

Heraclitus' Quarrel with Polymathy and *Historiê*

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SUMMARY: Heraclitus' attitude towards polymathy (B40) and inquiry or *historiê* (B129) is controversial, although most scholars believe that he was a practicing *histôr* who thought that polymathy was a necessary, but not a sufficient, condition for "understanding." Through a study of *historiê* and polymathy as practiced by those whom Heraclitus explicitly attacks, and by other practitioners of the sixth and fifth centuries, this paper argues that the *histores* were dependent upon polymathy, and that since Heraclitus believes that polymathy is an impediment to understanding, he would not count himself among the polymaths and *histores*.

MANY STUDENTS OF HERACLITUS try to separate his quarrel with the polymaths from polymathy and his quarrel with Pythagoras from "inquiry" or *historiê*, which Heraclitus says Pythagoras practiced above all others.¹ Scholars make these separations because they take Heraclitus to be both a polymath and a *histôr*. The *histores* are a new breed of intellectuals who emerged from Ionia in the sixth century, and they are customarily portrayed as stepping beyond the boundaries of traditional learning. They do not call upon the Muses; indeed they are credited with taking up a critical attitude towards the tradition of poetry and mythology. Above all they are applauded for introducing the new methodology of firsthand research into their topics, which in some cases involved travel to faraway places and peoples for the collection of information.² The *histores* abandoned verse for prose, providing the earliest books in

¹ Unless otherwise noted, the texts and references are those of Diels-Kranz (henceforth D-K). For ease of reading, iota subscripts replace iota adscripts. References to Heraclitus are to the text of Jacoby.

² E.g., Snell 143–44; Burkert 1972: 210; Fränkel 125; Kahn 1979: 96–97, 99–100, 106; Leshner 1992: 4, 154–55.

Greek prose on a wide array of topics: the cosmologies of natural philosophy, mythographies, geographies, records of foreign travel and people, and what more narrowly count as “histories,” such as the *historiê* of Herodotus. The prosaic style of the *histores* becomes the standard medium of the early Greek philosophers, aside from the notable anomalies of the verse of Parmenides and Empedocles, as well as the earlier poetry of Xenophanes. Heraclitus’ cosmological speculation is reason enough for most scholars to place him among the *histores*.³ Heraclitus, however, does not treat polymathy and *historiê* in a positive way, and he would not count himself as a polymath or as a *histôr*. The practice of *historiê* in his day is dependent upon polymathy, which Heraclitus judges to be an obstacle to “understanding.”

1. FRAGMENTS B40 AND B129 D-K

Heraclitus mentions “polymathy” in unflattering circumstances in two fragments, B40 and B129; *historiê* he mentions only in B129 and B35. In B40 Heraclitus names a motley crew of polymaths whose polymathy has failed to render them wise:

πολυμαθὴν νόον οὐ διδάσκει· Ἡσίοδον γὰρ ἂν ἐδίδαξε καὶ Πυθαγόρην αὐτίς τε Ξενοφάνεά τε καὶ Ἑκαταῖον.⁴

Polymathy does not teach understanding; for it would have taught Hesiod and Pythagoras, and also Xenophanes and Hecataeus.

Hesiod is an epic poet of great venerability from the dim past, a theologian who composed the most influential theogony among the Greeks, and a moralist whose poem of moral advice, addressed to his delinquent brother, becomes the standard manual for traditional Greek values. The other three polymaths are probably older contemporaries of Heraclitus. Pythagoras of Samos was a politically active moral and spiritual teacher who gathered a number of students around him in southern Italy. He published no book, but depended instead for the dissemination and preservation of his beliefs upon his oral teaching and a number of sayings credited to him. Xenophanes of Colophon wrote satires in hexameters and iambics, as well as elegies, and he made his living as an itinerant rhapsode who probably performed some of his own compositions. He is a new theologian, highly critical of traditional religious beliefs, who specifically criticizes Homer and Hesiod for their scan-

³ Kahn 1983: 114 adds that Heraclitus’ choice of prose is a further display of his credentials as a *histôr*; cf. Kahn 1979: 97.

⁴ Diels prints νόον ἔχειν, although the ἔχειν is not present in most of the citations, and Marcovich 64 gives convincing reasons for excluding it.

dalous stories about the gods, and who rids the divine of traditional anthropomorphisms. In his poems he also addresses issues of concern to natural philosophers or *physiologoi*, and thus to some degree he too took up a study of nature. Hecataeus of Miletus is sometimes labeled the first “historian.” He wrote a mythography, which in some of the testimonies goes under the title of Ἱστορίαι, although no form of the noun appears in his fragments. His mythography is an inquiry into the genealogies of the descendents of Heracles and Deucalion and of other families who claimed a divine origin, including Hecataeus’ own family, and in his research he makes efforts at offering rationalized versions of the legends tradition and the poets have passed down. Hecataeus is also the first of the Greek geographers who published a geography, *Journey around the World*, Περιήγησις, and some of the research he puts into his book comes from his travels to Asia and Egypt. The words αὐτίς τε of B40 would appear purposely to set off Hesiod and Pythagoras from Xenophanes and Hecataeus,⁵ and Heraclitus has good reason to pair Hesiod with Pythagoras and Xenophanes with Hecataeus.

In B129 Heraclitus names Pythagoras as the most outstanding practitioner of *historiê*:

Πυθαγόρης Μνησάρχου ἱστορίην ἥσκησεν ἀνθρώπων μάλιστα πάντων
καὶ ἐκλεξάμενος ταύτας τὰς συγγραφὰς ἐποιήσατο ἑαυτοῦ σοφίην,
πολυμαθίην, κακοτεχνίην.

Pythagoras son of Mnesarchus pursued inquiry farther than all men, and selecting from these books made a wisdom of his own, polymathy, malpractice.

Heraclitus here abuses Pythagoras, whom in another fragment he calls the “prince of praters” (B81a κοπίδων ... ἀρχηγός). When Heraclitus designates the despised Pythagoras as the prime practitioner of *historiê*, this does not put its practice in the best light, and polymathy fares no better when Heraclitus uses it, along with malpractice, to describe the “wisdom” of Pythagoras. Pythagoras, however, presents special problems for any assessment of him, not least of which is that without the lead of Heraclitus (practically) no one today would ever think of placing him among the *histores*.

⁵ Marcovich 64–65 and Burkert 1972: 210. Kahn 2001: 16–17 emphatically disagrees, however. He asserts that B40 may be read as placing Pythagoras squarely in the company of Xenophanes and Hecataeus, not merely because of their common polymathy, but because of Heraclitus’ association of Pythagoras with *historiê* in B129. If Pythagoras had written a book, Kahn 17 n. 32 contends that it would have been “intermediate” between those of Anaximander and Philolaus against Burkert’s suggestion that his book would have been in “the most favorable case” like that of Pherecydes of Syros.

2. POLYMATHS AND *HISTORES*

Heraclitus plausibly was the wordsmith who coined πολυμαθία,⁶ but he is not responsible for the word ἱστορίη he uses to describe the enterprise of Pythagoras. The usual analysis of ἵστωρ takes it to mean “eyewitness” because of the common belief that it has the same etymological root as ἰδεῖν, “to see,” and εἰδέναι, “to know.”⁷ On the basis of this reading *historiê* suggests knowledge gained through firsthand observation, but more recent scholarship argues for a different etymological provenance for ἵστωρ and for different renderings, such as a “convener,” one who convenes the judges who assess a dispute,⁸ or an “arbitrator” in a dispute.⁹ The practice of *historiê* would not then be so much the pursuit of firsthand observation as the adjudication of material gathered from firsthand and secondhand sources.

Herodotus, who flourished some fifty or so years after Heraclitus,¹⁰ provides us with our earliest surviving example of a *historiê* in his history of the Persian Wars, and he is the first author we know of who so labeled his research. Although Thales probably left no book,¹¹ Diogenes Laertius attributes authorship to Anaximander (2.2) and Anaximenes (2.3). What titles, if any, the Milesian *physiologoi* gave their books are irretrievably lost, although by the time of Plato their research went under the description of ἱστορία περὶ φύσεως (*Phd.* 96a), and a fragment of Euripides indicates that during his lifetime ἱστορίη is associated with natural philosophy (910 Nauck). A strong parallel holds between the Milesian *physiologoi* and *histores*, like their fellow Milesian Hecataeus, possibly a younger contemporary of Anaximenes. The *physiologoi* demythologize or rationalize nature, just as Hecataeus rationalizes traditional history as he finds it in the stories of the heroes handed down by the poets, and just as the theologian Xenophanes rationalizes the divine by purifying it of the cruder anthropomorphisms of the religious tradition. The Milesian *physiologoi* do not ground their “demythologies” upon a sure foundation in observation, but they largely depend upon what they take to be plausible through an appeal to natural forces without invoking anthropomorphic divine powers of superhuman nature, just as Hecataeus tries to explain human events without an appeal to extrahuman capacities. The Milesian

⁶ Kahn 1979: 37.

⁷ Drews 14, 150 n. 47; Marcovich 26 with n. 3.

⁸ Floyd.

⁹ Connor.

¹⁰ The consensus places Heraclitus' maturity at around 500, and Herodotus was born a little before the Persian Wars and lived up to the Peloponnesian War (D.H. *Th.* 5).

¹¹ Aristotle has no book by Thales: *Metaph.* 984a2, *Cael.* 294a29, and *de An.* 405a19.

natural philosophers are peculiarly interested in expunging the divine from *meteôra*, just as Xenophanes appears to be,¹² perhaps because meteorological phenomena had a special place in Greek religion as omens from the gods. Weather phenomena provided δεισσημόσιναι, “signs from Zeus” (cf. Ar. *Ach.* 170–71, *Nu.* 579–80); also portentous were eclipses (Th. 7.50) and earthquakes (Th. 5.45). Thales probably gives a naturalistic account of earthquakes as the rocking of the earth upon the water it is floating upon (A15), and his explanation may be appreciated as a rationalization of the sea-god Poseidon's epithet of “earth-shaker” (ἐννοσίγαιος). Anaximander is perhaps the most far-reaching of the Milesian *physiologoi* in his demythologizing of natural phenomena, since, in addition to cosmogony, meteorology, and astronomy (A11), he formulates naturalistic explanations for the origins of animals (A30) and humans (A10, A30), and undertakes a study of geography, publishing the Greeks' first map of the world (A1, D.L. 2.2).

Hecataeus is noteworthy for exercising critical judgment in the research for his mythography. He expresses his independence of mind in the proem to his mythography when he declares his commitment to the truth as it appears to him, and he states his critical attitude towards the “stories” or “reports” (*logoi*) of his fellow Greeks when he describes them as “many and absurd” (F1a). He does not reject outright the legendary stories of the heroes, but instead tries to discern the truth behind them by rationalizing away their incredible accretions. For example, he explains away Heracles' abduction of Cerberus (*Il.* 8.366–68) as his capture of a snake that had acquired the sobriquet “the dog of Hades” because of its deadly bite (F27, cf. F25).¹³ Etymology as a rational tool for research finds a place in Hecataeus' inquiries (just as it does in Heraclitus' enterprise), when, for instance, he explains that the origin of the place name of “Mycenae” is μύκης, the “cap” that had fallen off Perseus' scabbard (F22). In his geography Hecataeus provides a map of the world, probably an elaboration upon the map made by his fellow Milesian Anaximander,¹⁴ and he illustrates it with reports on the countries and cities and the ways of their inhabitants, some of which he probably drew from firsthand observations made in his travels.

In the scattered statements Herodotus makes about his procedure for putting together his history, he provides us with the most comments in keeping with the aspirations classical scholars typically ascribe to the early *histores*,

¹² Xenophanes B30, B32, A39, A40, A41, A44, A45, cf. A52.

¹³ On Hecataeus' rationalization of myths, as well as other dimensions of his rationalism, see Fowler 71, 78.

¹⁴ Thus reports Agathemerus, *Ge. Inf.* 1.1 (T12a); the view of Pearson 28, Fränkel 343, and Kahn 1960: 82–83.

and he very probably furnishes these scholars with their positive conception of *historiê*. Herodotus announces in his proem that his book is a “display” of his ἱστορίη, and at points he stresses that he has witnessed much of what he reports upon (2.99, cf. 5.59). He will confess that he heeds the “reports” (*logoi*) of others (2.3, 147, 7.35), and will admit when he has been unable to learn the truth about some topic (2.19, 103, 6.14). Herodotus often records alternative reports of events, in some cases reserving his judgment (4.96), in others deciding between the alternatives (4.11). Herodotus tries to remain aloof from some of the material he records by declaring as a general principle that he is only obliged to recount, not to believe, everything reported (7.152). Like Hecataeus, he rationalizes some of his fabulous material: he surmises that the “speaking dove” of the oracle at Dodona was a foreign woman whose speech sounded like the chirping of birds to the Greeks (2.55–57). Travel too plays a significant role in his research (2.3, 29, 44).

Travel is commonly associated with the learning of the *histores*. Untrustworthy stories about Thales have him studying among the Egyptians (A11), and Anaximander, the Greeks’ first cartographer, is also reputed to have been the leader of the Milesian colony to Apollonia (A3). Hecataeus is said to be an ἀνὴρ πολυπλανής (T12a), and the tradition depicts Pythagoras as a great traveler as well (Isocr. *Bus.* 28, D.L. 8.2–3). Xenophanes too seems much-traveled, since he describes himself as “tossing about” Hellas for many years (B8, cf. B45), and, like Hecataeus and the *histores* in general, he has a predilection for curiosities in his travels and in his polymathy. He inclines more towards natural oddities of a wide variety, the fossils of fish and other sea creatures (A33), St. Elmo’s fire (A39), a month-long eclipse of the sun (A41), and the resurgence of long-dormant volcanic activity (A48), but he also shares an interest with Hecataeus in cultural curiosities, such as the religious beliefs of the Ethiopians and Thracians (B16). Heraclitus may pair Xenophanes with Hecataeus in B40 because the two of them share an avid interest in travel and in cultural facts, and especially because they both rationalize away in their different manners the irrationalities of Greek mythology.¹⁵

The *physiologoi* and the mythographers are reasonably grouped together as pursuers of inquiry who readily may be associated with the later historian Herodotus. Pythagoras does not obviously have much in common with these intellectuals, although one anecdote, which is not given much credence,¹⁶ has

¹⁵ Leshner 1992: 154–55 argues that Xenophanes would count himself among the *histores* because of the importance he puts upon observation and upon information about people and nature gathered from distant places.

¹⁶ Burkert 1972: 408–9; Marcovich 69.

it that he called geometry *ιστορία* (Iam. VP 89). Since Heraclitus identifies only Pythagoras by name with the activity of *historiê*, as the one who pursued it “farther than all men” (B129), he probably takes the enterprise of Pythagoras to represent vividly the typical research practices of the *histores*. Since it is Pythagoras with whom Heraclitus twice associates polymathy, he probably judges Pythagoras’ enterprise to represent in a outstanding way what is troublesome about polymathy. Pythagoras calls then for more attention.

3. PYTHAGORAS THE POLYMATH AND *HISTÔR*

Modern students of Pythagoras believe that he never wrote a book, despite some controversy over this issue in antiquity.¹⁷ A number of *ἀκούσματα* are attributed to him, however. These “things heard” were passed along orally among Pythagoras’ disciples, or a subgroup of them, those who were called the *ἀκουσματικοί*, the “auditors,”¹⁸ and their *akousmata* represent the earliest form for the presentation and transmission of Pythagoras’ doctrines. The earliest collection of the *akousmata* dates from more than a hundred years after Pythagoras’ death,¹⁹ and since the Pythagoreans fathered their own opinions upon their founder, many of these *akousmata* he never uttered.²⁰ Most modern scholars still believe that Pythagoras is responsible for at least some of the *akousmata* and for the general form they take.²¹ Heraclitus was probably not completely ignorant of the *akousmata*, and he would have come by his knowledge of Pythagoras’ beliefs through some of the earliest of them, many of which Pythagoras himself would have formulated.

The *akousmata* resemble in form and in many cases in content the sayings of Greek proverbial wisdom, including the maxims of the Seven Wise Men.²² The maxims are largely prudential imperatives and practical advice for a sound

¹⁷ Josephus, *Contra Apionem* 1.163 (D-K 14, 18), but Diogenes tries to argue for Pythagoras as an author (8.6). See Burkert 1972: 218–20. The review of *akousmata* and Pythagoras depends heavily upon Burkert 1972; a debt is also owed to Guthrie 1962 and Kirk et al., West 1971 and 1983.

¹⁸ Iamblichus speaks of two groups of Pythagoreans, *ἀκουσματικοί* and *μαθηματικοί* (VP 81). On these two groups see Burkert 1972: 192–208.

¹⁹ Anaximander of Miletus, the younger, wrote an “exegesis” of the Pythagorean *symbola*, i.e., *akousmata* (D-K 58C6, *Suda* s.v. Anaximander), which Burkert 1972: 166 dates at about 400.

²⁰ D-K 58D6, of which the pertinent section is Iam. VP 198.

²¹ E.g., Philip 147; West 1971: 215 n. 2; Burkert 1972: 189.

²² Fehling has argued that Plato, who furnishes us with our earliest reference to the *collegium* of Seven Sages, was its creator and that it does not form a part of oral tradition. Martin and Bollansée argue convincingly against Fehling.

life, although they also include judgments upon a wide variety of human characteristics and upon a number of vices and virtues. Iamblichus, or more likely Aristotle whose book on the Pythagoreans Iamblichus is thought to excerpt at length,²³ observes that the *akousmata* resemble some of the maxims of the Seven, since both the *akousmata* and the maxims identify the superlatives of certain qualities, as the τί μάλιστα of some quality (VP 82–83, cf. D.L. 1.35, D-K 10.3 Thales 10). *Akousmata* that are in the style of the τί μάλιστα and more in line with the subject matter of the maxims of the Seven would include, “What is the most beautiful? Harmony”; “What is strongest? Judgment”; peculiarly Pythagorean would be, “The wisest of all, number, and second who establishes the names of things”; “The most sacred, the leaf of the mallow.” Iamblichus (or Aristotle) concludes that the *akousmata* are probably modeled upon the maxims, since the Sages are older than Pythagoras (VP 83).

Some *akousmata* may be classified as moral adages: “It is more holy by far to be wronged than to kill a man” (Iam. VP 155); “Do not counsel against the best interest of the one seeking counsel” (VP 84–85). Iamblichus, however, reports that the bulk of the *akousmata* concern sacrificial ritual (85), and a great number of those passed down to us are prohibitions and injunctions for the sake of self-purification. There are rules for practically every act and moment of the day, from rising in the morning, bathing and dressing, to traveling and worshiping. Dietary regulations are especially prominent. In addition to the celebrated prohibition on beans, the mallow should not be eaten, and a variety of fish are forbidden (Iam. *Protr.* 21). Of beasts only sacrificial animals may be eaten (Iam. VP 85), and only certain of these with further prohibitions on the consumption of some of their organs (Porph. VP 43). As in the maxims of the Seven, there are *akousmata* that identify the nature of things, but instead of the concern of the maxims with virtues and vices, these *akousmata* concern themselves with the features of Pythagorean theocosmology, metaphysics, and spiritualism: “What are the islands of the Blest? The sun and moon”; the sea is “the tear of Cronos”; an earthquake is an “assembly of the dead”; ringing of the ears the “voice of mightier beings”; thunder is for threatening those in Tartarus; the rainbow is the “light of the sun.” The *akousma* on the rainbow might reflect the influence of the

²³ Diogenes Laertius (8.34) uses Aristotle’s lost book *On the Pythagoreans* as one of his important sources for his reports on the Pythagoreans and the *akousmata*, as does Iamblichus (VP 31). Scholars, e.g., Burkert 1972: 166–67 with n. 5, think that much of 82–86 of Iamblichus’ *The Pythagorean Life* preserves material from Aristotle’s book, partly in his own words.

physiologos Anaximenes (A7, A18), but even so a great distance lies between the naturalistic explanations of Anaximander and Anaximenes and the spiritualistic explanations adopted by the Pythagoreans for earthquakes, thunder, and ringing ears. "The islands of the Blest," "the tear of Cronos," and the like picturesque descriptions are not mere poetic images for natural phenomena. Rather, they are remnants of a Pythagorean reinterpretation of the natural world in terms of the group's distinctive twist upon traditional mythology. Aside from the comment on the rainbow, there is nothing else in the *akousmata* that accords with the spirit of Milesian natural philosophy. The *akousmata* also do not hint at any interest in mathematics of a rigorous deductive nature, of the sort the Pythagorean tradition credits Pythagoras with.²⁴ The historical Pythagoras was probably no mathematician in the proper sense, and his interest in the properties of numbers probably lay in what he took to be their significance for his theocosmological preoccupations.²⁵ The tetractys or "fourness" is the first four natural numbers, which add up to the perfect number ten. The Pythagoreans saw in the tetractys the harmonic ratios of fourth, fifth, and octave that they believed shape the music of the spheres that the Sirens sing,²⁶ and the importance of the number ten led them to postulate the "counter-earth" so that the number of heavenly bodies would come up to ten in number (Arist. *Metaph.* 986a8–12).

Despite the strikingly revolutionary features in the teachings of Pythagoras, the *akousmata* clearly show that Pythagoras or the Pythagoreans borrow considerably from Greek folk wisdom and superstition. In form and to a significant extent in content the *akousmata* go back to the days before Pythagoras. Most scholars take it to be self-evident that those *akousmata* that, for instance, forbid "swallows in the house" (Iam. *Protr.* 21), or require "touching the earth when it thunders" (VP 156), are nothing more than ancient superstitions.²⁷ The importance the Pythagoreans place upon good advice Hesiod also stresses (*Op.* 226), as do many others in early Greek literature.²⁸ Timaeus (D.L. 8.10)

²⁴ A verdict that Kahn 2001: 10 agrees with.

²⁵ West 1971: 216; Burkert 1972: 401–82; Huffman 54–55. Kahn 1974: 169 disagrees strongly with the consensus about Pythagoras' mathematical interests, arguing that since the content of Pythagorean mathematics can be traced back to Babylonian times, and since Archytas and later mathematicians took themselves to be Pythagoreans, there is no reason to disbelieve "their implied claim" that their mathematical tradition goes back to Pythagoras. Subsequently, Kahn 2001: 14–17 augments this line of argumentation for Pythagoras' significant engagement in mathematical investigations.

²⁶ Burkert 1972: 72, 187; Philip 97–98 n. 5.

²⁷ Burnet 96; Burkert 1972: 176–78; Philip 136; Guthrie 1962: 183; Kirk et al. 229, 232 n. 1.

²⁸ Burkert 1972: 172 n. 480.

and Jerome (*Contra Rufinum* 3.39.46–47 Lardet) attribute to Pythagoras the well-known saying, “The things of friends are common,” which appears several times in Plato without attribution and which he calls a παροιμία (R. 424a) and a πάλλαι λεγόμενον (Lg. 739b–c). In one of the Homeric hymns Demeter is portrayed in her grief as shunning bathing (*h. Cer.* 50), and Burkert ticks off a number of other similarities in rituals between Pythagorean ideas and Greek mystery cults.²⁹

The *akousmata* and testimonials also indicate that the Pythagoreans borrow from Greek sources outside tradition or on its periphery, as well as from sources beyond the Greek world. The rainbow as the reflected light of the sun may have originated with Anaximenes (A7, A18), if he is earlier than Pythagoras, but what is more significant, antiquity connects Pythagoras with Orphic books and practices. Ion of Chios says that Pythagoras attributed some of his poems to Orpheus (D.L. 8.8),³⁰ and Herodotus maintains that the Egyptian prohibitions on entering a temple in woollen clothing or burying their dead in woollen shrouds “agree with those called Orphic and Bacchic,” but actually originate with “the Egyptians and Pythagoreans” (2.81).³¹ The suggestion is that the Pythagoreans are beholden to the Egyptians, and Herodotus commonly tries to trace Greek beliefs and practices back to the Egyptians, just as he accuses certain unnamed Greeks, probably Pythagoras among them, of stealing their views on immortality and metempsychosis from the Egyptians (2.123). Immortality the Egyptians believed in, but metempsychosis is certainly not a standard feature of their religion. Thus most scholars think that Herodotus’ report on metempsychosis is without any merit.³² Xenophanes attests to Pythagoras’ belief in metempsychosis (B7), and the doctrine probably predates Pythagoras in Greece, since Pherecydes of Syros, whom tradition names as the teacher of Pythagoras, is credited with advocating it (A2).

Although our knowledge of the doctrines of the Orphics and the early Pythagoreans is slight, some overlap is discernible between them, at least in their large-scale features.³³ Like the Pythagoreans, the Orphics concerned

²⁹ Burkert 1972: 177–78.

³⁰ A certain Epigenes credits the authorship of four Orphic poems to two Pythagoreans (Clem. Alex. *Strom.* 1.131, D-K 1.105.31).

³¹ There are two versions of this passage from 2.81, and the reasoning of West 1983: 8 n. 10 for accepting the longer version is compelling. See Burkert 1972: 127–28 for a careful study of the difficulties with 2.81.

³² Dodds 160 n. 29; Burkert 1972: 126; Barnes 103; Kirk et al. 220. West 1971: 62, however, gives more credence to Herodotus’ report.

³³ For Orphism see Burkert 1972, West 1983, Guthrie 1952, 1954, Linforth, and Kirk et al. A recent excellent summary is provided by Parker.

themselves with rituals of purification (Pl. *R.* 364b–65a). They adopted even stricter dietary regulations than the Pythagoreans by advocating a complete prohibition on the consumption of animal flesh (Pl. *Lg.* 782c–d),³⁴ and they probably held to some prohibition on beans (Paus. 1.37.4, cf. 8.15.3–4). Most significant, they probably believed in metempsychosis (Arist. *de An.* 410b28–30, Pl. *Cra.* 400b–c, cf. *Phd.* 62b, 70c, *Ep.* 7.335a, *Lg.* 870d–e).³⁵ Burkert draws the conclusion that the oldest sources do not support a distinction in doctrines between Orphism and early Pythagoreanism, although differences may be discerned in the history and social conditions of Orphics and Pythagoreans.³⁶ Besides metempsychosis,³⁷ there are indications of other foreign influences on Pythagoras or the Pythagoreans. Aristotle when he comments on the reasons for the Pythagorean prohibition on breaking bread notes that the practice is still found among “the barbarians” in his day (*VP* 86, D.L. 8.34–35). “White cocks” should not be sacrificed because they are dedicated to “Men” (D.L. 8.34), and although μήν means “month,” it also serves as the name of a Babylonian god. Another indication of influence from the Near East is Iamblichus’ statement that Pythagoras, “following the Magi,” banned the cremation of the dead (*VP* 154). The *akousmata* associated with Pythagoras, then, as well as testimonies from as early as the fifth century, indicate a number of influences upon him, or upon those responsible for the *akousmata*, from both within and without the Greek world.

The best attested of the views of the historical Pythagoras are his opinions on the immortality and the transmigration of the soul,³⁸ and psychology and eschatology were probably his major concerns, along with a mythological interpretation of the world-order that would provide a suitable place for gods and daimons and for immortal souls who migrate from body to body and

³⁴ See also E. *Hipp.* 952–55 and Ar. *Ra.* 1032; Burkert 1972: 180–83.

³⁵ Burkert 1972: 126, 133. Metempsychosis is certainly a feature of later Orphism as it appears in the rhapsodic theogony (F223–24 Kern). See also Dodds 149; Guthrie 1952: 182–87; Philip 137; Parker 500. See Burkert 1972: 126 n. 32 for other scholars who deny or affirm Orphic belief in transmigration.

³⁶ Burkert 1972: 131–32; cf. Philip 137–38, Dodds 171 n. 95. Guthrie 1954: 311 n. 3 thinks it is impossible to separate Orphic and Pythagorean religious beliefs, but he argues against the view that the Orphics were of the lower classes (326–32). For more on the different ways of life of Pythagoreans and Orphics see Parker and Burkert 1982.

³⁷ Scholars generally concede that the doctrine of transmigration may have been an import into Greece, although not from Egypt: Dodds 143–44; Kirk et al. 220. Burkert 1972: 133, who reviews the scholarship on metempsychosis, and Kahn 2001: 19 are two scholars who opt for a provenance in India.

³⁸ Xenophanes B7; Pythagoras D-K A8a.

from place to place for their punishments and rewards. Pythagoras would have no more sympathy with the demythologizing theology of Xenophanes and its criticisms of Homer and Hesiod (B11) than he would have with the naturalism of the Milesian *physiologoi*. One *akousma* orders that one disbelieve “no marvel about the gods or divine opinions” (*Protr.* 21).³⁹ Pythagoras is closer to Hesiod in his sentiments. They are myth-tellers who claim for themselves a superhuman knowledge of divinities and divine-like spirits. Accordingly, Heraclitus pairs Pythagoras in B40 with the ancient theologian Hesiod, and sets them apart from Xenophanes and Hecataeus who in their different ways try to abandon the irrationalities of Greek mythology.

4. THE CASE AGAINST *HISTORIÊ* AND POLYMATHY

Heraclitus’ quarrel with the polymaths and the *histores* is also a quarrel with polymathy and *historiê*. This quarrel arguably has to do with the value for “understanding” Heraclitus places upon hearsay and book-learning and upon the vast accumulation of information that lies beyond the reach of most people. The problem with *historiê*, as Heraclitus finds it practiced, is its dependence upon polymathy.

Heraclitus makes explicit mention of “books,” *συγγραφαί*, only in B129, and their reader is Pythagoras. He “pursued inquiry,” *historiê*, farther than all others, and in his pursuit he selected from “these books” what he liked, and “made a wisdom of his own.”⁴⁰ Pythagoras has his own private wisdom, and thus he falls in with the rest of mankind who are like sleepers turning away from the public world of the wakeful into their “private” world of dreams (cf. B89, B2, B17). Pythagoras’ “pursuit” of “inquiry” appears from B129 to amount merely to his pursuit of *books*,⁴¹ and hardly in his engaging in the

³⁹ Burkert 1982: 19–20 thinks it obvious that the Pythagoreans introduce no new gods, and he points out that even in their identifying Pythagoras with the Hyperborean Apollo (*VP* 140) they pick the name of a traditional deity. Burkert concludes that the Pythagoreans find a place within the “more general complex of Greek religion” as a “quasi puritan sect.”

⁴⁰ Kahn 1979: n. 79 defends the authenticity of the Greek of B129, ἐκλεξάμενος τὰς τὰς συγγραφάς, against E. Hussey’s unpublished objection that the phrase “choosing what he liked from these compositions” would require selecting “these” from some larger collection. Kahn appeals to Reinhardt for support and maintains that the oddity of the Greek is an indication of an archaic style and not of a forgery.

⁴¹ Marcovich 69 suggests that ἱστορίη implies in B129 nothing more than “travelling and inquiry after such treatises,” which he takes to be “prose treatises.” Burkert 1972: 210 argues that ἱστορίη in B129 is hardly *rationale Wissenschaft* and that the word need connote no more than the “Hesiodic type of πολυμαθία,” for evidence of which he quotes a formulation by Hermesianax of Colophon, who lived in the third century B.C.: Ἡσίοδον,

"independent research" traditionally associated with *historiê*. When Heraclitus charges Pythagoras with making a "wisdom of his own" in his pursuit of "inquiry," he dilates upon this so-called wisdom by describing it as "polymathy" and "malpractice," πολυμαθίη and κακοτεχνίη.⁴² The stress Heraclitus puts on Pythagoras' patching together for his private wisdom what he has gleaned from his reading of books makes it appear that Heraclitus is charging him with what we would condemn today as "plagiarism." Herodotus probably accuses him of borrowing his ideas about the soul from the Egyptians (2.123),⁴³ and Ion of Chios lends some credence to Herodotus' accusation when in his epigram on Pherecydes he says of him that he leads a pleasant life in his death, "if indeed Pythagoras is truly wise, who knew and examined thoroughly the thoughts of all men," εἴπερ Πυθαγόρης ἐτύμως ὁ σοφὸς περὶ πάντων ἁνθρώπων γνώμας εἶδε καὶ ἐξέμαθεν (B4.3–4 D-K, D.L. 1.120).⁴⁴ The *akousmata* make it abundantly evident that Pythagoras or the early Pythagoreans came under a number of influences, and thus it comes as no surprise that Ion would describe Pythagoras as someone who made a study of the opinions of all men, even if Ion was in no position to appreciate the full range of influences the *akousmata* indicate. Ion and Herodotus take the similarities between Orphism and Pythagoreanism to be due to the influence of the Pythagoreans. Heraclitus too may have noted the similarities, but concluded that they are due to the influence of the Orphics upon Pythagoras. Thus the Orphica may be among the συγγραφαί of B129 he accuses Pythagoras of plundering.⁴⁵ Whatever may be the case, the *akousmata* give Heraclitus good

πάσης ἥρανον ἱστορίης (F2.22 Diehl). Kahn 1974: 69–70, 2001: 16–17, however, takes Heraclitus' attribution to be evidence of Pythagoras as a ἵστωρ who is engaged in serious mathematical and cosmological inquiry. Burkert 1972: 131 argues that the συγγραφαί are Orphic poems. Kahn 1979: 113 points out that συγγραφαί are "normally" books of prose, and thus the puzzle arises: What prosaic works at this early period did Pythagoras depend upon? Anaximander, Anaximenes, and Pherecydes of Syros wrote the earliest prosaic works known to us. Scholars have suggested the book of Pherecydes, since the tradition links him with Pythagoras, and Pherecydes is also credited with belief in the soul's immortality (D-K A5) and in metempsychosis (D-K A2). See West 1971: 2 n. 3, 25 and Schibli 12 with n. 25.

⁴² Perhaps κακοτεχνίη is another word Heraclitus coined: Kahn 1979: 39.

⁴³ Burkert 1972: 126 n. 38.

⁴⁴ Schibli 12 with n. 25 takes Ion's comment on Pythagoras to be ironic, although he points out that Jacoby takes it to be genuine praise of Pythagoras. Dover 4–5 argues that the εἴπερ of B4.3 carries a sceptical force in Ionian Greek, as opposed to Attic, although in a note added to the reprint he cites an Attic example of εἴπερ with a sceptical connotation (Lys. 16.8).

⁴⁵ Burkert 1972: 130–31; for objections see Kahn 2001: 20.

reason, even if he knew only a small number of them, to think that Pythagoras borrows many of his ideas from others and is merely a compiler of opinions.

For Heraclitus the evil of what we call “plagiarism” may not lie so much in the appropriation of the opinions of others as one’s invention. No one is completely free of the influence of others, not even Heraclitus, who, despite the untraditional features of his teaching, adopts the traditional values sponsored by Hesiod and the Pythian Apollo when he endorses *sôphrosynê* (B112, B116), and he even appropriates in his own words a maxim of the Sage Bias without any acknowledgement (B104, D-K 10.3 Bias 1). The problem of appropriating the opinions of others lies in the mere reproduction of their opinions without any effort at confirming the truth of the opinions. Heraclitus takes the “wisdom” Pythagoras makes for himself to be nothing but the product of his polymathy and of his reading of books, and he does not believe that Pythagoras has any independence of thought. By contrast, Heraclitus stresses the importance of thinking for oneself: he cautions his audience not to heed him but the *logos* (B50), by which all things come to be (B1). The opinions of others may be taken over as one’s own, just as the reader of Heraclitus is invited to adopt his opinions. But these opinions should be made the reader’s own through confirming for himself their truth.

Today classical scholars commonly believe that Heraclitus does not condemn polymathy outright when he criticizes in B40 the polymaths who have failed to achieve “understanding” through their polymathy, and that his complaint is merely that it *alone* will not yield understanding. The error of Pythagoras and the polymaths sorted with him is mistaking a necessary condition for wisdom for a sufficient one.⁴⁶ Heraclitus, as Kahn thinks, still believes that wisdom depends upon “much learning”; for evidence of the value Heraclitus puts on polymathy Kahn points to B22, where the search for truth is as arduous as the search for gold, and B35, where “lovers of wisdom” must be “inquirers” into “many things.” Yet polymathy is presented in B129 as disreputable in itself when Heraclitus describes Pythagoras’ “private wisdom” as both *πολυμαθίη* and *κακοτεχνίη*. In putting these terms on a par in their application to “wisdom,” Heraclitus treats “polymathy” as just as much a pejorative as “malpractice.” One of Aristophanes’ characters associates “polymaths” with retailers of *μῦθοι* (V. 1174–79), and Plato identifies “polymaths” with those who read widely among the poets (*Lg.* 811a). The

⁴⁶ Leshner 1994: 15 with n. 29 maintains that the recent “consensus” is that extensive perceptual knowledge is a necessary, but not sufficient, condition for understanding. Among those falling in with the consensus are: Kirk 61; Marcovich 28, 59; Hussey 1972: 37; Kahn 1979: 108; Barnes 147; Robinson 182.

reading of books Heraclitus possibly associated with polymaths, those who would probably get much of their learning from book-learning, from the books of poets and the more recent *historiai*, and who do not draw directly upon the observation of the nature of things, as Heraclitus claims for himself in B55: "Whatever comes from sight, hearing, learning from experience, these I honor above all." Heraclitus may indicate his low regard for the books of others if the *logoi* of B108 includes "books," when he says that none of the *logoi* he has heard reaches the truth, that "the wise" is "set apart from all." Heraclitus too must have been a great reader. The number of authors he castigates bears witness to this, Homer, Hesiod, Archilochus, Xenophanes, and Hecataeus, and his reading would probably also have taken in both the συγγραφαί Pythagoras draws his "wisdom" from and the books of the Milesian *physiologoi*.⁴⁷ Despite his wide reading, Heraclitus is still no polymath, since his wisdom is not based on his reading, not so much because of the falsehood of the books, but because he, unlike the bookish polymath, bases his wisdom directly upon reality. The "knowledge" based on book-learning alone, without any confirmation, amounts to hearsay, what Heraclitus probably compares unfavorably in B101a with the epistemic superiority of the eyewitness: "Eyes are more exact witnesses than ears."

Some scholars have thought that the censure of Pythagoras in B129 is meant to sweep up *historiê* as well. Others believe that this conclusion is barred by B35, "Men who love wisdom (φιλοσόφους ἄνδρας) must be inquirers (ἵστορας) into right well many things," which also furnishes us with the earliest surviving use of any form of φιλόσοφος and with Heraclitus' one other reference in his surviving fragments to the activity of *historiê*. Cornford suggests that B35 is an "ironical sneer" at the polymaths and possibly at Pythagoras in particular, as the primary representative of inquiry.⁴⁸ Verdenius, however, takes the irony to go the other way, and thus he finds the "ironic sneer" in B129 in the association of Pythagoras with *historiê*.⁴⁹ There is undoubtedly a problem in harmonizing these two fragments. The severe criticism of Pythagoras in B129 should encompass *historiê*, since Pythagoras is there singled out for being one who "pursued inquiry farther than all other men,"

⁴⁷ Mansfeld 231.

⁴⁸ Cornford 1912: 186 n. 3; Guthrie 1962: 417 agrees with him. Cornford 1912: 184, however, sees Heraclitus as a mystic who is "in violent reaction" to the rationalism of Ionian *historiê*. Later Cornford 1952: 116, 150 softens his charge of mysticism. Fränkel 384 too holds that Heraclitus has "only a savage contempt" for *historiê*, and Lesher 1999: 234 also thinks that he holds it in disregard.

⁴⁹ Verdenius 280–84. Kahn 1979 and Robinson recognize no irony in B35.

and for what his pursuit of inquiry really amounts to and the bad consequences that ensue therefrom. But if *historiē* is discredited, it would discredit as well those “philosophical men” who are obliged to be “inquirers” into many things. Yet this is exactly what we should expect, since the ancient world honors Pythagoras with the coinage of “philosopher” and with being the first to give himself this title (D.L. 1.12, Cic. *Tusc.* 5.8–9).⁵⁰ Heraclitus is ridiculing the neologism, and he leaves the word to those parvenus like Pythagoras who pursue “inquiry.” In spite of derisive applications of “wisdom” (B129) and “wise” (B56), Heraclitus continues to cherish the old word σοφός, which he uses without irony in B50, B108, and B41, and he even uses it to describe the divine in B32. Heraclitus prefers to stay with the word tradition used to designate the ἐπὶ σοφοί (Pl. *Prt.* 343b). If this analysis of B35 is correct, then the earliest surviving use of “philosopher” is one of mockery.

It is not difficult to see why Heraclitus is hostile to any form of second-hand learning, to both hearsay and book-learning. Reliance on secondhand learning is at odds with the kind of firsthand experience Heraclitus considers to be important or essential for “understanding,” and it tends to nourish credulity. The polymath Hecataeus illustrates vividly the foible of credulity in his exploitation of the stories of others in his research, despite his expression in the proem to his mythography of his independence of mind and of his critical attitude towards the “stories” of the Greeks (F1a).⁵¹ Hecataeus’ inquiry does not amount to an objective examination of his material with a thoroughgoing rationalism. He accepts the stories of the poets, only divesting them of their irrationalities, and he remains capable of reporting outrageous things, including a talking ram (F17, cf. F15). He records in his *Journey* the fabulous Egyptian story (as Herodotus preserves it) of the phoenix (F324, Hdt. 2.73), the Egyptian story of the floating island of Chembis (F305), and the story of the Ethiopian tribe of the Σκιάποδες who would shade themselves from the sun by lying on their back and raising their feet above them (F327). For the construction of his map of the world Hecataeus draws upon Anaximander’s,⁵²

⁵⁰ The historical value of this anecdote of Heraclides of Pontus is much disputed. Burkert 1972: 65 does not credit it; Gottschalk 23–33 with nn. 56 and 57 reviews the literature on the anecdote and provides a study of its renditions by Diogenes and Cicero. Although Gottschalk 30 with n. 59 disputes just what should be credited to Heraclides’ tale, he contends against Burkert that the historical Pythagoras could have “used or even invented the word” φιλόσοφος.

⁵¹ Fränkel 346, like Drews 16 with n. 59, 152 n. 61 and others, takes F1a to be Hecataeus’ declaration of a commitment to the critical examination of the stories of the Greeks. See Pearson 97–98 for a more harsh assessment of Hecataeus’ rationalism.

⁵² Agathemerus, *Ge. Inf.* 1.1 (T12a); Pearson 28; Fränkel 343.

and these maps bring a smile to Herodotus' face because of the artificial symmetry in which they depict the great land masses and waterways of the world. These cartographers make Europe and Asia equal in size, and draw Ocean as flowing around the inhabited earth in a circle "as with a compass" (4.36, cf. 4.42). Homer places Ocean in a circle around the earth (*Il.* 18.607–8), and he also speaks of Ocean as the spring of all great waters (*Il.* 21.195–97). Hesiod explicitly names the Nile as a river that has Ocean for its source (*Th.* 337–38), and Hecataeus does the same, as Herodotus indicates (2.23, F302). Hecataeus and Anaximander both draw upon the poetic tradition for their geography, and Hecataeus apparently draws farther upon it for his opinions about Ocean and the Nile (D.S. 1.37.3).

The *pater historiae* suffers from the same weaknesses as Hecataeus, including his own highly symmetrical sense of geography (2.33–34). Despite the critical attitude Herodotus takes from time to time towards the reports he records (2.23, 3.115–16, 4.77, 96, 7.152), his critical acumen fails him when, for example, he records the Persian story about giant ants found in India that are bigger than foxes (3.102), or when he reports what he "learned" (πυνθάνόμενος) in his travel to Arabia about "flying snakes" with wings like bats (2.75–76, 3.107, cf. 3.111). Herodotus, like Hecataeus, is comfortable with rationalization, firsthand observation, and fantasy.⁵³ Eusebius tells us that Porphyry charges Herodotus with appropriating almost verbatim Hecataeus' reports on the phoenix, the hippopotamus, and the Egyptian technique for capturing crocodiles.⁵⁴ Hecataeus relies upon the reports of others for his fabulous story of the Phoenix, and Herodotus passes it along without any attribution and with only the comment that he does not find it credible. Herodotus mentions Hecataeus a few times, including the celebrated story of his wise counsel to the Milesians (5.36). In one case Herodotus refers to Hecataeus as one of his sources (6.137),⁵⁵ but he does not acknowledge his debt to Hecataeus for his information on the animals of Egypt, and he probably owes him much more, as is indicated by the statement of Hermogenes of Tarsus that he "especially derived profit" from Hecataeus (*Id.* 2.411) and

⁵³ Connor 13–14 defends Herodotus against the charge of gullibility by arguing that Herodotus held himself to be an arbitrator among conflicting accounts, who was under no obligation to criticize a story unless it was contested by those giving testimony. Hence Herodotus allows implausible stories to stand that are reported to him in an uncontested fashion. Yet Connor admits that Herodotus will often offer his own opinion even when the story remains uncontested (e.g., 3.116).

⁵⁴ Eusebius, *Praeparatio evangelica* 10.3.466B (F324a); Hdt. 2.73, 71, 70.

⁵⁵ The other references: 2.143 (genealogy); 5.125 (additional advice to the Milesians).

by the report of Arrian of Bithynia (*Anab.* 5.6.5) that both Hecataeus (F301) and Herodotus (2.5) describe Egypt as “the gift of the river.”⁵⁶ Book-learning is just a further kind of dependence upon hearsay and the authority of others, and the independent “inquiry” of the new critical researchers is thus compromised by their reliance upon this unverified “learning.”

The dependence of the poets upon the Muses amounts to another variety of secondhand learning. The poets and in many cases the *histores* depend upon untrustworthy “witnesses” for their learning, and Heraclitus sweeps up both poets and *histores* in his criticisms of their “polymathy” in B40. Heraclitus might also think that the Milesian cosmologists depend too heavily upon their secondhand polymathy in the formulation of their cosmologies. Aristotle ranks the earliest *physiologoi* alongside Hesiod as those who, like Hesiod, believe that every thing comes to be (*Cael.* 3.1.298b25–33.),⁵⁷ and, along with Hesiod, Anaximander and Anaximenes take the cosmos to come into being. Since there is no obvious or empirical reason for supposing that the cosmos comes to be, Anaximander and Anaximenes might reasonably be charged with being unduly under the influence of traditional beliefs about the world-order as they may have learned about them from the poetic theogony of Hesiod or from other channels of learning.⁵⁸ Anaximander and Hecataeus draw Ocean in a perfect circle around the land areas of the earth (*Hdt.* 4.36), just as Homer places Ocean in a circle around the inhabited earth (*Il.* 18.607–8). Despite discrepancies among the testimonies, it is evident that Anaximander calculates cosmic distances on the basis of reasons that have nothing to do with observation. Hippolytus, a reliable witness on the whole, reports that Anaximander judged the circle of the sun to be twenty-seven times the diameter of the earth and the circle of the moon to be eighteen times the earth’s diameter (A11), and pseudo-Plutarch reports that he held the earth to be three times as broad as it is high (A10). In these testimonials cosmic distances are calculated in multiples of three, and no empirical reason could possibly account for this procedure. We find antecedently in Hesiod the same urge towards symmetry in cosmic distances: heaven is above the earth at the same distance Tartarus is beneath the earth (*Th.* 720–21). Heraclitus might plausi-

⁵⁶ For Herodotus’ debt to Hecataeus see Pearson 23–24, 57–58, 62; see also Lloyd 1. 128 and Hornblower 16 with n. 24, who gives additional references.

⁵⁷ Aristotle, however, mentions only Heraclitus as his example of these early natural philosophers whom he ranks with Hesiod.

⁵⁸ Cornford 1952 and West 1971 provide the two most notable efforts at discerning a heavy debt the Milesian cosmologists owe to mythological theogonies; also West 1994: 305–7. See also Stokes; Vlastos 1955b; Solmsen. Schibli 30–33, 37 sees parallels between Pherecydes and Anaximander.

bly, then, have come to think that the *physiologoi* refashion poetic beliefs about the world-order into their own naturalistic cosmogony. Heraclitus, however, may justly claim to be truly independent in his cosmological speculations when he proclaims grandiloquently that the cosmos “always was and is and will be fire ever living” (B30), since he thereby rejects cosmogony, which provides the cornerstone of Milesian cosmology.⁵⁹

Yet, it may be urged, Heraclitus was surely under the influence of the *physiologoi*, since he too is a *physiologos*, and thus he could not be altogether hostile to the new inquirers and their interests in cosmology. Aristotle, Theophrastus, and Simplicius certainly think he is just another of the *physiologoi*.⁶⁰ Kirk and others have suggested that Anaximander may be a subject of Heraclitus' criticism when in B80 he stresses that “justice is strife.”⁶¹ Heraclitus may be expressing his disagreement with Anaximander's view that “injustice” is done when one of the cosmic powers dominates another one (B1, A9). An unqualified charge of “injustice” is inappropriate at the cosmic level, since the generation of every power is the destruction of another (B36, B76). If Kirk is right, then B80 would tell us that Heraclitus would correct the mistakes in the natural philosophy of Anaximander, although it does not tell us that he corrects in a large-scale manner the mechanics of Anaximander's natural philosophy, but rather the evaluation he placed upon the natural phenomenon. Aristotle and Theophrastus try to fit Heraclitus into their idea of the monism of the early *physiologoi*, of which Anaximenes provides a credible example in his belief that all things are basically air (A7). Theophrastus reports that fire serves as the monistic material in Heraclitus' natural philosophy. It provides the underlying subject of change, and all things are an “exchange” (ἀμοιβή) for fire, in which different things come to be through the rarefaction or condensation of fire. Yet Theophrastus has to admit that Heraclitus' monistic explanation of “coming-to-be” is “not at all clear” (D.L. 9.8). Heraclitus may fail to explain his monism to Theophrastus' satisfaction

⁵⁹ Heraclitus' rejection of cosmogony is controversial. Barnes 61–62 underscores Heraclitus' disagreement with the Milesians in his rejection of cosmogony in B30, and Cornford 1952: 188 too understands Heraclitus as rejecting Milesian cosmogony in the fragment. Aristotle (*Cael.* 279b12–17) and the doxography (D.L. 9.8) ascribe beliefs to Heraclitus that conflict with his rejection of cosmogony and cosmophthory. Kahn 1979: 132–34 offers a non-technical reading of “cosmos” in B30, and he does not think that the fragment should be read as denying cosmogony and cosmophthory. There are difficulties over just what should count as the words of Heraclitus in B30; see, e.g., the survey of these by Marcovich 268–72.

⁶⁰ Arist. *Metaph.* 984a7, *Cael.* 298b25–33, Thphr. *apud* Simp. in *Phys.* 23.33 (A5).

⁶¹ E.g., Kirk 401; Vlastos 1955a: 356; Kahn 1979: 206–7.

because he is not a monist of the sort Aristotle and Theophrastus have in mind.⁶² Theophrastus' use of the word ὁμοιβή to explain how fire stands to "all things" indicates that he bases his analysis, at least in part, on the content of fragment B90, since in this text Heraclitus does say that fire is an ἀνταμοιβή for all things, "just as goods are an exchange for gold and gold for goods." The mercantile image of B90 does not lend itself at all to a monistic model for the explanation of one element's changing into another through the rarefaction or condensation of some basic material. Instead of the exchange of gold for goods, an adherent of Aristotle's idea of monism would do better to call upon an image in which gold bullion is minted into coins and coins are melted back into bullion.

Heraclitus may have interests in natural philosophy, but this would hardly mean that he looks favorably on the views of its other practitioners. In Heraclitus' eyes, Anaximander may understand nothing about the proper evaluation of the interplay between cosmic opposing forces. Anaximenes may fail to understand how a single element or material may function as the basis for all else, and thus his monism cannot be correct in Heraclitus' judgment. Heraclitus differs profoundly from the *physiologoi* in his rejection of cosmogony and cosmophthory for an eternal cosmos (B30). In the surviving texts and even in the testimonies there is little evidence to suggest that Heraclitus developed a natural philosophy in any great detail, certainly not the kind of detail the testimonies ascribe to the speculations of Anaximander and Anaximenes.⁶³ Heraclitus is possibly not interested in natural philosophy for

⁶² Even though Barnes 63 thinks the evidence is "thin," he adopts Aristotle's monistic view of Heraclitus. Heraclitus certainly privileges fire (B30, B31, B36, B76), but scholars have debated in just what way he does so. For interpretations that contest Aristotle's see Vlastos 1955a: 360–61, Wiggins 13–18, and Graham.

⁶³ Besides cosmogony, Anaximander and Anaximenes concern themselves with a wide array of topics concerning natural phenomena. Theophrastus does indicate that Heraclitus shares some of the natural philosopher's interest in natural phenomena. Certain "bowls" in the heaven trap bright exhalations from earth and sea; this mechanism yields the heavenly bodies, and the exhalations account for many other sorts of heavenly and meteorological phenomena. Theophrastus, however, concludes by saying that Heraclitus offers no explanation of "what the earth is like, or even about the bowls" (D.L. 9.9–11). Aëtius also contributes a few comments on Heraclitus' interest in the stars, sun, moon, eclipses, and meteorological phenomena (A11, A12, A14). Kahn 1979: 291–93 is highly critical of the Theophrastean doxography, and he dismisses the celestial bowls as confusions based on Theophrastus' effort to tease a broad natural philosophy from the riddling text of Heraclitus. West 1971: 112 too stresses Heraclitus' lack of interest in the usual range of cosmological topics pursued by the Milesians, and West notes the report of Diogenes (9.15) that the grammarian Diodotus in his commentary on Heraclitus held that his book was

its own sake, but only for the sake of what he may draw from it to exhibit his understanding of the principle of all things. Even though Heraclitus may have benefited from the teachings of the *physiologoi*, he need not approve of their natural philosophy or, what is more pertinent, how they may have come by their beliefs.

5. THE THREE PATHWAYS TO UNDERSTANDING

Heraclitus differs markedly from the polymath *histores* over the way to achieve understanding. He speaks of a *logos*, by which all things come to be (B1), and that men must hearken to so that they may become wise (B50). Central to the message of this *logos* is that “all things are one” (B50), and behind this unity is the unity of opposites. This truth is hidden—“Nature loves to hide” (B123,⁶⁴ cf. B54)—and what lies hidden is contrary to common sense and the teachings of the respected authorities of old and also of those new experts who would like to displace them. Hidden beneath the placid surface of things there lies within the essence of each thing a “strife” between opposing powers, without which the cosmos and everything in it would be unable to maintain itself; what further outrages ordinary ways of thinking is that this strife at the heart of things is beneficent and just. The opposing powers within the essence of each thing work together in their striving with one another so as to yield a unified object: “They do not comprehend how each thing quarreling with itself agrees; it is a connection turning back on itself, like that of the bow and the lyre” (B51).⁶⁵ No bow or lyre would exist without the tension between their wood and string that comes from their powers of pulling in opposite directions. The examples of bow and lyre have a broad application, and they are probably emblematic of the workings of the cosmos, since the bow and the lyre may exemplify the distant extremes of the violence displayed in war and hunting and the tranquility exhibited in the pursuit of music and poetic recitation. An example of the unity of opposites at the cosmic level lies in the relationship between the great cosmic powers of the hot and cold, the dry and moist; they are tightly bound together even as they strive for dominion over one another, since the destruction of one power is the generation of

not about nature, but περὶ πολιτείας, and that the comments on nature are merely illustrations of this more basic theme. A new fragment of Heraclitus (*P.Oxy.* 3710, col. ii 43–47, col. iii 7–10) provides, however, evidence for his interest in astronomical phenomena; for which see West 1987.

⁶⁴ See Kirk 227–31 for φύσις as the “nature” of things.

⁶⁵ See Kahn 1979: 195–96 for the decision in favor of παλίντροπος over παλίντονος in B51, both of which readings have come down to us.

another: “death for water is the birth of earth, from earth water is born” (B36). Birth and death unite in a single event.

The truth is “hidden,” yet paradoxically is “obvious.” Homer is the “wisest of all the Greeks,” yet he is unable to recognize the “obvious” (B56). Despite the obscurity of the truth, it remains readily open to everyone through simple means of comprehension. Simple arguments premised on trivial empirical truths help establish the truth of the unity of opposites: “Sea water is the purest and foulest of water, for fish it is drinkable and life-sustaining, for men it is undrinkable and deadly” (B61, cf. B88). Linguistic analysis also yields the truth about reality. In Heraclitus’ day words were written without any sign for their accent, and this eases the way for a punning play upon word-formations like *BIOΣ*, which accented on its first syllable means “life” and upon its second means “bow.” This ambiguity yields the paradox that what yields death is named “life,” τῷ οὖν τόξῳ ὄνομα βίος, ἔργον δὲ θάνατος (B48), and Heraclitus marshals this pun as another illustration of the unity of opposites. Death is life, since, for example, the destruction of earth is the birth of water. Just as *BIOΣ* in its ambiguity yields meanings that stand in opposition—“bow” and “life”—so too does a single event yield the opposition of life and death. Heraclitus’ exploitation of language also includes instances of word-play that depend upon etymological considerations. The name of the Furies, Ἐρινύες, comes from ἔρις, the word for strife, and the Furies are the aides of Justice (B94). Since Heraclitus believes that justice is strife (B80), he may take the etymology of the name for the assistants of Justice to indicate the oneness of justice and strife.⁶⁶ In one instance Heraclitus finds the truth of the unity of opposites in the linguistic fact that opposing terms depend upon one another for their meaning. In B23 Heraclitus says that “they would not know the name of Justice, if these things did not exist”; presumably he thinks that it is “un-just things” that make possible the knowledge of justice, and thus that a “name” like “justice” has no meaning in isolation, but only with its opposite, “injustice.”⁶⁷

Heraclitus, unlike the *histores*, has no use for travel, of seeking out the great marvels and curiosities of the world, as a path to “understanding.” He makes no reference to foreign people, either approvingly or disapprovingly, and the only people of a city whom he mentions are his fellow citizens of Ephesus

⁶⁶ For this analysis of B94 see Wiggins 28–29 and Hussey 1982: 54.

⁶⁷ Nussbaum 11 and Kahn 1979: 185 offer similar comments on B23, and B111 might be subject to the same sort of interpretation. Nussbaum especially stresses the importance of the interdependence of the meaning of words for Heraclitus’ conception of the unity of opposites.

(B121). The only "journey" Heraclitus mentions as worth making is into one's soul, in search of oneself (B101). This is a great journey that has no end, as Heraclitus explains by making use of the imagery of travel: "You would not find out the limits of the soul by going, even traveling over every road, so deep is its *logos*" (B45). In this inward journey one discovers the value of a measured existence for one's well-being, which depends upon knowledge of the proper limits of the great destructive forces of emotion and desire. The *sôphrôn* flourishes and preserves himself in his interactions with others by restraining himself from indulgence in the extremes of his emotions and desires. Despite his innovations, Heraclitus' stress on the connection between self-knowledge and measure (B116) keeps him bound to traditional values, especially as they are promoted by Pythian Apollo, whose Alcmaeonid temple displayed prominently the famous maxims of the Seven Sages, "Know yourself" (D-K 10.3 Chilon 1) and "Nothing too much" (D-K 10.3 Solon 1). The world-order too "lives" a measured existence: the cosmos is "fire ever living, kindled in measures and in measures going out" (B30). A *logos*, or proportion, holds between the change from one element to another and back again: sea "measures up to the same *logos* it was before becoming earth" (B31b). The cosmos is a self-regulating system that keeps in bounds both spatially and temporally the great destructive forces of nature by regulating the changes they undergo and the interactions between them. Fire, water, and earth are restrained from impinging upon one another beyond due measure: "The sun will not step over his measures" (B94). The heat and light of summer have their limits diurnally and seasonally, as do the dark and cold of winter. Reflection upon one's vital properties, Heraclitus may even believe, contributes to the confirmation of the truth of the unity of opposites because it is the same person who displays in his vital operations the extremes of sleeping and waking (B88), of hunger and satiety, of fatigue and restoration (B111). The great breadth of the soul argues for its possessing a cosmic dimension (B45), and since the *logos* is common to all things, self-knowledge provides a path to cosmic knowledge. Thus one may rely on self-reflection to come to "understanding."

Heraclitus refrains from setting himself up as an expert when he turns his audience away from himself and urges them to listen to the *logos*: "not to me but to the *logos* hearken" (B50). His audience should rely for their "understanding," just as he does, (1) on their own senses, which if properly understood serve them as trustworthy "witnesses" (B107), or (2) they may rely upon the testimony of their own language, through word-play, etymologies, and the interdependence of opposing terms for their meaning, or (3) his audience may simply rely upon an investigation into themselves. Heraclitus' "undisguised

revolt,” as Cornford once put it, against Ionian inquiry is not due to the mystical insights into the workings of nature that Cornford ascribed to him, because the procedures Heraclitus lays down for the acquisition of the truth are publicly available and indicate nothing of the privacy and uniqueness typically associated with mystical experience.⁶⁸

6. PRIVILEGE AND TRUTH

The dangers of polymathy are many. Much learning of the secondhand variety fosters credulity and a reliance upon the opinions of others. Secondhand learning distracts the seeker of truth from trusting in the immediacy of his own reliable firsthand experiences and circumstances for the truth. Even polymathy drawn from accurate firsthand observation is perilous because it too distracts the seeker of truth by burdening him with a mass of superfluous information that goes well beyond what is needed for understanding. The disinterested collection of information Heraclitus has no use for since it would largely impede the progress towards understanding. Above all, polymathy, whether firsthand or secondhand, endows the polymath with a false sense of achieving a privileged epistemic position that only a handful of human beings would ever be able to attain. The well-read man claims a wisdom for himself based upon the exceptional breadth of his reading, the much-traveled man upon the many far-flung sights he has seen firsthand, the compiler of anecdotes upon the many tales he has heard, the inspired poet upon the Muses’ revelation of a host of hidden truths about the gods and heroes of yesteryear, and Pythagoras, the most privileged of all the polymaths, who draws upon his superhuman memory, which rivals that of the Muses, for the many things he learned in his many past lives. Empedocles praises a “man who knows countless things,” and this man could “reach out with all his wits” and survey “each of the many things that are in ten and twenty generations of men” (B129). Antiquity took Empedocles to have in mind Pythagoras,⁶⁹ who is reputed to be able to remember his past lives (D.L. 8.4–5).

For Heraclitus, however, there is no privileged position, and the truth is equally open to all. “Although the *logos* is common, the many live as though they had a private understanding” (B2); men are merely “deceived in the recognition of what is obvious” (B56); they “do not think things in the way they encounter them” (B17). Privilege is privacy when the truth is public, and it has no more claim on truth than do dreams (B89). There is no need for humans to scurry about, collecting odd pieces of information, however inter-

⁶⁸ Cornford 1912: 186.

⁶⁹ Porphyry (VP 30–31), Iamblichus (VP 67), Diogenes (8.54); see Burkert 1972: 137–38.

esting that information may be in itself, since the fundamental truth about reality lies no farther away than in the homely truths of every man's daily life. Instead of a great clutter of truths, a few well-integrated truths may yield understanding to a judicious man. These truths need come from no farther than such familiar truths of nature as, "sea water is drinkable for fish but not for men," or they may come from reflection upon the workings of the soul or an analysis of language. Heraclitus' superciliousness (B104), which has been commented on since antiquity,⁷⁰ is tempered by his concession that any man may be able to achieve the truth about reality (B116), and by his urging mankind to take up this difficult task (B50). The truth should be within mankind's compass, especially since "Man's character is his fate" (B119), and "Common to all is thinking" (B113).⁷¹ There is nothing essential in the nature of humanity that blocks humans from reaching the truth. The elitist Heraclitus is an egalitarian when it comes to the estimation of the underlying capacity humans possess for the attainment of the truth. Each man is his own witness, and he requires no further authority than himself: "It belongs to all men to know themselves and to reason soundly" (B116).⁷²

WORKS CITED

- Barnes, J. 1979. *The Presocratic Philosophers. Vol. 1: Thales to Zeno*. London.
- Bollansée, J. 1999. "Fact and Fiction, Falsehood and Truth." *MH* 56: 65–75.
- Burkert, W. 1972 (German original 1962). *Lore and Science in Ancient Pythagoreanism*. Trans. E. L. Minar, Jr. Cambridge, Mass.
- . 1982. "Craft versus Sect: The Problem of Orphics and Pythagoreans." In B. F. Meyer and E. P. Sanders, eds., *Jewish and Christian Self-Definition. Vol. 3: Self-Definition in the Graeco-Roman World*. London. 1–22.
- Burnet, J. 1930 (original publication 1892). *Early Greek Philosophy*. 4th ed. London.
- Connor, W. R. 1993. "The *Histor* in History." In R. M. Rosen and J. Farrell, eds., *Nomodeiktēs: Greek Studies in Honor of Martin Ostwald*. Ann Arbor. 3–15.
- Cornford, F. M. 1912. *From Religion to Philosophy*. London.
- . 1952. *Principium sapientiae*. Cambridge.

⁷⁰ Ancient critics speak of Heraclitus as *μεγαλόφρων* and *ὑπερόπτης* (D.L. 9.1). Robinson 161 calls him "supercilious" in his attitude towards the limited capacity most humans have for gaining "insight."

⁷¹ In B113 it is uncertain what counts as the "all," but the *πάνσι* could certainly refer to "men" alone.

⁷² I am grateful for helpful suggestions from the editor of *TAPA* and two of its anonymous referees. I carried out some of my research for this paper in the summer of 2001, while I was a recipient of awards, for which I am grateful, from the College of Liberal Arts at Wayne State University (Research and Inquiry), and also from University Research at Wayne State.

- Diehl, E. 1925. *Anthologia lyrica graeca*. Leipzig.
- Diels, H. 1956–59. *Die Fragmente der Vorsokratiker*. 8th ed. by W. Kranz. 3 vols. Berlin.
- Dodds, E. R. 1951. *The Greeks and the Irrational*. Berkeley.
- Dover, K. J. 1988. "Ion of Chios: His Place in the History of Greek Literature." In *The Greeks and Their Legacy*. Oxford. 1–12. Originally published in J. Boardman and C. E. Vaphopoulou-Richardson, eds., *Chios: A Conference at the Homereion in Chios, 1984* (Oxford, 1986).
- Drews, R. 1973. *The Greek Accounts of Eastern History*. Washington, D.C.
- Fehling, D. 1985. *Die sieben Weisen und die frühgriechische Chronologie: Eine traditionsgegeschichtliche Studie*. Bern.
- Floyd, E. D. 1990. "The Sources of Greek 'Ἰστωρ 'Judge, Witness.'" *Glotta* 68: 157–66.
- Fowler, R. L. 1996. "Herodotus and His Contemporaries." *IHS* 116: 62–87.
- Fränkel, H. 1975 (German original 1951). *Early Greek Poetry and Philosophy*. Trans. M. Hadas and J. Willis. Oxford.
- Gottschalk, H. B. 1980. *Heraclides of Pontus*. Oxford.
- Graham, D. W. 1997. "Heraclitus' Criticism of Ionian Philosophy." *OSAPh* 15: 1–50.
- Guthrie, W. K. C. 1952 (original publication 1935). *Orpheus and Greek Religion*. 2nd ed. rev. London.
- . 1954 (original publication 1950). *The Greeks and Their Gods*. 2nd ed. rev. Boston.
- . 1962. *A History of Greek Philosophy. Vol. 1: Earlier Presocratics and Pythagoreans*. Cambridge.
- Hornblower, S. 1994. *Greek Historiography*. Oxford.
- Huffman, C. 1993. *Philolaus of Croton*. Cambridge.
- Hussey, E. 1972. *The Presocratics*. London.
- . 1982. "Epistemology and Meaning in Heraclitus." In M. Schofield and M. C. Nussbaum, eds., *Language and Logos*. Cambridge. 33–59.
- Jacoby, F. 1957. *Die Fragmente der griechischen Historiker. Vol. 1*. Leiden.
- Kahn, C. H. 1960. *Anaximander and the Origins of Greek Cosmology*. New York.
- . 1974. "Pythagorean Philosophy before Plato." In A. P. D. Mourelatos, ed., *The Presocratics: A Collection of Critical Essays*. Princeton. 161–85.
- . 1979. *The Art and Thought of Heraclitus*. Cambridge.
- . 1983. "Philosophy and the Written Word: Some Thoughts on Heraclitus and the Early Greek Uses of Prose." In K. Robb, ed., *Language and Thought in Early Greek Philosophy*. La Salle. 110–24.
- . 2001. *Pythagoras and the Pythagoreans: A Brief History*. Indianapolis.
- Kern, O. 1922. *Orphicorum fragmenta*. Berlin.
- Kirk, G. S. 1954. *Heraclitus: The Cosmic Fragments*. Cambridge.
- , J. E. Raven, and M. Schofield. 1983 (original publication 1957). *The Presocratic Philosophers*. 2nd ed. rev. Cambridge.
- Lardet, P., ed. 1983. *Saint Jérôme, Apologie contre Rufin*. Paris.
- Leshner, J. H. 1992. *Xenophanes of Colophon: Fragments*. Toronto.
- . 1994. "The Emergence of Philosophical Interest in Cognition." *OSAPh* 12: 1–34.
- . 1999. "Early Interest in Knowledge." In A. A. Long, ed., *The Cambridge Companion to Early Greek Philosophy*. Cambridge. 225–49.

- Linforth, I. M. 1941. *The Arts of Orpheus*. Berkeley.
- Lloyd, A. B. 1975–76. *Herodotus: Book II*. 2 vols. Leiden.
- Mansfeld, J. 1985. "Fiddling the Books (Heraclitus B129)." In K. J. Boudouris, ed., *Ionian Philosophy*. Athens. 229–34.
- Marcovich, M. 1967. *Heraclitus*. Merida.
- Martin, R. P. 1993. "The Seven Sages As Performers of Wisdom." In C. Dougherty and Leslie Kurke, eds., *Cultural Poetics in Archaic Greece: Cult, Performance, Politics*. Cambridge. 108–28.
- Nauck, A., ed. 1964 (original edition 1889). *Tragicorum graecorum fragmenta*. 2nd ed., supplemented by B. Snell. Hildesheim.
- Nussbaum, M. C. 1972. "Ψυχῇ in Heraclitus." *Phronesis* 17: 1–16, 153–70.
- Parker, R. 1995. "Early Orphism." In A. Powell, ed., *The Greek World*. London. 483–510.
- Pearson, L. 1939. *Early Ionian Historians*. Oxford.
- Philip, J. A. 1966. *Pythagoras and Early Pythagoreanism*. Toronto.
- Robinson, T. M. 1987. *Heraclitus: Fragments*. Toronto.
- Schibli, H. S. 1990. *Pherekydes of Syros*. Oxford.
- Snell, B. 1953 (German original 1948). *The Discovery of the Mind: The Greek Origins of European Thought*. Trans. T. G. Rosenmeyer. Cambridge, Mass.
- Solmsen, F. 1950. "Chaos and Apeiron." *SIFC* 24: 235–48.
- Stokes, M. C. 1962–63. "Hesiodic and Milesian Cosmogonies." *Phronesis* 7: 1–37 and 8: 1–34.
- Verdenius, W. J. 1947. "Notes on the Presocratics." *Mnemosyne* ser. 3, 13: 271–89.
- Vlastos, G. 1955a. "On Heraclitus." *AJP* 76: 337–68.
- . 1955b. "Cornford's *Principium sapientiae*." *Gnomon* 27: 65–76.
- West, M. L. 1971. *Early Greek Philosophy and the Orient*. Oxford.
- . 1983. *The Orphic Poems*. Oxford.
- . 1987. "A New Fragment of Heraclitus." *ZPE* 67: 16.
- . 1994. "Ab ovo: Orpheus, Sanchuniathon, and the Origins of the Ionian World Model." *CQ* 44: 289–307.
- Wiggins, D. 1982. "Heraclitus' Conceptions of Flux, Fire and Material Persistence." In M. Schofield and M. C. Nussbaum, eds., *Language and Logos*. Cambridge. 1–32.