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THE LOGOS OF HERACLITUS

EDWIN L. MINAR, JR.

IT IS strange that discussions of the sense of Heraclitus' λόγος have not taken more account of the history of the word and the development of its meanings. It may be well, before passing to a detailed consideration of Heraclitus' usage, to mention a few fundamental characteristics of this development.

The word λόγος is simply the verbal noun from λέγω, which means primarily "gather, collect," as appears clearly from the cognates collected by Walde-Pokorny. The sequence of development is "sammlen, lese zusammen, zähle, rede, sage (vgl. z. Bed. engl. *to tell*, . . . dt. zählen)."¹ This appears also in the Latin *lego, legio*, Greek *συλλογή*, etc. Consistently, the principal senses of the verb as listed by Liddell and Scott's *Greek Lexicon* (new edition) are (1) "pick up, gather, choose"; (2) "count"; and (3) "say, speak." The third of these, which in classical Greek is most prominent, does not occur in Homer. The first occurrence is Hes. *Theog.* 27. Some examples are found in Homer for the second classification, but in the significance of "recount," "tell over." In a sense derived from λέγω as "say, speak," λόγος is found in Homer in the plural—*Il.* xv. 393: τὸν ἔτερπε λόγους; *Od.* i. 56: αἰμύλιοι λόγοι.

In the former editions of Liddell and Scott's lexicon the meanings of λόγος were listed under the heads *oratio* and *ratio*, and little was done to clear up the ambiguities in the Greek and Latin words or in the English words commonly used to translate them. The new edition has a new classification based to a greater extent on the historical development of the word; and our survey may follow generally this new system.

I. As might be expected, we find that the primary significance of λόγος is "computation, reckoning." It can mean a money account, or be used more generally as in *Hdt.* viii. 100: δόντας λόγον τῶν ἐποίησαν (where "render account" means "be punished"). It can mean "meas-

¹ Walde-Pokorny, *Vergleichendes Wörterbuch der indogermanischen Sprachen* (1927) II, 422; cf. also Boisacq, *Dict. etym. de la langue grecque*³ (1938), s.v. λέγω.

ure, tale," as in Hdt. iii. 99: ἐς τούτου (*sc.* γήραος) λόγον ἀπικνέονται (cf. "the tale of years"). It is here that Liddell and Scott list Heraclitus frag. 31: θάλασσα . . . μετρέεται εἰς τὸν αὐτὸν λόγον ὀκόλος, κτλ., and frag. 115: ψυχῆς ἐστι λόγος, κτλ. It is significant that the meaning "esteem," "value" is listed here in the new edition and that Her. frag. 39 οὐ πλείω λόγος ("who is of more worth") is cited. Diels translated this "von dem mehr die Rede ist" and it is printed under the heading "Ruf" in *Vors.*⁵ III (*Wortindex*), 258b8.

II. Another series of passages is grouped under the closely related significance of "relation, correspondence, proportion." There is an example from Theognis (418, 1164) referring to the proportion of gold to lead, and a few from Aeschylus, Herodotus, Hippocrates, and others; then a group of passages in which the word is to be translated "ratio" or "proportion" in the mathematical sense. There are many instances of this in the Pythagorean literature.

III. Closely related to the idea of a reckoning or account is that of an "explanation"; and this is one of the most important and comprehensive headings in the article. The word λόγος can denote an explanation in any one of a number of senses. First, it can be a plea, pretext, or ground.² It can be the statement of a theory, an argument. It is clearly so in Parmenides frag. 8, l. 50 (cf. also Democritus frag. 7, Pl. *Phaedo* 62d, etc.). It seems much preferable to explain Her. frag. 50 (οὐκ ἐμοῦ ἀλλὰ τοῦ λόγου ἀκούσαντας) in this way than to translate with Diels "nicht mich, sondern das Wort" ("—den Sinn," Kranz); and likewise, in frag. 108 (ὀκόσων λόγους ἤκουσα), where Diels again gives "Worte" and Burnet "discourses." Here are listed also various titles. The λόγος of Her. frag. 72 (ᾧ μάλιστα διηνεκῶς ὀμιλοῦσι λόγῳ) has been translated "law, rule of conduct." Heraclitus may have meant something similar to "law," but how the phrase "rule of conduct" fits this context is difficult to understand.³ Through "explanation" λόγος sometimes means "thesis" or "hypothesis" in Plato and Aristotle; and in a number of authors it can be construed as "reason, ground." It is here that Liddell and Scott place the important phrase in Her. frag. 1, κατὰ τὸν λόγον τόνδε,⁴ and the difficult frag. 45, οὕτω βαθὺν λόγον ἔχει

² See Aesch. *Cho.* 515, Soph. *Phil.* 731, *O.C.* 762, *O.T.* 657, etc.

³ The parallel with Democritus frag. 53 ζῶσι κατὰ λόγον is not convincing.

⁴ It seems more likely that λόγος here means "doctrine"; it refers clearly to the first λόγος (τοῦ δὲ λόγου τοῦδ' ἕντος, κτλ.). Cf. A. Busse, "Der Wortsinn von λόγος bei Heraklit," *Rh.M.*, LXXV (1926), 204.

(*sc. ἡ ψυχῆ*). Compare also Leucippus frag. 2: ἐκ λόγου (opp. μάτην). As explanation, a λόγος may also be a "formula," or kind of definition (in a broad sense). The formula gives an account of the thing to which it applies. Plato (*Rep.* vi. 497c) speaks of the λόγος τῆς πολιτείας, and (*Phaedrus* 245e) of the οὐσία τε καὶ λόγος of the soul. Aristotle's statement *Top.* 102a5 is interesting: πᾶς ὁρισμὸς λόγος τίς ἐστὶ.

The last division under the general heading of "explanation" is "reason, law, exhibited in the world-process." The only examples of this usage, often supposed to explain many of the fragments of Heraclitus, are a doubtful passage of Epicharmus (frag. 2 Diels), Plato *Rep.* vi. 500c (κόσμῳ πάντα καὶ κατὰ λόγον ἔχοντα), and instances from the Stoic and Neo-Platonic literature. To Plotinus and the Neo-Platonists it meant "regulative and formative forces, derived from the intelligible and operative in the sensible universe." It is doubtful whether a trace of this idea can be found in Heraclitus.

IV. Next are considered a number of passages in most of which the conventional translation of λόγος would be "reason." They are thought by the editors of the lexicon to reflect "inward debate of the soul," thinking being treated as primarily reasoning. One endeavors to "give account" to himself. Thus *oratio* is throughout subordinated to *ratio*. The only Heraclitean fragment classified here is 2: τοῦ δὲ λόγου ἐόντος ξυνοῦ, ζῶουσιν οἱ πολλοὶ ὡς ἰδίαν ἔχοντες φρόνησιν. Though reasoning is common to all men (i.e., open to all), they live as though they had private insight. It will be seen later that in this passage λόγος probably implies more than that.

Of the earlier passages cited, none seems to show the meaning "reflection." For example, in Anaxagoras frag. 7 (μη εἰδέναι . . . μητε λόγῳ μήτε ἔργῳ) we can perhaps translate "neither by calculation nor through experience." However, this meaning emerges in Plato and Aristotle along with the development of the mind-body and soul-intellect dichotomies.

"Reason as a faculty" is found in pseudo-Epicharmus 256 (frag. 57 Diels), Plato, and the Stoics. Naturally, when Sextus Empiricus speaks of the λόγος in Heraclitus in opposition to αἰσθησις, he is not using Heraclitean language.

The λόγος can also indicate (V) a narrative, oration, etc., or (VI) simply verbal expression or utterance, often contrasted with ἔργον. In Her. frag. 87, λόγος probably means "rumor."

The other main divisions do not specially concern us. They represent usages which are derived or late and mostly unphilosophical (VII, a particular utterance; VIII, subject matter; IX, expression, speech regarded formally; and X, the Word or Wisdom of God).

It will be seen from this brief survey that the fundamental idea of *λόγος* is that of *an accounting*, and that this idea is retained throughout the early history of the word at least as an undertone. At an early period "account" in the sense related to "count" passes into the sense related to "recount" ("explain, narrate"). But the *λόγος* is always at least "verbal expression" and never simply "word." Gradually, the simple discrepancy reflected in the opposition between *λόγος* and *ἔργον* develops into an idea of the separation of *λόγος* and *ὑποκείμενον*, and we have the emergence of an epistemological usage of the word.⁵

With the beginning of rhetorical thought, there is increasing emphasis on the word as an organ of persuasion. It is sufficient to mention the attitude of the Sophists in regard to the power and importance of speech.

Besides the few Heraclitean fragments in which *λόγος* has the sense of "expression" or the like, there are a number, much harder to interpret, in which it obviously has a more general significance. Heraclitus speaks of a power which pilots the world,⁶ and the *λόγος* has been thought to be simply equivalent to this. Sometimes, Heraclitus seems to identify it loosely with the gods and to attribute to it some of the elements of personality.⁷ It is dangerous however to overemphasize this fact, because Heraclitus was much more interested in the philosophy of natural process than in theology as such. His expressions about the gods and the divine are in part rationalistic and opposed to the spirit of traditional religious conceptions,⁸ in part poetic and general, clothing in theological language ideas which are in essence entirely secular.⁹ Thus the power which pilots the world cannot be identified

⁵ Cf. *Vors.*⁵ 82 (Gorgias) B 3, II, 282.20 ff.

⁶ Frag. 41: *εἶναι γὰρ ἐν τὸ σοφόν, ἐπίστασθαι γνώμην, δὲ ἐκυβέρνησε πάντα διὰ πάντων*. Cf. also his expressions regarding the divine law which "nourishes" all human laws (114), etc. However, it should be noted that frag. 41 is to be interpreted in connection with the preceding one, and the emphasis is on the contrast between *πολυμαθία* and *ἐν τὸ σοφόν* (cf. also frag. 108).

⁷ Zeller (*Ph. d. Gr.* I⁵, 2, 668, n. 1; 670, n. 3) exaggerates this aspect. Some of the passages he cites are quite irrelevant.

⁸ E.g., 5, 14, 15, 30, 53, 67, 119.

⁹ E.g., 35, 78, 79, 102, 114.

one for one with the λόγος. It is uncritical to say, as Zeller does (p. 670), that "alle diese Begriffe [sc. divinity, harmony, divine law, *dike*, necessity, wisdom, Logos, Zeus, aeon] bezeichnen bei Heraklit ein und dasselbe."

In dealing with the λόγος of Heraclitus, the commentators have generally distinguished it sharply from the Stoic Logos. At the same time, however, the λόγος of Heraclitus was taken as model by the Stoics (doubtless in a form already modified by the interpretation of the Heracliteans), and modern ways of thinking are formed so largely by Stoicism, and, more broadly, Platonism, that it is difficult not to see Heraclitus as predecessor of the Stoics. Zeller says (p. 669), "Der κοινὸς λόγος muss . . . bei Heraklit im wesentlichen das Gleiche bedeuten wie bei seinen Nachfolgern den Stoikern." He recognizes that many of the statements in the doxographical reports belong essentially to the Stoic interpreters and admits that in frag. 1 λόγος need not mean the *Vernunft* active in the world, but draws his proof from frag. 2: διὸ δεῖ ἐπεσθαι τῷ ξυνῶ . . . τοῦ λόγου δὲ ἐόντος ξυνοῦ ζῶουσιν οἱ πολλοὶ ὡς ἰδίαν ἔχοντες φρόνησιν. It seems unwarranted to conclude from the parallelism of κοινὸς λόγος and ἴδια φρόνησις here that the λόγος can only be *Vernunft*. More light would seem to be cast on the interpretation by comparing frag. 72: ᾧ μάλιστα διηλεκτῶς ὁμιλοῦσι λόγῳ (τῷ τὰ ὅλα διοικοῦντι) τούτῳ διαφέρονται, καὶ οἷς καθ' ἡμέραν ἐγκυροῦσι, ταῦτα αὐτοῖς ξένα φαίνεται (cf. also frag. 17). The λόγος is that whose recognition constitutes real understanding. It is "common" and can easily be observed by anyone, but men are blinded by their own putative wisdom. It is in this sense that we must understand the explanation of Sextus Empiricus (*Adv. math.* viii. 8), which Zeller arbitrarily rejects, that κοινὸς λόγος means τὰ κοινῇ φαινόμενα.

The interpretation of Heraclitus' "Word" as reason, intelligence, or sense has been very widespread, and the various versions attribute varying degrees of ideality to the concept. Dean Inge illustrates one extreme when he says, "For him the visible world is a symbolic system which half conceals and half reveals the reality. The truth or reality is the divine soul of the world, whose life is manifested in the endless cycle of birth and death, of becoming, change, decay, and renewal."¹⁰ According to Aall, the Logos is "die Vernunft als universelles

¹⁰ Art. "Logos," Hasting's *Encyclopedia of Religion and Ethics*.

Paradigma für den menschlichen Geist. . . . Derselbe Logos manifestiert sich im Aeusseren, welches nach seinem Bild geschaffen ist."¹¹

An important new treatment of the use of *λόγος* in the early philosophers is contained in the *Wortindex* to the fifth edition of Diels's *Vorsokratiker* by Walter Kranz (Vol. III [Berlin, 1937]). The senses of the word are classified as follows: (1) *Wort*, (2) *Darlegung*, (3) *Rede* (*Rhetorisches*), (4) *Vernunft, Sinn*, (5) *Berechnung, Gesetz, Verhältnis*. Certain differences between this classification and that of the Liddell and Scott lexicon become immediately apparent. The historical development of the meanings of the word is not taken into consideration in the arrangement, and the one which we have found to be primary (*Berechnung*) is relegated to the end of the article.¹² More important, there appears here an entire category under the lemma "Vernunft, Sinn," which, according to the history of the word, represents a derived and relatively late sense. Examination of the passages cited by Kranz will, I think, show the inadvisability of assigning such a significance to the *λόγος* as early as Heraclitus, and perhaps to any of the Presocratics.¹³

A large number of the examples are from Heraclitus himself. The section is divided into "Weltvernunft" and "menschliche Vernunft"; and, although we are told (p. 261a13) that in Heraclitus the two mean the same, the passages from that philosopher are distributed between the two divisions. We proceed, then, to consider the Heraclitean fragments classed as exemplifying world-reason. In frag. 50, which occurs in the ninth book of Hippolytus' *Refutatio*, is the phrase *εἶναι τὸ πᾶν . . . λόγον αἰῶνα*. However, this first sentence of the passage from Hippolytus is not part of the fragment proper. In any case, although it may be analogous to frag. 1 (*έόντος ἀεί*) and reflect Heraclitean doc-

¹¹ *Gesch. d. Logosidee i. d. griech. Phil.* (Leipzig, 1896).

¹² There is a certain difficulty too in regarding *λόγος* as equal to *blosses Wort* (p. 258a16). This is scarcely borne out by the instances cited, many of which clearly show the rhetorical usage of the word, indicating the tenuousness of any distinction between *λόγος* as "blosses Wort" and as "Rede," e.g., Dem. frag. 51: *ισχυρότερος ἐς πειθῶ λόγος . . . χρυσού*; frag. 110: *γυνή μὴ ἀσκέτω λόγον*.

¹³ Busse (*op. cit.*, p. 211), says that in Heraclitus there are no passages in which an active function is attributed to the *λόγος*, or where it is to be understood as either "world-reason" or simple "reason." H. Gomperz, in "Heraklits Einheitslehre" von Alois Patin als Ausgangspunkt zum Verständnis Heraklits," *Wien. Stud.*, XLIII (1923), 125, n. 1, has attempted to show that *λόγος* never means "reason" (*Vernunft*) in the fifth century.

trine, there is no reason inherent in the fragment itself for regarding the λόγος as reason.

In frag. 31 we have this sentence, explaining Heraclitus' cryptical statement about the "turnings" of fire: *δυνάμει γὰρ λέγει ὅτι τὸ πῦρ ὑπὸ τοῦ διοικούντος λόγου καὶ θεοῦ τὰ σύμπαντα δι' ἄερα τρέπεται εἰς ὑγρόν*. This seems at first to state a world-reason doctrine quite clearly. But two considerations dispel the necessity and diminish the likelihood of such an explanation. As the word *δυνάμει* shows, this is only a paraphrase explanation of Heraclitus' words, or perhaps even simply an interpretation out of whole cloth. And, in the second place, the interpreter is Clement of Alexandria, who had behind him a long tradition of Stoic and Christian Logos doctrine.

Aet. i. 7. 22 (*Vors.*⁵ 22A8): *εἰμαρμένην δὲ λόγον (sc. εἶναι) ἐκ τῆς ἐναντιοδρομίας δημιουργόν τῶν ὄντων*. Besides the fact that the terminology of this passage is late, the words *ἐκ τῆς ἐναντιοδρομίας* seem to speak rather against than for the translation "world-reason."¹⁴

An important doxographical statement of the views of Heraclitus is contained in Sext. Emp. *Adv. math.* vii. 126 ff. After stating that for Heraclitus the common and divine Logos was the criterion of truth, he proceeds (129): *τούτον οὖν τὸν θεῖον λόγον καθ' Ἡράκλειτον δι' ἀναπνοῆς σπᾶσαντες νοεροὶ γινόμεθα*. The epistemological reference here is admittedly late. Neither the division of reason from sense nor the concern with a criterion of truth is as early as Heraclitus. If the passage is based on genuine Heraclitean material, as it may well be,¹⁵ the belief reflected is much more likely to be in a world-soul than in a world-reason. In early Greek thought (and as late as Plato's *Timaeus*) it was common to think of the universe as a living being, and it was natural to think of the principle of life (i.e., essentially, breath) as being drawn in from the surrounding air. This was the view of Anaximenes.¹⁶

Fragment 2 (*τοῦ λόγου ἐόντος ξυνοῦ, κτλ.*) simply states an attribute of the λόγος and not its nature. Much the same thing can be said of frag. 50 (*οὐκ ἐμοῦ ἀλλὰ τοῦ λόγου ἀκούσαντας*). It would be begging the

¹⁴ Neither does the passage in i. 28. 1 prove anything in this sense (see below, p. 337).

¹⁵ O. Gigon, *Untersuchungen zu Heraklit* (Leipzig, 1935), pp. 112 f.

¹⁶ Frag. 2. Cf. the article of R. Mondolfo, "Anaximenea," *Riv. di filol.*, LXIV (1936), 15 ff.

question to use this as positive evidence for this interpretation of the λόγος even if the text were certain.¹⁷

In frag. 72 (ᾧ ὁμιλοῦσι λόγῳ τῶ τὰ ὅλα διοικοῦντι, τούτῳ διαφέρονται, κτλ.), as Diels indicates, the phrase τῶ τὰ ὅλα διοικοῦντι does not belong with the fragment proper. It provides a good example of the methods of quotation often used by the Stoic writers and commentators (the citation is from Marcus Aurelius) and the way in which a number of the fragments of Heraclitus have become buried under layers of *accommodatio*.

In frag. 1 λόγος is probably, as Diels thinks, intended to bear two different senses. One is "this account." Whether the other is "reason" cannot be proven on the basis of this fragment alone.

The only instances of the word cited by Kranz as comparable to these are Leucippus frag. 2 and a report about Democritus from *Simpl. Phys.*, p. 28, l. 15 which surely do not belong here, and two passages from pseudo-Epicarmus.

Of the passages cited by Kranz under the lemma "menschliche Vernunft" none is impressive. Fragment 45 means that the soul is hard to fathom. Burnet's translation is: "You will not find the boundaries of soul by traveling in any direction, so deep is the *measure* of it." Fragment 115 (ψυχῆς ἐστὶ λόγος ἑαυτὸν αὔξων) probably means not, as Diels would have it, that man's understanding grows with his age but that the soul is thought of as closely parallel, in nature and functions, to the body, as needing and receiving nourishment, and consequently as "growing."¹⁸

Kranz lists a number of passages from other authors here, but it would not be worth while to discuss them in detail. It is doubtful whether any of them can be said to attest the use of λόγος as reason among the Presocratics. By far the most of them are from the A divisions, and many of these quite obviously belong to later interpretation. The passages from Heraclitus have been seen to prove nothing. In Parmenides frag. 7, l. 5 (κρίναι δὲ λόγῳ πολύδηριον ἔλεγχον), λόγος means "dialectical argument," as Burnet says,¹⁹ or "thought" in the sense of the weighing of reasons, and is distinct from the Heraclitean usage.

This discussion has perhaps helped to establish the presumption

¹⁷ λόγου is Bergk's reading. On the text cf. *Vors.*⁵, I, 161.16 n.

¹⁸ See Gigon, *op. cit.*, p. 105, and cf. esp. frag. 12.

¹⁹ *EGP*³, p. 173, n. 1.

that it is a mistake to attribute to Heraclitus a "Reason" or "Word" like that of the Stoics, representing a divine mind which orders and disposes the universe. Let us proceed to consider other possible views. In view of the frequent use of *λόγος* to mean "speech," "explanation," etc., and of its use in the titles of books, it is difficult not to conjecture that in Heraclitus it may signify simply the content of his book. However, frag. 2 (*τοῦ λόγου δὲ ἕκοντος ξυνοῦ*) shows what is evident from other fragments as well: that the *λόγος* is not *simply* "my explanation." Gigon²⁰ has shown very well that in the prologue, reflected fairly completely in frags. 1 and 2, Heraclitus plays on the meaning of *λόγος* and establishes (not necessarily with complete deliberation, as Gigon thinks) three characteristics of it. It is true, all things come to be in accordance with it, and it is "common." Gigon emphasizes that in recognition of this fact explanation of the fragments must be based on the lexical meanings of *λόγος* common at Heraclitus' time. He rejects any interpretation in terms of cosmology. "Vor der Stoa ist eine irgendwie kosmische Bedeutung von *λόγος* unbekannt."²¹ Lexically, then, he says, the word signifies in frags. 1, 2, 50, 72, and 108

die Rede, der Inhalt des Buches. . . . *λόγος* ist ein abgekürztes Zeichen für die Summe des Buches—die ewige Wahrheit . . . *λόγος* hat diese seine Bedeutung nur im Zusammenhang mit dem heraklitischen Werke, nicht wie *πόλεμος* oder *ξυνόν* auch absolut, da ja die Prädikate auch auf "*diesen*" einen (*ἕδε*) *λόγος* gestellt werden. Die Summe des Buches wird als ewige Wahrheit prädiiziert. Philosophisch ist sehr wichtig, dass die Prädikate der *ἀρχή* nun auf die "Wahrheit" fallen. Nicht ein Stoff, sondern eine Lehre, ein System steht am Anfang.²²

This is a valuable observation, and it will be well to bear it in mind. The *λόγος* doubtless does carry to some extent the implication of "truth"; but since the use of the word specifically as equal to "truth" is late, if indeed it occurs at all (and, even according to Gigon's interpretation, it can only mean "this book as an embodiment of truth"), it may be well to look for more specific implications.

The problem is to find the way in which the idea of universality must be connected with the normal or possible meanings of *λόγος* without bringing in semi-mystical concepts of a world-reason or world-soul. The central point to Heraclitus is the recognition of a principle of development and process. The *ἐν τὸ σοφόν* of frag. 41 is contrasted

²⁰ *Op. cit.*, pp. 1 ff.

²¹ *Ibid.*, p. 4.

²² *Ibid.*

with the *πολυμαθίη* (frag. 40) which does not bring understanding (*νόον ἔχειν*). It is in this sense that we must interpret frag. 108, in which he complains of his predecessors that not one had attained to the realization that "wisdom is apart from all" (*σοφὸν ἔστι πάντων κεχωρισμένον*). The comprehension of this relationship is associated for Heraclitus with *γνώμη* (insight), *σοφόν* (wisdom), and probably *φρήν* and *νοῦς*. This is what he finds lacking in his predecessors. *τίς γὰρ αὐτῶν νόος ἢ φρήν;* (frag. 104).²³

It is not easy to avoid exaggerating the ideal abstraction of Heraclitus' thought when dealing with the more general aspects of his system. Snell has shown in an interesting study of the language of Heraclitus²⁴ that the actual language used in many of the fragments usually treated as simply "philosophical" is not abstract and conceptual but springs directly from personal experience and a sympathetic rather than coldly logical understanding. "Es gilt überhaupt für Heraklit, dass er die Sprache durchaus als ein Empfindender handhabt, sie aber nicht so sehr nach der logischen Klarheit hin entwickelt."²⁵ For example, in frag. 126 the oppositions are living and not logical oppositions: *τὰ ψυχρὰ θέρεται, θερμὸν ψύχεται, ὑγρὸν αὐαίνεται, καρφαλέον νοτίζειται*. This means not simply "cold becomes warm, warm becomes cold, etc.," but "cold things warm themselves, what is warm cools itself off, etc." Here, as in many other Heraclitean fragments, both the conception and the language are poetical. *καρφαλέος* is not found otherwise in prose, *νοτίζω* and *θέρομαι* only seldom.²⁶ This realization is very important for the understanding of Heraclitus' thought. A system of rigid, logical oppositions would lead inevitably to an absolute; for Heraclitus just as the oppositions are living and actual in experience, that which joins them is accessible to man.

Recognizing the damage done to our knowledge of Heraclitus by the distortions of the Stoics and the doxographical tradition and also the danger of importing modern concepts into an ancient context, Snell begins with consideration of the normal implications of words and develops an interesting suggestion as to the meaning of *λόγος* to

²³ An interesting example is the word-play in frag. 114 (*ξὺν νῶ . . . ξυνῶ*). Cf. also frags. 78 and 41.

²⁴ "Die Sprache Heraklits," *Hermes*, LXI (1926), 353-81.

²⁵ *Ibid.*, p. 357.

²⁶ *Ibid.* Heraclitus' attitude toward the world is reflected also in the words which he uses for understanding (*σύνεσις, συνιέναι*).

Heraclitus. He points out that λέγειν can frequently be translated "to signify" and holds that this connotation passes into the verbal noun λόγος. Thus λόγος has the double sense of meaningful human speech and the meaning which lies in things. Things speak to us, as it were. Thus the λόγος of frag. 1, says Snell, is not only the "explanation" of Heraclitus. This explanation has actuality. It is more than the "opinion" of the philosopher; it is the "sense" which is in the world and which alone gives "content" to the world. In the same way γνώμη, τὸ σοφόν, and the other designations for this single principle have a comparable "double meaning":

Er sagt einmal: Nicht auf mich hört, sondern auf den Logos usw. (fr. 50). Wir verderben die eigentümliche Prägung des Gedankens, wenn wir übersetzen: nicht auf mich hört, sondern auf die Weltvernunft. Nein, er will sagen: Dieser Logos, den ihr verstehen sollt, ist nicht etwas Willkürlich-Persönliches von mir sondern er "ist"—er ist Sinn, Bedeutung, das Tiefste und Eigentlichste der Welt. Und solch ein Satz zeigt, wie wenig Heraklit "Individualist" ist. Freilich, er sondert sich stolz ab von den übrigen—aber er will nicht sich, sondern fühlt sich gerade gebunden an das Allgemeine.²⁷

It would seem, however, that the significance of the fragment is somewhat more simple than this. The point is not so much that Heraclitus felt himself dependent on and connected with the universal, as that he felt strongly and wished to emphasize clearly that true understanding (σύνεσις) is only to be attained by attention to that which is *common*, the ξυνόν, by observance of "regularity" rather than of detail (πολυμαθίη). Undoubtedly, λόγος does carry some of the implication which Snell wishes to attribute to it. It means not only that which man says but that which speaks to man. It is rather different, however, to say that it is "the meaningful" or "Sinn, Bedeutung, das Tiefste und Eigentlichste der Welt." I believe we can assign it a more definite content than this.

A consequence of Snell's explanation which shows its inadequacy lies in the interpretation which he is compelled to give to the relationship of the λόγος to the νόμος of cities. Heraclitus draws the analogy clearly: ἐν νῶ λέγοντας ἰσχυρίζεσθαι χρὴ τῶ ξυνῶ πάντων, ὅκωσπερ νόμω πόλις (frag. 114). According to Snell, "Der Logos, der die Bedeutung des Wortes meint, richtet sich auch bei Tatsachen nur auf die dahinter liegende Bedeutung, auf den einheitlichen Sinn der zwiespältigen

²⁷ *Ibid.*, p. 367.

Erscheinung."²⁸ Thus νόμος is that which gives meaning to the city, which has force and is valid (p. 380). But it seems strangely forced to say that a city must defend the νόμος as it does its walls (frag. 44) because that is what gives the city significance. It would argue an abstraction far greater than Snell attributes elsewhere to Heraclitus to suppose that, when he says of the law κρατεῖ γὰρ τοσοῦτον ὀκόσον ἐθέλει καὶ ἐξαρκεῖ πᾶσι καὶ περιγίνεται (frag. 114), he means that the law is as valid ("gilt") as it wishes to be. Heraclitus is a theoretician, in the sense that he deals with general concepts and principles, but he is not to be thought of as a closet philosopher. Fragments 80, 43, 44, 121, and others show a lively and concrete practical interest not only in justice and the principles governing human relationships but in certain particular situations and struggles. His philosophy was formed with one eye constantly focused on the practical concerns of the world about him.

The relation of the λόγος to empirical things is clearly indicated by frag. 54: ἀρμονία ἀφανῆς φανεροῦς κρείττων. Hidden harmony is better than apparent harmony. Fragment 51 shows that ἀρμονία means "fitting-together" and is to be understood as referring to the doctrine of opposites. There is no good reason simply to interpret this ἀρμονία ἀφανῆς as God. It is rather the invisible unity which is implicit in the oppositions of the world-process, that which makes the πόλεμος τῶν ἐναντιοτήτων understandable to man. Obviously, this is not far from the λόγος of fragments 1 and 2. What, then, is the "apparent harmony"? Evidently, the states of equilibrium which are observable everywhere. The eternal give and take of fire-earth-water-earth-fire is at a standstill in an ordinary object like a table. Its appearance of permanence we interpret as real permanence, whereas in fact it is involved in the eternal process of change. Real knowledge is apprehension of the "hidden harmony"; concern with the apparent is πολυμαθία.

It is interesting to correlate this fact with the concept of νόμος. One would expect the law of a city to be a good example of "apparent harmony." Social institutions are always in flux, and it is war which assigns to men their stations in life (frag. 53); yet we learn that, just as man must hold to the λόγος, the city must hold to its law.²⁹ It is not

²⁸ *Ibid.*, p. 379.

²⁹ Cf. frag. 44, where δῆμος, as Vollgraff shows (*Mnem.*, XLV [1917], 166-80), means not *plebs* but *populus*.

an apparent or momentary equilibrium but a static principle, consistent with the philosopher's well-known aristocratic political sympathies. Heraclitus' philosophy is not a closed system, consistent in every respect. Alongside the vigorous affirmation of the fact of change are hints of a static world.

An aspect of the significance of the word *λόγος*, which I believe has not been sufficiently emphasized as contributing to the Heraclitean concept, is that of proportionality, measure, and relationship. There are some fragments in which *λόγος* surely bears this meaning. In frag. 31, *λόγος* may mean either "amount" or "proportion": *θάλασσα διαχέεται καὶ μετρεῖται εἰς τὸν αὐτὸν λόγον ὁκόλος πρόσθεν ἢν ἢ γενέσθαι γῆ*. In the cyclical process of the change of the elements the sea is poured back in the same proportion, or to the same amount, as before it became earth. That Heraclitus was thinking of the quantitative relations of fire and water is shown by the last sentence of this fragment.³⁰

We may compare also frag. 115: *ψυχῆς ἐστὶ λόγος ἑαυτὸν αὐξῶν*. The *λόγος* of the soul increases itself. Doubtless Gigon is right in understanding this to refer to the need of the soul for nourishment, possibly from the blood.³¹ We learn from frag. 12 that "souls rise from dampness by evaporation." Even the soul is not a fixed and changeless thing but is involved as an integral member in the war of opposites. While it is impossible to determine the exact bearing of Heraclitus' observation, it may be directed, at least in part, toward such a conception of the soul as was held by the Orphics and Pythagoras, which tended to make it a thing wholly separate and apart from the body and superior to physical change. Heraclitus shows that change is inherent in the very constitution of the soul.

The idea of proportionality is explicitly brought into connection with the Heraclitean cosmology in frag. 94: *ἥλιος γὰρ οὐχ ὑπερβήσεται τὰ μέτρα, εἰ δὲ μή, Ἐρινύες μιν Δίκης ἐπικουροὶ ἐξευρήσουσιν*. Here the *μέτρα* of the sun are probably the measures of kindling and extinction, like those of the ever living universal fire: *πῦρ αἰείζων, ἀπτόμενον μέτρα καὶ ἀποσβευνόμενον μέτρα* (frag. 30). The interchange of elements in the

³⁰ A. Aall (*op. cit.*, pp. 33 f.) interprets *λόγος* as *Verhältnis*, "ratio," but then, to save his general interpretation of the word as *Vernunft*, says, "Wie man sich aber auch immer die Worte zurechtlegen mag, über die Bedeutung 'Wort' und auf die Bedeutung von Vernunft sind wir hingewiesen."

³¹ *Op. cit.*, p. 105.

world-process is elsewhere compared to a trade transaction: *πυρός τε ἀνταμοιβή τὰ πάντα καὶ πῦρ τῶν πάντων, ὄκωσπερ χρυσοῦ χρήματα καὶ χρημάτων χρυσός* (frag. 90).

The notion of proportionality and exchange was not original with Heraclitus, for in large part he was simply carrying out an idea which had been one of the focal points of the philosophy of the Milesians. As the war of opposites is foreshadowed in the cosmology of Anaximander, in which the interaction of the opposites separated out from the *ἄπειρον* constitutes the world-process, so the *λόγος* or proportion, the principle of regularity and meaningfulness, is anticipated in the *τάξις τοῦ χρόνου* of the earlier philosopher. Here, in frag. 94, *δίκη* has much the same function as in frag. 1 of Anaximander. Directly to be compared with the fragment of Anaximander is Heraclitus frag. 80: *εἰδέναι δὲ χρὴ τὸν πόλεμον ἔόντα ξυρόν, καὶ δίκην ἔριν, καὶ γινόμενα πάντα κατ' ἔριν καὶ χρεῶν*, where the reading *χρεῶν*, proposed by Diels for the manuscript *χρεώμενα*, is certainly correct.³² In Anaximander things pay penalty to one another for their injustice *κατὰ τὸ χρεῶν*; in Heraclitus the coming-to-be of all things (i.e., the world-process, which is essentially the reciprocal interaction of opposites) takes place *κατ' ἔριν καὶ χρεῶν*. A similar concept is to be found in the *πύκνωσις καὶ ἀραίωσις* attributed to Anaximenes. It is notable that, while he engages in vigorous polemic against Homer, Archilochus, Hesiod, Hecataeus, Xenophanes, and especially Pythagoras, Heraclitus' only mention of the Milesian philosophers is in frag. 38, which states that Thales was the first astronomer.

It has been noted that special prominence is to be given to the significances of *λόγος* connected with "counting" and "rendering account." The conjecture seems justified that these implications were much more prominent in the mind of one who used the word at the time of our philosopher than later. The meaning of "proportion" is at least as old as Theognis, who wrote in the sixth century, and many examples are found from the succeeding period.³³ Besides the fragments already quoted, Heraclitus has other analogous uses. The difficult and doubtful frag. 126a may be mentioned,³⁴ as well as 67a: "(corporei

³² Cf. *Vors.*⁵, I, 169.5 n.

³³ See the convenient collection, *ibid.*, III, 261b-62a.

³⁴ *κατὰ λόγον δὲ ὥρων συμβάλλεται ἑβδομάς κατὰ σελήνην, κτλ.*

anima) proportionaliter iuncta est." There are one or two passages from the doxography which may reflect Heraclitean usage in this particular, especially Aet. i. 28. 1; i. 7. 22.³⁵ Although these passages are obviously distorted by Stoic hands, the juxtaposition of λόγος and μέτρον and the reference to ἐναντιοδρομία are significant.

The usage is found elsewhere in the Presocratics, as in Empedocles frag. 61: ὅσα μὴ κατὰ τὸν οἰκεῖον συνῆλθε λόγον, ἐφθάρη, frag. 131, and Zeno 29A29 (Simplicius); but by far the greatest number of instances are in the Pythagorean literature, where λόγος becomes a technical term. The concept of proportion was very important in Pythagorean philosophy, and, in spite of the many difficult problems in the Pythagorean literature and tradition, it can doubtless be considered a characteristic feature even of the earliest Pythagoreanism. Pythagoras himself is said by Eudemus to have been the inventor of the method of ratios: τὴν τῶν ἀνὰ λόγον πραγματείαν ἀνεύρεν.³⁶ The Pythagoreans found the πάθη καὶ λόγους of harmony in numbers.³⁷ In the oldest Pythagorean writers of whom we have any considerable fragments, Archytas and Philolaus, λόγος is taken for granted as a technical term.³⁸ I would suggest that, in using the word, Heraclitus may have been influenced by Pythagoras. There are other indications of similar influences. There can be little doubt that, when he speaks of ἄρμονία, he is thinking of Pythagoras' work.³⁹ Some of the fragments concerned would not in themselves necessarily suggest a musical reference, as frag. 8 (τὸ ἀντίξουν συμφέρον καὶ ἐκ τῶν διαφερόντων καλλίστην ἄρμονίαν) or frag. 54 (ἄρμονίη ἀφανῆς φανερῆς κρείττων). But compare with the first of these Philolaus' definition of harmony: ἔστι γὰρ ἄρμονία

³⁵ Vors.⁵, 22 A 8.

³⁶ Procl. in *Eucl.* 65.11; Friedlein (Vors.⁵, 14.6a).

³⁷ Ar. *Met.* A 5. 985b23 ff. (Vors.⁵, 58 B 4).

³⁸ Arch. frag. 2, Ptol. *Harm.* i. 13, p. 30 Düring (Vors.⁵, 47 A 16), *Theol. Arithm.*, p. 82. 10 deFalco (Vors.⁵, 44 A 13, I, 401.17). See further the examples given by Kranz, Vors.⁵, III, 261b–62a; Nicomachus *Introd. arithm.*, ii. 21. 3 (p. 120 Hoche); and the notes of D'Ooge, Robbins, and Karpinski, *Nicomachus of Gerasa, Introduction to Arithmetic* (New York, 1926), pp. 264–65.

³⁹ Cf. H. Fränkel, "A Thought Pattern in Heraclitus," *AJP*, LIX (1938), 321; W. Jaeger, *Nemesios von Emesa* (Berlin, 1914), p. 109: "Die harmonische Bildung der Gegensätze, dies aus der Musiktheorie genommene Bild Heraklits mutet pythagoreisch an. Er spricht ja von der Leier. Dass er Pythagoras in der Polemik kennt, wissen wir. Aber er hat von ihm Wesentliches gelernt."

πολυμυγέων ἔνωσις καὶ δίχα φρονούντων συμφρόνησις (frag. 10) and with the second the phrase from the catechism of the Pythagorean acusmatics:⁴⁰ τί κάλλιστον; ἁρμονία. That a reference to music was at the back of Heraclitus' mind is shown clearly by such phrases as οὐ γὰρ ἂν εἶναι ἁρμονίαν μὴ ὄντος ὀξέος καὶ βαρέος,⁴¹ the musical reference of frag. 10, or the famous frag. 51: οὐ ξυνιάσιν ὅκως διαφερόμενον ἔωυτῷ ὁμολογείει· παλίντροπος ἁρμονίη ὅκωσπερ τόξου καὶ λύρης.

The use of the word κόσμος for the world is analogous to the use of ἁρμονία. As the latter denotes the fitting-together of things, κόσμος means primarily the *order* in which particulars work together to form a unified whole. The two terms are connected by Philolaus in frag. 6. The *Wortindex* (p. 241a23 ff.) shows that the word κόσμος was frequently used by the Pythagoreans but not by the Ionians or the Ionian tradition. It is very frequent in the doxography, but not attested for the actual words of the philosophers except Heraclitus, Empedocles, and the Pythagoreans. Pythagoras himself is reported to have been the first to call the heaven by that name.⁴²

In a recent article Hermann Fränkel has shown that the concept of the geometrical proportion runs through the whole of Heraclitus' thought, forming a "thought pattern" which serves as a framework for many of his ideas and at the same time influences to a great extent the substance of Heraclitus' thought.⁴³ For example, in frag. 79, the relations of man to god are clarified by the use of a geometrical progression: ἀνὴρ νῆπιος ἤκουσε πρὸς δαίμονος, ὅκωσπερ παῖς πρὸς ἀνδρός. That is to say, god:man::man:child. As Fränkel says, this observation shows primarily the comparative lowliness of man. He is wise in comparison with a child, but foolish when compared to a god.

It is not necessary to examine in detail all the examples discussed by Fränkel. They show convincingly that the idea of the geometrical proportion pervades Heraclitus' philosophy. But what is the significance of this in relation to the substance of his beliefs and point of view? Fränkel thinks of Heraclitus' activity as a search for a meta-

⁴⁰ *Iam. V.P.* 82.

⁴¹ *Ar. Eud. Eth.* H 1. 1235a28.

⁴² *Aet. ii. 1. 1* (*Vors.*⁵, 14. 21): Πυθαγόρας πρῶτος ὠνόμασε τὴν τῶν ὄλων περιοχὴν ἐκ τῆς ἐν αὐτῷ τάξεως.

⁴³ *Op. cit.*, pp. 309-37.

physical reality which transcends the world of change. In the example given above, the worthlessness of man is to be understood by reference to the "perfection" of the divinity; and it is brought out in order to point emphatically, by contrast, toward that perfection. The same is true of the comparison of man, god, and ape in frags. 82 and 83. The thought pattern is used primarily to express the inexpressible, to bring closer by extrapolation that which is ordinarily beyond human reach. It thus becomes a device to approach the transcendental, metaphysical reality, somewhat in a mystical sense.⁴⁴ However, this does not seem entirely consistent with Heraclitus' general point of view. The principle and law embodied in the λόγος and the divinity seem to be not transcendent but immanent in the world-process. The words of frag. 79, cited above, do not in themselves prove the existence of an "absolute,"⁴⁵ but only that the divine is relatively much wiser than man. On the other hand, frag. 67, e.g., clearly shows the divinity subject to change, entering into (or being implicit in) the "war of opposites."⁴⁶

Fränkel's penetrating analysis provides welcome corroboration for the view of the λόγος expressed above and confirms the suspicion that Heraclitus may have come under the influence, in some respects, of Pythagoras.⁴⁷ Of course, it must be emphasized that, however much Heraclitus may have been influenced in his terminology or even his way of thinking by Pythagoras, he cannot in any sense be called a Pythagorean. In fact, though he has little good to say of any of his predecessors, Pythagoras is singled out especially in frag. 40, where the inadequacy of his learning is asserted, and in the extremely caustic sarcasm of frag. 129. Probably the most we are justified in conjecturing in the way of influence of Pythagoras on Heraclitus is the suggestion of the general idea of the application of proportionality to cosmic process. The mathematical and musical pronouncements of Pythagoras worked germinally in the mind of Heraclitus and helped in

⁴⁴ *Ibid.*, pp. 324 f. and n. 35. Fränkel draws a parallel between the attitude of Heraclitus and that of the medieval Christian mystics.

⁴⁵ *Ibid.*, pp. 316 f.

⁴⁶ ὁ θεὸς ἡμέρη εὐφρόνη, χειμῶν θέρος, πόλεμος εἰρήνη, κόρος λιμός . . . ἀλλοιοῦται δὲ δὼκωπερ πῦρ, ὅπῳταν συμιγῆθι θυμάσιν, ὀνομάζεται καθ' ἡδονὴν ἐκάστω.

⁴⁷ *Op. cit.*, p. 321.

shaping the form of his discourse. However, the concept carried different implications for the two systems. For Pythagoras harmony and proportion meant proper subordination of the inferior, and the existence of a transcendent principle which guaranteed the justice and the continuance of this state of affairs. For Heraclitus it meant recognition of the principle of strife and the perception of the beauty of unity rising from difference. To both the Pythagoreans and Plato true wisdom was the recognition of the changeless as the only real, whereas for Heraclitus it was the fact of change itself which was fundamental.

The content of the vision which Heraclitus desiderates is in a sense "metaphysical" in that it involves perception of essentially abstract relationships. The λόγος is present to all the phenomena of nature. It is the key to all knowledge and must be insisted upon with great emphasis. But, for all that, it does not imply a world apart from everyday life and experience.⁴⁸ In the pattern of the geometric mean (A:B::B:C) as used by Heraclitus, much emphasis is laid on the possibility or necessity of transition from one term to another. For example, in cosmology fire:sea::sea:earth;⁴⁹ the ὁδὸς ἄνω κάτω is a continual process of transformation among these elements. If the proportion is used among the Pythagoreans, the point is that the relations are unchangeable. According to Heraclitus, the fluctuating vicissitudes of life make men slaves or kings, or even gods (frag. 53), but in the Pythagorean conception some are created better, some worse—some rulers, some ruled. The principle of justice, as in Plato, is akin not to strife but to harmony; and prudence is willing submission to one's lot.⁵⁰

Perhaps the English word which can best cover most of the meaning which the λόγος has for Heraclitus is "account." The λόγος is first of all Heraclitus' story, his explanation, and perhaps even his book.

⁴⁸ It is difficult to expel from the interpretation of Heraclitus the separation of object and subject, thing and idea, God and the world, which has dominated philosophy since Plato. But even fragments like 32 and 108 probably do not involve this separation. As the latter shows clearly, the frame of reference is primarily the originality of Heraclitus' message and that which is separated from all things is not a transcendent God but a principle of explanation.

⁴⁹ Frags. 31, 36, 90, etc.; Fränkel, *op. cit.*, pp. 329 ff.

⁵⁰ Cf. *Iam. V.P.*, 130, 174-76, 183, etc.

This appears from frag. 1. But the word carries also the implication that it is a true account; it is the "meaning" of things. And since it is considered, in a sense, as itself a thing, it carries definite implications also as to the content of this true report. It is analogous to *νόμος*; and as *νόμος* is custom and usage, the way men behave, finally crystallized into a rule for behavior, so the *λόγος* indicates the way in which the world-process moves, the usage of phenomena, so to speak. As we observe the history of the world unfolding, it appears to us as a cosmos. The striking fact that there is a *νόμος* for world-events as well as for human intercourse becomes gradually apparent. This realization had been prepared but not clearly stated by the predecessors of Heraclitus. He seized upon it and made it the central point in his system, naturally exaggerating the magnitude of his advance; and he represents in a way the culmination and summing-up of a whole process of philosophical development. The nature of Heraclitus' perception of world-process is known. To him it was a war of conflicting forces, not simply drawn up on two sides but present everywhere as opposites. The *ἔρις* was for Heraclitus radical and universal, not simply a superficial or apparent struggle which is meaningless because transcended by a single omnipotent principle. This distinction is frequently overlooked by those who explain his philosophy. The *λόγος* then is the *νόμος*, the *ratio*, the explanation or meaning, and hence in a qualified sense the law or regularity inherent in the process. The *λόγος* is considered as a thing, named and spoken of as such, but not deified. I believe that Heraclitus' use of the concept will be considerably clarified if it is borne in mind that, when he said *λόγος*, there was present to his mind the complex of implications built up around the idea of proportionality, harmony, and rhythm by the Pythagoreans. Not only are there reflections of this in the language of the philosopher, but proportionality plays a significant role in the details of his system. But, most important, the world as a whole presents itself to him as a kind of harmony: *παλίντροπος ἁρμονίη, ὄκωσπερ τόξου καὶ λύρης*. Perhaps the perception of the amount he had in common with Pythagoras intensified Heraclitus' opposition to the latter and occasioned him to emphasize and define more clearly the uniqueness of his own theory.