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Author(s): Hugh DeLacy

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HERACLITUS OF EPHEBUS: STRUCTURE OF CHANGE

HUGH DeLACY

A VERY LONG time ago—as childhood fables once began—some 2500 years ago, in Asia Minor, in a Greek colony called Ephesus, situated on the coast across a narrow belt of the Aegean from the Isle of Samos, there lived a descendant of the royal family which had founded that city. Its high priest by right of descent, Heraclitus, is thought to have abdicated his post to his brother. Whether from his priestly background, or out of contempt for the views of other philosophers and for the unthinking ways of his fellow citizens, his sayings, like the oracle's dark truths, were pitched to the trained and attentive ear. Guardedly he revealed the secret of nature, the joinings and Sunderings of contraries and their balancing tension at those temporary phases which are the objects we sense. Critical of thinkers before him, his genius was like the genius of Parmenides, though to contrary purpose. Just as Parmenides and Zeno seized upon the law of contradiction to reduce to absurdity the working assumptions of earlier Greek materialism, Heraclitus sought in contraries the inner dialectic of nature, and in contradictory statements, expressions of concepts and relations for which he had no words. If he was a mystic, as Bertrand Russell suggested in the first pages of his essay, *Mysticism and Logic*, his mysticism was that of a man who strains for philosophic expression through a language too young. He grasped darkly for those inner dynamic compulsions which Hegel, Marx and Engels, and Whitehead, in their different ways, saw as pulses in process.

The difficulty with all interpretation of Heraclitus is not just that his sayings must be culled by scholars from the comments and compendia of later writers, not just that learned men quarrel over almost every word attributed to him, but that the only means of

interpreting most of his sayings is in the light of how one thinks all of them fit together. And that compounds the original difficulties, as Mr. Guthrie distrustfully observed when he said of varying translations of the Heraclitean fragments, "To translate is sometimes to have taken sides already in a disputed question of interpretation."¹ With the experts in turmoil over significant technical questions, an interested laymen can only consult their results and use his own wits. I have consulted Zeller, Burnet, C. S. Kirk, Kirk and Raven, Guthrie, and Wheelwright, whose works are elsewhere identified. I have chiefly used Mr. Kirk's translation and have taken my starting point from his and Mr. Raven's interpretation of *logos* as "the formula or element of arrangement common to all things" and from their warning:

It must constantly be remembered that no firm distinction between different modes of existence had yet been envisaged, and that what to us is obviously non-concrete and immaterial, like an arrangement, might be regarded before Plato as possessing the assumed ultimate characteristic of "being," that is, concrete bulk.²

As to my wits, well, with the help of *logos*, and in lurking delight with an ancient process philosopher, I begin by defense of the criterion suggested above: that his doctrines were critically developed from the preceding (Milesian) explanations of change.

I

This modest-seeming criterion would be at once rejected by Felix Cleve, whose account of Heraclitus in *The Giants of Pre-Sophistic Greek Philosophy* follows earlier treatments by Gladisch³ and Adolph Stöhr.⁴ Mr. Cleve sees Heraclitus, not as a "natural philosopher" but as founder of a "doctrine of god and soul,"⁵ a "counter-

1 W. C. K. Guthrie, *History of Greek Philosophy* (New York and Cambridge, 1962), Vol. I, p. 40.

2 G. S. Kirk and J. E. Raven, *The Presocratic Philosophers* (New York and Cambridge, 1964) (subsequently referred to as K & R), pp. 188-89.

3 August Gladisch, *Herakleitos und Zoroaster* (1859).

4 Adolph Stöhr, *Heraklit* (Vienna, 1920). Said by Cleve to be the "tenable core" of Gladisch's work.

5 *Op. cit.* (The Hague, 1965), Vol. I, p. 33.

creation to the creed of Zarathustra."⁶ "Logos," Mr. Cleve thinks, "is the main and principal name of the Heraclitean god . . . [who] transformed part of his body and mind into the world. For a fixed time, predetermined by the god, this world will exist. When that time is over, the god will take the world back into his divine repose."⁷

Transformations and retransformations of this sort have gone before and will be repeated eternally, Mr. Cleve says,⁸ and god's motive in all this reshuffling is that he gets bored periodically: in one cycle with reposing "in the peace of his reason," and in the other cycle with the strife-filled world he creates and directs, as a game, from himself.⁹

There is more to this startling story. The flux of all things and the saying that one cannot step into the same river twice, Mr. Cleve is confident, do not at all indicate that Heraclitus centered his attention upon becoming. They say "merely" . . . "that our consciousness is a continuous flowing . . . [that] there is no identity of a consciousness-subject."¹⁰ In Mr. Cleve's view, these widely known statements are "merely" part of the Heraclitean soul doctrine—a doctrine which seems to him to deny "identity of consciousness-subject," whatever that is, and to assert that souls are delicately made physical substances which last indefinitely after bodily death.¹¹

As one who thinks that the dominant characteristics of a social formation have a great deal to do with the kind of ideas which flourish within it, I am sensitive to Mr. Cleve's appeal to historical background,¹² but he cannot securely rest his case on three slender historical references: that Ionians in Asia Minor, where Ephesus is located, were under Persian rule; that the Persian king, Darius I, declared the teachings of Zarathustra the Persian state religion; and that Heraclitus, high priest of Ephesus, must have been acquainted with Zarathustra's doctrines.

Heraclitus did not need to turn to an enstated Persian religion

6 *Ibid.*, p. 39.

7 *Ibid.*, pp. 42–43.

8 *Ibid.*, p. 43.

9 *Ibid.*, p. 79.

10 *Ibid.*, pp. 62–63.

11 *Ibid.*, pp. 58 ff.

12 *Ibid.*, pp. 32–33.

to gain the idea of a god or of a fire which was a body for god, or of immortal souls, or of the governance of the world by the conflicting powers of a good spirit and a bad spirit. But even if there had been an impact of Persian religious influence on him, as there could have been, what interpretation of his sayings is to be followed? An unproved one which makes Heraclitus an accidental, off-beat Greek reflection of Zarathustra during a period of Persian rule over Asia Minor? Or one which places him, as he was placed historically by ancient writers, within the buffeting stream of Ionian materialists?

But rhetorical questions will not do, for that distinguished philosopher and citizen, Bertrand Russell, in his *History of Western Philosophy*, also excludes Heraclitus from "the scientific tradition of the Milesians."¹³ His argument, if it should hold, would destroy both his own thesis and mine.

1. To exclude Heraclitus from the scientific tradition of the Milesians is to exclude him from having taken like part in the kind of logically based cosmological inquiries which they conducted.
2. Heraclitus affirmed fire, Mr. Russell believes, to be the primordial physical substance.
3. Heraclitus may not be reasonably interpreted, Mr. Russell asserts, as regarding fire as a symbol for that which is destroyed, yet exchanged or transmuted in natural process.

But if Heraclitus held fire to be the prime, permanent, unchanging *physis*, he stands with Thales, who held water to be: with Anaximander, who held the Boundless to be; and with Anaximenes, who held air to be. It is consequently not the case that Heraclitus does not stand in the same cosmological tradition as the Milesians. Nor is it the case, if his basic doctrine is so exactly like those of the Milesians, that Heraclitus could have believed that *all* things are in flux or that he sought a more inclusive analysis of change than those before him had arrived at.

The grand theme which bound Heraclitus to his predecessors was the need each felt to explain change. What divided him from them was conflict over the logic of change. He stood with the Miles-

¹³ *Op. cit.* (New York, 1967), pp. 41 ff.

ians and with Pythagoras in their search for the underlying permanence in relation to which change may be understood as an *altering in something*. They sought a material substrate, a common corporeal, against which to exhibit alteration. He sought a relation within changing. One may possibly explain the change from a green, unripe apple to a red, ripe apple as alteration in apple substance, but what is the blossom to the apple, the seed to the tree? Is there any sense in which change may be understood as substitution? If the things we perceive are discrete, separated states, what relationship, what process accounts for the succession of states which defines their unity?

II

For anyone to have asserted, after the Milesians and after Pythagoras, that things are in flux, and to have considered a process of flux would not have been, in itself, the distinguishing mark of a new philosophy. Anaximenes held air to be the primal substance and thought that its rarefaction into fire and its compression into clouds, moisture, sea, earth, and stone, were the source of the new qualities by which men know one changed state from another. Pythagoras held that numbers, displayed as points in pattern, were the substance and shape of things, and that the distribution of numbers into their opposites, odd and even, and their ratios, have to do with the order and with the nature of things. But these, at best, are descriptions of mechanics of change. They are not its moving power.

Those who could not or would not grasp his new way, Heraclitus scorned:

The learning of many things teacheth not understanding, else would it have taught Hesiod and Pythagoras, and again Xenophanes and Hekataios.¹⁴

Asses would rather have straw than gold.¹⁵

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

¹⁴ John Burnet, *Early Greek Philosophy* (New York, 1964), Item 16, p. 134.

¹⁵ *Ibid*, Item 51, p. 137.

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. . . .¹⁶

However uncomprehending most of us may be, we have thus been told of a *logos*, of experiences improperly understood, of a constitution of things, which must be something common to many things, and of the distinguishing of each thing from that which is in common.

Clearly there can be no fixed constitution, no iron grid of things, if all is in flux. When Heraclitus said, "Upon those that step into the same rivers different and different waters flow," he noted the sameness by which rivers are recognized. The altering of its waters within their known boundaries need to be no more essential to him than to anyone else who names a river by the shape and location of its banks and the direction of its current. The skillfully gathered together contraries which he adds to that sentence force attention toward an unnamed relation. The river, he said, "scatters and . . . gathers . . . it comes together and flows away . . . approaches and departs."¹⁷ It is not the stepping man or the flowing waters which we are idly to perceive. We must understand what we perceive, and what is to be understood is how coming waters scatter and "die" at the obstacle of a standing man and how, though dead as coming waters, they live, rejoined, in differing composition, to depart. What we must understand is not a simple metaphor, which is to be dismissed when we grasp the relation he strives to impart, but surging composition, the coming together, the breaking apart, the coming together, the breaking apart, the ever-moving structure of change.

Like the oracle at Delphi, Heraclitus "neither speaks out nor conceals, but gives a sign."¹⁸ He speaks of the bow, the lyre, the *kykeon*, of strife, of the measure and exchange of things and, again and again, of their hidden constitution.

The bow, arched by its cord to functioning strength, and the string of the lyre tensed to pitch against its tuning peg, display a "back-stretched connection," which stands in the fragment¹⁹ as

16 K & R, Item 197, p. 187.

17 K & R, Item 217, p. 196.

18 K & R, Item 247, p. 211.

19 K & R, Item 212, p. 193.

though a special case of the principle, "being at variance it agrees with itself." Mr. Kirk, whose translation this is, makes the interesting note that a more literal rendering of the passage would give "how being brought apart it is brought together with itself."

An opposite state to "being brought apart it is brought together with itself" would seem to be that shown in the *kykeon* which, having been brought together by stirring, is brought apart by not stirring. "Even the barley drink disintegrates if it is not moved."²⁰ A mixture of ground barley, grated cheese, and wine, the *kykeon*, if not stirred, Mr. Kirk explains, loses the interchange and movement of the opposites composing it. The constituting balance of it is lost, and it stands before the worshipper, not a sacred potion,²¹ but common wine with disengaged components littering the bottom of the cup.

The *raison d'être* of the well-strung bow, the attuned string, the mixing of the drink is strife to measure. Too tightly strung, the bow breaks. Too weakly bound, the bow snaps its cord and straightens. The lyre string and *kykeon*, too, function if and only if their bonds and their strife are in equal measure.

Homer, who prayed that strife be destroyed among gods and men, Heraclitus thought a fool, "for there would be no musical scale unless high and low existed, nor living creatures without male and female, which are opposites."²² Strife unchecked is strife unbonded. It is that bonding, that contained interaction of enduring opposites, the hidden "constitution of things," which is how Mr. Kirk translates *physis* in that fragment,²³ which is common to all. "Things taken together," Heraclitus said, "are whole and not whole, 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."²⁴

The unity coming from all things, the contra-point to strife incessant even when tensed in back-stretching connections, is the order suggested by fire. Said Heraclitus,

20 G. S. Kirk, *Heraclitus: The Cosmic Fragments* (New York and Cambridge, 1954), pp. 255 ff.

21 Guthrie, *op. cit.*, p. 449.

22 K & R, Item 216, p. 196.

23 K & R, Item 211, p. 193.

24 K & R, Item 206, p. 191.

The world, which is the same for all, no one of gods or men has made; but it was ever, is now, and ever shall be an ever living Fire, with measures of it kindling, and measures going out.²⁵

V. I. Lenin, who called this passage in his *Philosophical Notebooks*, "a very good exposition of the principles of dialectical materialism," translated the latter part of it, "eternally living fire, regularly becoming ignited and regularly becoming extinguished,"²⁶—a qualification impossible to understand unless there is a world-order such that disjunctions, extinguishings, are in equal measure to junctures, rekindlings. It is particularly interesting, therefore, to find in a footnote (*op. cit.*, *supra*), Burnet's explanation of why he translated *kosmos* in this saying as "world," instead of as "order." The concepts of order and of the totality of things, which Burnet's hesitation binds together in this saying and which are clearly bound together in Mr. Kirk's translation as "world-order,"²⁷ are each sparks of illumination.

The ordering of nature is the consuming and the tempering of qualitative arrangement, and the working of fire was Heraclitus' means of making that relation clear. "All things are an equal exchange for fire and fire for all things, as goods are for gold and gold for goods,"²⁸ he told his trade-minded fellow citizens. Gold, clearly, is not a persistent substratum within each of the goods exchanged. The value of the sandals, wine presses, iron tools, casks, grain, oil, with which a merchant has stocked his place of business is a oneness among diverse and seemingly incomparable commodities, a magnitude, not in a commodity called gold, but in a weight of gold. As goods are exchanged for a weight of gold and weights of gold for goods, the exchange of all things, which is their coming into being and their perishing, is given measure, and hence intelligibility, by—if the analogy is to hold—a quality of fire. Commentators on this passage have suggested that fire consumes objects, turning them into ash and smoke, which is one clear example of its working. But the use of heat to create and temper was then and still is one of man's

²⁵ Burnet, *op. cit.*, Item 20, p. 134.

²⁶ V. I. Lenin, *Collected Works*, Vol. 38, *Philosophical Notebooks* (Moscow, 1963), p. 349.

²⁷ K & R, Item 220, p. 199.

²⁸ K & R, Item 222, p. 199.

chief means for change. From the molten bar came the defending and attacking sword. From slaughtered animal, fowl, or fish, cooked delicacies for the master's table. From fired ore came coins, emblems, leaden pipes for water works, anvils, hammers, nails, and cooking pots. Not only for man, but in nature, too, from rippling water comes vapor or crusted ice; from seething volcano, spills of hardening rock.

A possible virtue of this close-clinging interpretation is that one may hold to it without committing himself to Zeller's²⁹ or to Burnet's³⁰ finely worked out cosmological interpretations of such of Heraclitus' sayings as, "The path up and down is one and the same,"³¹ or, "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."³² Or, "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."³³ It may very well be that Heraclitus viewed cosmological process as the emergence of elements one from another in two continual streams, from celestial fire downward to earth and from earth upward to fire. What a discussion of his doctrine of change requires is more simply to note in the latter two of the passages just cited the turning attributed to fire, which is definitely not its "unturned" persistence within other elements, and to see re-emphasized the extinction-emergence theme, its mode, the consumption of fire in the tempering of sea, the consumption of sea in the tempering of earth, the consumption of earth in the tempering of sea, the consumption of sea in the tempering of fire.

The ambiguity of the preposition, "in," used in the parallels of the preceding sentence comes clearly through if one asks only, "How?" The answer must be, if one clings to this interpretation, that the disappearance of an antecedent is a necessary, though not a sufficient, condition for the kindling of a consequent, that there is a generative process, that among its qualities are its universality,

29 E. Zeller, *History of Greek Philosophy*, S. F. Alleyne (trans.) (London, 1881), Vol. II, pp. 53-54.

30 Burnet, *op. cit.*, pp. 146 ff.

31 K & R, Item 203, p. 189.

32 K & R, Item 221, p. 199.

33 K & R, Item 232, p. 205.

its having to do with measure, and its oneness as the unceasing obverse of unceasing change.

Perhaps this relationship can be set out more clearly. States within the state of becoming or perishing may be called sets of qualities, each different, recognizable, and discontinuous. Although one may differ from another so little as to be all but imperceptibly different, or enough to be similar, or so much as to be as unlike as the qualities of ice and water are to each other, each qualitative state is what it is and is not what it is not. Mr. Wheelwright suggests,³⁴ mistakenly it seems to me, that qualities waver. Even to say that things change is to speak superficially. What binds states of change together is the movement of contraries whose separate and opposing forces, in their balancing and unbalancing tensions, create the diverse physical states which one may distinguish and describe. Insisting that it is the distinctive which we recognize and that the distinctive is this-which-is-distinct, in contrast to that-which-is-distinct, we are enlarging the notion that a collection of succeeding sets of qualities describes becoming, to the notion that a collection of substitutive sets describes becoming or perishing, as the case may be. One such set disappears before another, but does not waver, yield, or change to another. To perceive such sets, each changeless and in series, is to perceive change.

Change is not the alteration of something. To understand difference, one must understand sameness. To understand many, one must understand one. To understand change, one must understand permanence, but it is erroneous to conclude that one must reply to the question, "What alters," by asserting that the only permanence to look for lies hidden behind a noun, is a substance, an existing substrate of some kind to which the "what" of this question must logically and existentially refer. Considered as a collection, in series, of discontinuous, that is, substitutive, sets of qualities, change is no more primal than rest or duration, which, properly, should also be so considered. Behind both, strife and war are king. Perishing, which is an unbonding of contraries, gives rise to dis-

34 Philip Wheelwright, *Heraclitus* (New York, 1964), p. 31. "In the qualitative sense all things are constantly changing," Mr. Wheelwright comments, "because the qualities are wavering, and for Heraclitus a thing is nothing more than the complete set of all the qualities and powers which belong to and constitute it."

continuous sets of qualities—in series. Becoming, which is a bonding of contraries, gives rise to discontinuous sets of qualities—in series—each set substitutive and distinguishable for the duration of the relation of contraries which it characterizes. Duration and change are marks of a primal structuring principle.

This is the “common” which Heraclitus declares it “necessary to follow,”³⁵ the *logos*, “the real constitution of things (which) is accustomed to hide itself,”³⁶ the “unapparent connexion (which) is stronger than an apparent one.”³⁷

God, he said:

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.³⁸

And

One thing, the only truly wise, does not and does consent to be called by the name of Zeus.³⁹

And

The wise is one thing, to be acquainted with true judgment, how all things are steered through all.⁴⁰

One may or may not liken the primal structuring principle to Zeus or fire or *logos*. Everlasting, and thus without end or beginning, it was made, as we have seen, by no man or god. The sets of qualities which we perceive in series are like the distinct fragrances of several incenses cast separately into continuing flame. For the ass, the straw; for the wise man, knowledge of the inner connection binding qualitative change, knowledge of the steering, the governing dialectic of nature.

To Aristotle's complaint that Heraclitus did not understand contradiction, Heraclitus might have answered with the criticism made by Hegel and Whitehead, that Aristotle's logical view is based

35 K & R, Item 198, p. 188.

36 K & R, Item 211, p. 193, cited page 11.

37 K & R, Item 210, p. 193.

38 K & R, Item 207, p. 191.

39 K & R, Item 231, p. 204.

40 K & R, Item 230, p. 204.

on his belief that there are substance and attributes of substance and that predicates expressing attributes may be asserted only of subjects referent to substance. For Heraclitus to deny the notion of an underlying substratum as a condition for his logic of change no more eliminates logic than language. A set of qualities, being the characterization of a given duration, is what one recognizes and what one may affirm in speaking of this or that perceptual object before him. What is at issue is not the law of contradiction, but divided views as to the nature of things.

One may say of Heraclitus that like "the Sibyl with raving mouth . . . uttering things mirthless, unadorned and unperfumed," his search for a generative account of nature "reaches over a thousand years," a voice "through the god."⁴¹

Van Nuys, California

41 K & R, Item 248, p. 212.



NOTICE

For a book he is writing about Albert Einstein, Mr. Ronald W. Clark would be grateful to hear from any of our readers who have letters, personal reminiscences, or other material relevant to the book. Please communicate directly with Mr. Clark at 10, Campden Street, Kensington, London W8, England.