις Vi atque Usu praesertim in Graecitate Aristotele anteriore* (Groningen, 1955).
- 9 On early uses of the word *logos*, see Guthrie [15] 420–24 (a convenient survey, but it neglects the evidence of derivative words); Verdenius [264].
- 10 On *logos* in Heraclitus: Kirk [233] 32–71; Verdenius [264]; Kahn [232] 92–95; Dilcher [239] 27–52; a minimalist view in West [136] 124–29.
- 11 Mere opinions are also described as "what [merely] seems" (B28), as products of conjecture (B47), as stories told to children (B74), as toys for people's amusement (B70), as (?) the barking of dogs at strangers (B97).
- 12 On unity-in-opposites in Heraclitus, a variety of opinions can be sampled in: Kirk [233] 166–201; Emlyn-Jones [240]; Kahn [232] 185–204; Mackenzie [254].
- 13 So too Aristotle (*Topics* VIII.5 159b30-33), giving "good and bad are the same thing" as a thesis of Heraclitus, interprets it as meaning that the same thing is simultaneously both good and bad.
- 14 On B102, relevant here if genuine, see n.29.
- 15 The verb *harozein* (fit together) implies a purposive mutual adjustment of components to produce a unity. The noun *harmonîê*, derived from the verb, denotes the result of such a process. It had also a specialized musical sense, which is probably also in play in B51. It should not be translated as "harmony" (the associations are misleading and the musical sense different).
- 16 The ancient variant reading *palintonos* (back-stretching) implies static tension, not dynamic process, at the core of Heraclitus' vision of the world, but it is less well-attested, as well as less in tune with the evidence in total.
- 17 Plato at *Soph.* 242c-e is concerned with ontological foundations only; it is therefore understandable that he says nothing about processes.
- 18 While Plato in the *Cratylus* seems to conflate the views of Cratylus and Heraclitus, his full examination of the extreme flux doctrines (*Tht.*, esp.

151d-160e, 179c-183c) associates them with Heraclitus only in vague terms.

- 19 Cf. Plato *Crat.* 412d2-8. In a different sense, the underlying unity can also be said to be "in flux": Aristotle *De an.* I.2 405a25-27, cf. Plato *Tht.* 153a7-10.
- 20 On Heraclitus' cosmology: Reinhardt [258] 41-71; Kirk [233] 306-61; Kahn [232] 132-59; Wiggins [266] 1-32; Dilcher [239] 53-66.
- 21 On Heraclitus on the soul: Kirk [248]; Nussbaum [256]; Kahn [232] 241-60; Robb [259]; Hussey [247]; Schofield [261]; Laks (Chapter 12 in this volume).
- 22 Alternative versions (B36, 76) of this remark integrate the soul into a sequence of physical changes, but this looks like a later, Stoicising reconstruction.
- 23 B24 (cf. B136?) and B25; also later doxographical reports in A15 and A17.
- 24 I am indebted for this point (and in section 5.3 on Heraclitus and Greek religion) to the remarks and unpublished work of Mantas Adomenas.
- 25 There are hints of a treatment in physical terms of the passions and pathology of the soul: on arrogance as "wildfire," B43; on self-delusion, B46; on the power of desire (*thymos*), B85; on sensual self-indulgence, which makes souls moist, B77, cf. B117.
- 26 On the questions discussed in this section: Kahn [232] 204-11, 276-87; Hussey [245] 42-52.
- 27 The strongest explicit testimony is Aristotle *De an.* I.2 405a25-26.
- 28 There are uncertainties about the text. The first word may be "fittings-together" (*synapsies*); it is not certain that the other clauses all belong together.
- 29 If we may set aside the putative solution offered by B102:

To God all things are fine and good and just: but human beings have supposed some things to be just, others to be unjust.

There are philological grounds for doubting the authenticity of this remark, which is also out of line with Heraclitus' treatment of opposites (see section 3).

- 30 The translation "draughts" is conventional; the board game in question (*pestoi*) was closer to backgammon.
- 31 B124 (on the interdependence of large-scale order and small-scale chaos?) may also be relevant.
- 32 "Those who have lived with the *logos* are Christians, even though reputed godless, such as were, among the Greeks, Socrates and Heraclitus and those like them" (Justin, *Apol.* 46.3).
- 33 Schleiermacher [260]; Hegel [22] (vol. I, 279: "There is no proposition of Heraclitus which I have not adopted in my Logic"). The next substantial

- contributions were Jakob Bernays' early work (1848-54 = Bernays [237] 1-106), and Ferdinand Lassalle's monograph of 1858 (Lassalle [249]).
- 34 There is still, for example, no comprehensive study of Heraclitus and the Stoics (but see Long [251]; Dilcher [239] 177-200). On Heraclitus in the Christian writer Hippolytus (an important source), see especially Mansfeld [51]; also Mueller [53] (a review of, and corrective to, Osborne [52]).
- 35 On the new evidence in the papyrus found at Derveni in 1962, see now Sider [262], Tsantsanoglou [263], which contain the best available readings of the relevant part of the text.
- 36 This context, besides Homer, Hesiod, and the Ionian natural philosophers, may include the Ancient Near East, Judaism of the exile period, and early Zoroastrianism.
- 37 I am indebted to all those who over the years have helped me in understanding Heraclitus, and in particular to Mantas Adomenas, Roman Dilcher, and David Wiggins.