Articles

Xenophanes on Inquiry and Discovery: An Alternative to the 'Hymn to Progress' Reading of Fr. 18

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I. Introduction: Text and Translation

In assembling a set of comments on the topic of 'Time the great discoverer', John Stobaeus quoted—and thereby preserved for posterity—this well-known couplet from the poems of the 6th-century (B.C.E.) Ionian philosopher, Xenophanes of Colophon¹:

οὔτοι ἀπ' ἀρχῆς πάντα θεοὶ θνητοῖσ' ὑπέδειξαν² ἀλλὰ χρόνω ζητοῦντες ἐφευρίσκουσιν ἄμεινον.

Both the subject matter and style are characteristic of Xenophanes: a denial of a conventional belief about the gods (cf. Frs. 11, 12, 14-17, and 23) followed by the expression of a contrasting point of view (for 'argument by contrasting opinion' as typically Xenophanean, see Classen 1989, 98). A relatively uncontroversial translation would read:

Truly, not from the outset did gods reveal all things to mortals, but in time as they seems they discover better

but in time as they search they discover better.

It is not obvious that the remark really belonged in a collection of views 'on time, its parts, and of how much it is the cause'. LSJ cites Xenophanes' $\chi\rho\delta\nu\phi$ as an example of a special use, 'in process of time' or 'at length'.³ This would make $\chi\rho\delta\nu\phi$ a characterization of the manner in which discoveries occur rather than a reference to their cause. Zntoûvtes—'seeking', naturally read as a circumstantial participle, would indicate either the means or cause of discovery: 'as they seek'

¹ Listed by Diels and Kranz (henceforth: DK) as Fr. 18; see also the cover of this journal; for the full citation see the listings at the conclusion of the paper.

² DK printed the ὑπέδειξαν of Stobaeus' *Florilegium* 29.41 rather than the $\pi\alpha\rho$ έδειξαν of *Eclogues* i 8.2. The latter, as Heitsch 1983, 135 argued, appears first in the writings of Xenophon, Plato, and Isocrates. Its various meanings ('exhibit side by side', 'compare', 'indicate', 'represent', or 'exhibit and hand over') would have had little if any connection with any role traditionally assigned to the gods.

 $^{^3}$ Cf. Herodotus i 80: 'at length (χρόν ω) the Lydians were routed and driven within their city wall'.

or 'by seeking'. For Xenophanes, time evidently played a role, but it did not work alone.

The precise role played by time is, however, only one of many uncertain aspects of the fragment. With different points of emphasis, the striking opening phrase, 'Truly, not from the outset all things...', can be read either as:

- (1) Gods did not reveal all things to mortals *at the outset* (a remark on the temporal dynamics of divine revelation: in effect, the gods may have revealed some things at the outset but other things later on); or as
- (2) From the outset gods have not revealed *all things* to mortals (a remark concerning the quantity of information conveyed by gods to mortals: in effect, at no time have gods revealed *everything* to mortals); or as
- (3) Not from the outset have gods revealed all things to mortals (a complete rejection of conventional opinion: in effect, at no time has it been the case that the gods reveal things to mortals).

It is also unclear whether Xenophanes wanted only to redefine and limit the role of the gods in human affairs or whether he wanted to remove them altogether from the process of inquiry and discovery. We can understand his thesis either as:

- (1) The gods did not reveal the truth about all things to mortals from the outset—although as mortals search gods may help them to discover the truth; or as
- (2) The gods did not reveal the truth about all things to mortals from the outset—on the contrary, mortals search and find out the truth by themselves.

Additional uncertainties attend the meaning of 'by inquiring they discover (a) better' in line two. We may take this either as:

- (1) By inquiring mortals discover better and better things all the time; or
- (2) By inquiring mortals discover something superior to anything they knew or possessed in the past; or
- (3) By inquiring mortals discover something superior to anything the gods were supposed to have revealed; or
 - (4) By inquiring mortals are doing better at discovering.

And by saying that this occurs 'in time' or 'at length', he meant either that:

- (1) As mortals inquire, at length (i.e., after some period of inquiry) they discover (a) better; or
- (2) As mortals inquire at length (i.e., after a lengthy period of inquiry), they discover (a) better; or
- (3) At length (i.e., at some time well after the outset), mortals discover better by inquiring.

It is also unclear whether the couplet was meant to express a complete thought or formed part of a larger set of remarks (to some unknown end) on the topic of divine revelation and human discovery.⁵

 $^{^4}$ Cf. Aristotle, Nicomachean Ethics 1103a33: ταῦτα ποιοῦντες μανθάνομεν—'these we learn by doing'.

⁵ The evidence of Xenophanes' other writings is inconclusive on this point: the elegiac poems are significantly longer; some of his 'silloi' or satires (e.g., Fr. 14) appear to work as brief aphorisms; but three of the 'epistemological' fragments (Frs. 34-36) are clearly only snippets from longer pas-

With three options for 'not from the outset all things', two for the degree of opposition intended between lines one and two, four for the meaning of 'discover (a) better' and three for 'in time', we quickly generate seventy-two possible readings of the fragment as a whole, a great many of which have been put forward in the scholarly literature on this fragment.⁶ Regrettably, forms of $\dot{\upsilon}\pio\delta\epsilon(\kappa\nu\upsilon\mu\iota,\zeta\eta\tau\epsilon\omega)$, and $\dot{\epsilon}\varphi\epsilon\upsilon\rho(\sigma\kappa\omega)$ appear nowhere else in the surviving fragments, and not a single ancient *testimonium* regarding Xenophanes contains anything specifically relating to his views on the nature and conditions of human discovery.

II. Fr. 18 as 'Hymn to Human Progress'?

It is hardly surprising that commentators, facing so ambiguous a set of remarks and lacking any sense of an original surrounding poetic setting to help narrow their choices, have chosen to elucidate the meaning of Xenophanes' comment by comparing it with similar comments by other early writers. The approach appears to lead to good results. The poets had spoken of the gods as the providers of all human goods; in the next century we will find numerous expressions of pride in mankind's ability to create an increasingly better way of life for itself; situated in time in between these two points of view, Fr. 18 can be reasonably regarded as a mean between the two extremes; in short, as the first 'hymn to human progress'.⁷

That the gods were the 'givers of all good things' was a commonplace of early Greek poetry. Hesiod had told how the gods 'made' $(\pi o(\eta \sigma a \nu))$ not one, but five generations of mankind, from a first, 'golden race' that lived in blissful ease down to the present 'iron race' destined for labor, sorrow, and eventual destruction (175-201). Later writers, by contrast, recounted the gradual progress made by mankind either by means of divine beneficence or native intelligence, or a combination of both. The $\zeta \eta \tau o 0 \nu \tau \alpha s$ of Isocrates and the $\dot{\epsilon} \nu \chi \rho \dot{\rho} \nu \phi \zeta \eta \tau o 0 \sigma \nu \dot{\epsilon} \dot{\epsilon} \epsilon \nu \rho (\sigma \kappa \epsilon \tau \alpha t)$ in a general statement of faith by the 4th-century tragic poet Chaeremon (Fr. 21, Nauck; Stobaeus, *Ecl.* i 8.32), sound very much like echoes of Xenophanes' words. Even when the wording differs, it is still tempting to suppose that behind them all is 'the outline of a design which inspired that conception of man' (Havelock 1957, 107).

A 'hymn to human progress' reading of Fr. 18 is, moreover, not without its

sages. One reason to suspect that Fr. 18 formed part of a larger remark is its slightly awkward shift in subject. (While it is possible to translate line two as 'as in time they—the gods—search, etc.', it is not easy to make sense of the idea of divine searching and finding in time.) This unmarked change in subject (from gods to mortals) might have been less peculiar had the two lines formed part of a larger discussion of the nature, limits, and so on of human discovery.

⁶ Some of these are reviewed in section II; my reading, roughly speaking: options 3, 1, 4, and 3.

⁷ A view espoused by Barnes 1979, Cherniss 1957, Dodds 1973, Edelstein 1967, Fränkel 1968, Guthrie 1969, Havelock 1957, Heidel 1943, Heitsch 1983, Kleingünther 1933, Lumpe 1952, Steinmetz 1966, and Zeller 1963 —among others.

⁸ Cf. Od. viii 325: θεοί, δωτῆρες έάων; Hesiod Theogony 664 and Erga 109 ff.

⁹ Cf. Aeschylus, *Prometheus Vinctus* 476 ff.; Euripides, *Supplices* 195 ff.; Sophocles, *Antigone* 332 ff.; Plato, *Protagoras* 320c ff.; Isocrates, *Panegyricus* 32; Critias, Fr. 25 DK; Moschion, Fr. 6 Nauck.

virtues: it gives a natural sense to the expression 'they discover better' (cf. Dodds' translation: 'men discover improvements'), and a plausible explanation for the contrast between the outout $d\pi'$ $d\rho\chi\eta_S$ of line one and the $d\lambda\lambda\dot{\alpha}$ $\chi\rho\delta\nu\phi$ of line two: the gods did not endow mortals with all good things at the outset but mortals gradually develop them over the course of time. In support of this interpretation it has been claimed that during the course of his long life Xenophanes would have personally observed a number of positive social changes taking place (Heitsch 1983, 138). Xenophanes' Frs. 4 (a report of his opinion on the inventors of coinage) and 19 (a report of his admiration for Thales' successful eclipse prediction) have also been proposed as evidence of his awareness of current advances in science and technology (Dodds 1973, Havelock 1957, Heitsch 1983, Kleingünther 1933, and Lumpe 1952), and as early examples of the recurring interest in the 'first discoverers' of various arts or cultural advances (Kleingünther 1933, esp. 40-43).

Scholarly opinion has divided on whether this amounted to 'humanism'; i.e., to a faith in human intelligence as sufficiently powerful to achieve truth *on its own* without acts of divine beneficence (a view proposed by Gomperz 1901-1912, Kleingünther 1933, Loenen 1956, and opposed by Lumpe 1952, Shorey 1911, and Verdenius 1955); on whether partial (Barnes 1979) or subsequent (Untersteiner 1956) revelations might be possible, and on whether the progress referred to in Fr. 18 was strictly scientific in nature (Gomperz 1901-1912, Untersteiner 1956, and Zeller 1963, 640-678), or was improvement in the quality of human life generally, but understood only in provisional or relative terms (Babut 1977). But common to all these accounts is the idea that (with or without divine aid, and either in terms of our scientific understanding or in the conditions of life generally) Fr. 18 presents the course of human history as on an upward path.

I believe, however, that there are compelling reasons to reconsider the widely shared 'progressivist' interpretation of Fr. 18: not only does it lack a firm foothold in the language of Fr. 18, its optimism is contraverted by virtually everything else Xenophanes is known to have said or thought on the topic of human intelligence. If we had no viable alternative to the 'hymn to progress' reading of Fr. 18 we might be justified (on the basis of its similarities with those later expressions of pride in human achievement) in regarding it as his singular and otherwise inexplicable surge of optimism. But if, as I shall argue, there is an alternative reading of the fragment that can be firmly and systematically grounded in Xenophanes' own teachings, then we ought to prefer it over one which fits the fragment only inexactly and fails to correspond with other aspects of his teachings.

The progressivist reading takes off from the contrast between the opening phrases of each line: not all things endowed by the gods *at the outset* (cf. Guthrie's [1962] and Heidel's [1943] translation 'in the beginning' or Havelock's [1957] 'originally'), but instead human discovery *over time*. But Xenophanes did not actually speak of what gods did not do 'at the outset' or 'in the beginning' (e.g., $d\rho \chi \eta \nu$ or $\dot{\epsilon} \nu \ d\rho \chi \hat{\eta}$), but rather of what they did not do $\dot{\alpha} \pi$ '

ἀρχῆς—'from the outset onward'. ¹⁰ As a consequence, the message of Fr. 18 is not 'no original divine revelation but gradual discovery', but rather 'no divine revelation from the very outset forward—but, at length, discovery by mortal searching', a comment contrasting a constant divine state of affairs with a latter-day development among mortals. Fr. 18.1, moreover, does not specifically contest the idea that the gods were the 'givers or providers of all good things', but denies (in a sense we will explore further) only that gods 'revealed all things (or all sorts of things) to men'. Similarly, Fr. 18.2 does not specifically contest Hesiod's claim that the excellence of the race and the general circumstances of civilized life were both in decline but says only that human inquiry leads in time to the discovery of a better, or better discovery. None of these incongruities actually refutes the progressivist interpretation, but collectively they reveal the extent of the shoehorning required to make the fragment say what it has been supposed to mean.

While later hymns to progress differ from one another in important details (e.g., the speakers in Aeschylus and Euripides emphasize divine beneficence while Sophocles' chorus proclaims that man 'has taught himself'), they all differ in one or more important respects from Fr. 18. Most speak of progress made by mankind as a whole; some aim at distinguishing between technical progress and moral wisdom; and all but three mention divine agency as the key factor in mankind's rise from a brutish way of life. By contrast, Fr. 18 speaks in terms of what individuals (in the plural: 'seekers') achieve, with no suggestion of a contrast between technical and moral progress, with a firmly negative comment (οὖτοι) on the question of divine agency, 11 with no reference to a primeval state of brutishness.¹² The closest verbal echo to Fr. 18 (Chaeremon, Fr. 21 Nauck) says only that there is nothing in human affairs that cannot in time be discovered through inquiry, which is considerably less than a statement of faith in the advance of civilization as a whole. Even if we were to concede that each of the later hymns echoed Fr. 18 in some (one or more) respects, we would still need additional justification for identifying the meaning of Xenophanes' comment with just one of these (widely divergent) points of view.

When we look elsewhere in the Xenophanes fragments and *testimonia* for either a possible explanation or confirming evidence for his faith in progress, we encounter many anomalies. Later writers conceived of the rise of civilization in

¹⁰ Cf. LSJ, $s.\nu$. ἀπό, II: 'from', 'after'; ἀπ' ἀρχῆς commonly appearing in such phrases as 'from start to finish' or 'from beginning to end' where it refers to a state of affairs which endures over some period of time; cf. Gorgias, Fr. 11a, 29, etc. On several occasions in Herodotus (ii 50.3; 104.2; 113.2), it is used in conjunction with 'always' and refers to circumstances which have remained unchanged since the beginning of history (cf. ii 50.3: 'No one but the Libyans have had among them the name of Poseidon from the first—ἀπ' ἀρχῆς—and they have honored this god always—αἰϵί.').

¹¹ Denniston 1954, 543-544 characterizes τοι here as doing little more than adding force to the negation.

¹² Cf. O'Brien 1985 and Woodbury 1970 on the the post-Xenophanean emergence of θηριώδης in the sense of 'beastlike' and the late 5th-century character of interest in the question of the original circumstances of human life.

terms of the invention of various arts and sciences.¹³ There is not a single positive reference to any of them in any surviving Xenophanes fragment or ancient *testimonium*.¹⁴

Not only did Xenophanes fail to mention the particular arts praised by later writers, but when he did allude to the works of human intelligence he had nothing positive to say. He was reported (in DK A 52) to have repudiated the supposed art of divination at the very center of Prometheus' tale (484-499; with a similar view in Euripides, Supp., 211-213). Far from admiring representations of the deities drawn by human hand, Xenophanes saw in them an ignorance about the true nature of the divine endemic in all societies (Frs. 14-16). Far from congratulating his fellow citizens for having fashioned for themselves a common life within cities, he criticized them for behavior that put the harmony and continued well-being of the city at risk (Frs. 1-3). In his one explicit reference to a technological development, Xenophanes cites prepared fragrances (ἀσκητοῖσι...χρίμασι, Fr. 3.6) as a symptom of Colophonian decadence. The working of gold, cited by Prometheus as one of his many gifts to man (PV, 500-502), was for Xenophanes only another sign of moral decay. So were much sought-after purple garments. A Xenophanean admiration for 'man the inventor' is nowhere to be seen.

One piece of evidence often thought to demonstrate Xenophanes' awareness of progress is the passage in the *Onomasticon* of the second century C.E. grammarian, Pollux, where Xenophanes is said to have identified the Lydians as the inventors of coinage (DK Fr. 4). The minting of coins, it has been argued, was one of the changes in 6th-century life which led Xenophanes to espouse a general faith in human progress, a specific instance of a 'better' resulting from the application of human intelligence. Yet in Fr. 3 Xenophanes alluded to the Lydians as the source from which the citizens of Colophon learned 'unprofitable luxuries' (gold jewelry, fancy dress, and perfumed fragrances) the pursuit of which led to the destruction of their city. Are we to imagine that he regarded as an advance the invention of coinage by these same paragons of wealth and self-indulgence? Is it not at least equally possible, as Heidel (1943, 271) suggested, that the reference reflected a 'root of all evil' attitude; i.e., of coinage as a singular instance of Lydian decadence?

We know from his comments in other fragments that Xenophanes approved of the pursuit of pleasure in moderation: the enjoyment of wholesome food and

¹³ Navigation, agriculture, animal husbandry, language, architecture, medicine, pharmacy, divination from signs, metallurgy, artistic representations of the gods, domestic skills, and—at a later stage, according to Protagoras—political expertise.

¹⁴ In the only doxographical report on Xenophanes' views about human intelligence, Diogenes Laertius says that Xenophanes held τὰ πολλὰ ἥσσω νοῦ εἶναι (A 1) which might mean that 'the many' or 'most things' either 'escape', 'give way to', or 'are inferior to' νοῦς.)

¹⁵ Cf. Havelock's suggestion (1957, 107) that this observation on coinage formed 'part of [Xenophanes'] reconstruction of the history of human institutions'.

drink without loss of self-control (Fr. 1), the dilution of the wine with water (Fr. 5), and banquets of sweet wine, chick-peas and conversation on elevated topics (Fr. 22). Like Plato (cf. *Rep.* 372c ff.), Xenophanes appears to distinguish between desires (for basic, natural goods) which should be satisfied, and desires (for artificial and un-necessary fineries) whose pursuit leads to harmful consequences for a society.

Even philosophers with no particular brief against Lydian luxuries saw that the invention of coinage had a bearing on personal morality. Aristotle (*Politics* 1257) observed that the invention of coinage ushered in a system of retail trade allowing for the unlimited accumulation of individual wealth. Plato (*Laws* 742), holding that no wealthy individual could be good, called for the abolition of private wealth and the restriction of currency to purposes of foreign trade. Admiration for the invention of a device facilitating the unlimited accumulation of wealth sits poorly in the context of the teachings of a philosopher who preferred the simpler, natural pleasures and denounced the fever for luxuries. Xenophanes, in short, had good reason to regard the invention of coinage by the Lydians not as a social advance, but as a novelty characteristic of a people engaged incessantly in pursuit of wealth and luxury. The reference to Lydian coinage—as reported by Pollux—could easily have occurred in the context of a Xenophanean attack on their corrupt and destructive values.

It is also not possible to confirm a Xenophanean belief in (at least scientific) progress on the basis of a reported 'admiration for Thales' eclipse prediction'. There has long been considerable scepticism that Thales could have predicted—at least in any intelligent or well-informed manner—a total solar eclipse; Herodotus' version of the story (i 74) gains some degree of credibility by casting the prediction in very general form: 'this alteration of the day was foretold by Thales the Milesian, setting as its limit the year [or less likely: "the season"] in which the change actually occurred'. But to accept with any assurance the proposition that Xenophanes admired Thales for this achievement we need to settle at least three additional matters: (1) whether Diogenes Laertius' 'whence' ($\ddot{6}\theta \epsilon \nu$) reflected not so much his inference (or that of Eudemus to whose account he here alludes, or an inference made by those who provided information to Eudemus) but a connection in Xenophanes' own mind; i.e., that whatever admiration Xenophanes might have had for Thales was based at least in part on the reported eclipse prediction (rather than, e.g., on Thales' wise political advice to the Ionians, an activity which would have struck Xenophanes as wholly admirable—cf. Frs. 1-3). Herodotus, to whom Diogenes Laertius attributes the same admiring attitude, does not actually praise Thales for the prediction, but merely reports it (i 74)—although he elsewhere (i 170) commends Thales for having given useful political advice to the Ionians. It hardly strains the imagination to suspect that an early reference to 'Thales, the famous author of an eclipse prediction, admired by Xenophanes and Herodotus' might have evolved over time into 'Thales, the famous author of an eclipse prediction admired by Xenophanes and Herodotus'; (2) whether θαυμάζει—if correctly ascribed to Xenophanes in connection with

the reported eclipse prediction—reflected a genuinely admiring attitude on Xenophanes' part (as opposed to merely 'marvels at', 'wonders how or whether', or 'is astonished that'); (3) whether Diogenes Laertius might have meant by his comment only that Xenophanes admired Thales for 'being the first to study astronomy', mentioning foretelling eclipses and setting solstices merely as particular instances of that admirable activity (cf. LSJ, s.v. καί, A 2).

The only information relevant to Xenophanes' thinking on these issues tends to count against the sought-for conclusion. In several fragments and *testimonia* Xenophanes appears to embrace a degree of scepticism about whether anyone possesses the ability to foretell future events in any knowledgeable way. In Fr. 34, for example, he expresses his conviction that no one has ever had or ever will have *knowledge* about matters lying beyond the direct field of their experience (i.e., 'about the gods and such as I say about all things'); he specifically characterizes someone who is able to speak truly of events being brought to pass as just 'happening to say just what occurs' $(\tau \dot{\nu} \chi o \iota ... \epsilon \iota \pi \dot{\omega} \nu)$ without having knowledge. Thales' prediction of an upcoming solar eclipse, even if right on the money, would still represent just the $\delta \dot{o} \kappa o s$ or opinion common to everyone. There is, then, no firm evidence in either Fr. 4 or 19 for a Xenophanean consciousness of technological or scientific *progress*, although, for all we know, he might have admired earlier sages for any one of a number of the activities traditionally (perhaps reflexively, see Cherniss 1951) attributed to them.

Other fragments and *testimonia* convey the impression of a Xenophanes well aware of forces stacked up against social and intellectual progress. Driven from his homeland by the invasion and conquest of Ionia by Harpagus the Mede (DK A 1, 10), he could hardly have been unaware of the possibilities for large-scale social disasters such as the destruction of an entire city. In Fr. 1 he displays his concern about behavior which invites such disasters when he criticizes the sort of entertainment usually provided at celebrations, and—well before Plato¹⁸—urges that the stories poets tell about the gods be censored. There is 'no use' in these accounts of divine strife and deception; they foster the belief that gods are capable of wickedness, thereby undermining the moral values essential to the survival of a decent society. In Fr. 2 he criticizes those who honor victorious athletes with lavish gifts, meals, and special privileges: 'this practice [setting one person above another in virtue of athletic prowess] makes no sense'. Much worthier of honor

^{16 ...}πρώτος ἀστρολογήσαι καὶ ήλιακὰς ἐκλείψεις καὶ τροπὰς προειπείν...

¹⁷ Xenophanes' admonition to his audience in Fr. 35 to 'accept these as like the realities'—ἐοικότα τοῖς ἐτύμοισι—has been regarded by some as a reference to a process which results in increasingly probable (but never completely true) opinions, but 34.3 already countenances our ability to state the complete truth and ἐοικότα here cannot mean 'probable' (to the realities) but merely 'like' (them). Fr. 35 is better read as Xenophanes' concluding request for his audience to accept his account as correct—even if it cannot be *known for certain* to be correct (cf. the similarly phrased requests at Herodotus, i 140; ii 28, 33, 35; iv 15, 36, 45; vi 55; and Aristotle *NE* 1097a14-15)—rather than as his admission that we can only continue to approximate the truth and never hit it right on the nose.

¹⁸ Cf. Rep. 607a: 'We can admit no poetry into our city save only hymns to the gods and praises of good men.'

by the city is one—such as himself—whose 'expertise' (σοφίη) benefits the city (to adopt the language of Euripides' imitation of Xenophanes in his *Autolycus*, Nauck, Fr. 282, 25 ff.), 'by ridding the city of its evil battles and factions'. In Fr. 3, he denounces the pursuit of Lydian luxuries by the Colophonians, suggesting that their expensive tastes and lifestyle were a prelude to internal divisions that undermined their ability to defend Colophon from external invasion and conquest. Elsewhere, he disparages common views about the gods (Frs. 11, 12, 14-17), repudiates the leading teachers of Hellas (Fr. 10-12) as well as the occasional charlatan (Fr. 7, A 1, etc.), and characterizes human opinion as constrained within a narrow circle of individual experience (Frs. 34, 36, 38).

The magnitude of these anomalies should give us pause. Fr. 18 was not a precise rejoinder to the poets' accounts of the gods as the original benefactors of mankind nor did the later progress hymns consistently mimic its features. Frs. 4 and 19 provide no clear indications of a Xenophanean belief in scientific or technological progress, and attempting to alert his fellow citizens to the threat to the well-being of the city posed by their behavior would have been an odd enterprise for a prophet of progress. In none of his comments on mankind's failure to understand the nature of the divine (Frs. 10-12, 14-17) or grasp the larger truths about the cosmos (Frs. 34, 35) did he so much as hint that progress was in the cards. Nowhere among his other teachings, in short, can one find any confirming evidence of Xenophanes' faith in progress.

III. The Subject Matter of Fr. 18.1

What then might Xenophanes have meant when he denied that from the outset gods $\dot{\nu}\pi\dot{\epsilon}\delta\dot{\epsilon}\iota\xi\alpha\nu$ $\pi\dot{\alpha}\nu\tau\alpha$ to mortals? Use of the verb $\dot{\nu}\pi\delta\dot{\epsilon}\iota\kappa\nu\nu\mu\iota/\nu\dot{\nu}\omega$ varied among writers in different periods (LSJ lists 'show', 'indicate', 'report', 'mark out', 'teach', and 'make a show of' among its main uses) but it means specifically 'to show or display in a secretive, partial, or indirect manner'. ¹⁹ It is essential to recognize, then, that $\dot{\nu}\pi\delta\dot{\epsilon}\iota\kappa\nu\nu\mu\iota$ here in Fr. 18 deals not with the broad question of divine *endowments* to mankind but rather with the matter of divine *communication* with mortals, especially an indirect form of communication

¹⁹ From ὑπό—in composition: 'secretly', or 'gradually', plus δείκνυμι/-νύω: 'to show, point out, or display'; Diels 1901 noted: 'occulta monstraverunt'. Among its earliest attested uses: Herodotus, i 32: there are many to whom the gods 'have given a glimpse of blessedness (ὑποδέξας ὅλβον, LSJ trans.) and yet afterwards brought to utter ruin'; Schol. on Lycophron, 344: 'Sinon having secretly shown a signal light to the Hellenes'—φρυκτὸν ὑποδείξας τοῖς Έλλησιν; Hesiod, *Cat. of Women* 10: 'Athena having disclosed—ὑποδείξάσης—his location to Heracles'; Xenophon, *Anab.* v 7.12: Xenophon worrying 'that a lack of discipline surfacing among the soldiers will be as serious as it is beginning to appear to be'—ἔσται οἶον ὑποδείκνυσιν; and *Mem.*, iv 13: Xenophon claiming that the gods intimate—ὑποδείκνυσιν—to mortals through the example of the sun—as an object which cannot be looked at directly—that mortals see only the handiworks of the gods, never the gods themselves. Thus ὑποδείκνυμι means more than just 'reveal' or 'show' broadly speaking, it means communicating in a secretive, partial, or indirect manner—as by a signal fire or some other meaningful signalling device.

through the use of 'all sorts of things'.20

As the passage from Xenophon's *Memorabilia* suggests, Xenophanes' use of $\dot{\nu}\pi o\delta \epsilon (\kappa \nu \nu \mu \iota)$ in the context of divine relationships with mortals was entirely appropriate. The ancients almost universally supposed that the gods 'showed all sorts of things to mortals', but that these 'showings' were hard to make out clearly. Hesiod provides a clear statement of the cognitive predicament:

The will of Zeus who holds the aegis is different at different times and it is hard for men to tell it (*Erga* 483-484).

To meet this problem, to learn what the gods intend for mankind, the wise man must learn to spot the signs they send (for Hesiod, these are pre-eminently the cries of birds):

Mark, when you hear the voice of the crane who cries year by year from the clouds above, for she gives the signal for ploughing and shows (δεικνύει) the season of rainy weather (*Erga* 448-451).

So, soon as the time for ploughing is proclaimed to men $(\theta \nu \eta \tau o \hat{i} \sigma i \phi a \nu \epsilon i \eta)$, then make haste...to plough in the season for ploughing (*Erga* 458-460).

Hesiod concludes his account of the good days and bad days for various activities with his explanation of the secret of human happiness:

That man is happy and lucky in [his choice of days] who knows all these things and does his work without offending the deathless gods, who discerns the omens of birds and avoids transgression (*Erga* 825-828).

Homer had also spoken of the signs which the gods 'show' to mortals, once likening the flashing of light from Idomeneus' bronze armor to the bolts of lightning Zeus brandishes in the heavens:

...like the lightning that the son of Cronos seizes in his hand and brandishes from gleaming Olympus, showing forth a sign to mortals (δεικνὺς σῆμα βροτοῖσιν), and brightly flashes its rays, even so shone the bronze about his breast as he ran (II. xiii 243-245).

Facing a difficult choice among alternative routes to their homeland, Odysseus and his shipmates ask the gods for guidance:

 $^{^{20}}$ For πάντα as 'all sorts of', cf. LSJ, s.v. πᾶς, D II, as in II. v 60: ἐπίστατο δαίδαλα πάντα/τεύχειν—'he knew how to fashion all sorts of cunning works'; II. xv 411-412: πάσης/εὖ εἰδῆ σοφίης—'well skilled in all manner of craft', etc. For a similar use in Xenophanes, cf. Fr. 11 'they have attributed "all sorts of things" (πάντα) which are matters of reproach and censure among men—theft, adultery, and mutual deceit'. These three are clearly central cases of misconduct, but they do not constitute literally all the sorts there are. Additional reason to think that Xenophanes was not saying only that 'the gods have not revealed (literally) everything to mortals' is supplied by the considerations in section IV following: Xenophanes appears to have been unsympathetic to the whole enterprise of divine ὑπόδειξις.

So we asked the god to show us a sign $(\phi \hat{\eta} \nu \alpha \tau \epsilon \rho \alpha \varsigma)$ and he showed it to us $(\mathring{\eta} \mu \nu \delta \epsilon \hat{\iota} \xi \epsilon)$ and directed us to cut through the middle of the sea to Euboea, that we might escape from misery as quickly as possible (Od. iii 174-175).²¹

In the *Hymn to Selene* (13), the increased brightness of the moon is described as a 'sure token and sign to mortals' $(\tau \dot{\epsilon} \kappa \mu \omega \rho \delta \dot{\epsilon} \beta \rho \sigma \tau \hat{\alpha} \dot{\varsigma} \kappa \alpha \dot{\iota} \sigma \hat{\eta} \mu \alpha)$. The twins called the Dioscuri (the electrical phenomenon we know as St. Elmo's fire) are spoken of as 'fair signs' $(\sigma \dot{\eta} \mu \alpha \tau \alpha \kappa \alpha \lambda \dot{\alpha})$ betokening calmer winds and seas:

Forthwith they allay the blasts of the cruel winds and still the waves upon the surface of the white sea: fair signs $(\sigma \dot{\eta} \mu \alpha \tau \alpha \kappa \alpha \lambda \dot{\alpha})$ are they and deliverance from toil (*Hymn to the Dioscuri* 14-16).

In the Hymn to Hermes (525 ff.), Apollo promises to men:

Whosoever shall come guided by the call and flight of birds of sure omen, that man shall have advantage through my voice, and I will not deceive him.

The stories told by Herodotus make clear that this belief in divine communication through natural signs was still very much alive well after Xenophanes' time:

'I find, Hystaspes, that your son is guilty of plotting against me and my rule; and I will tell you how I know this for a certainty. I am a man for whom the gods take thought, and show me beforehand all that is coming (μοι πάντα προδεικνύουσι τὰ ἐπιφερόμενα). Now this being so, I have seen in a dream in the past night your eldest son with wings on his shoulders, overshadowing Asia with the one and Europe with the other...'. (i 209)

When they had set forth, the sun left his place in the heaven and was unseen, albeit the sky was without clouds and very clear, and the day was turned into night. When Xerxes saw and took note of that, he was moved to think on it, and asked the Magians what the vision might signify. They declared to him that the god was showing to the Greeks the desolation of their cities (Ἑλλησι προδεικνύει ὁ θεὸς ἔκλειψιν τῶν πολίων—vii 37).

The gift of reading the signs sent by the gods to mortals was also included among the powers Prometheus claims to have imparted to mortals:

For them there was no secure token $(\tau \epsilon \kappa \mu \alpha \rho)$ by which to tell winter nor the flowering spring nor the summer with its crops; all their doings were indeed without intelligent calculation

²¹ Among the natural phenomena mentioned in the Homeric epics as divine signs were the behavior of birds (*Il.* ii 308 ff.; xii 200 ff.; *Od.* ii 146 ff.), lightning (*Il.* ii 354; ix 234 ff.), thunder (*Il.* viii 170; *Od.* xxi 412), the rainbow (*Il.* xi 28; xvii 548), and the annual appearance of Sirius—the Dog star (*Il.* xxii 28 ff.).

(γνώμης τὸ πᾶν) until I showed them the rising of the stars and the settings, hard to observe (ἀντολὰς...ἄστρων ἔδειξα τάς τε δυσκρίτους δύσεις—454-458).

It was I who arranged all the ways of seercraft ($\mu\alpha\nu\tau\iota\kappa\hat{\eta}_S$), and I first adjudged what things come verily true from dreams; and to men I gave meaning to the ominous cries, hard to interpret. It was I who set in order the omens of the highway and the flight of crooked-taloned birds...It was I who made visible to men's eyes the flaming signs ($\sigma\hat{\eta}\mu\alpha\tau\alpha$) of the sky that were before dim (484-499, Grene trans.).

These passages—only a small selection from a larger body of literature on this topic—all give voice to the idea that mortals can achieve a glimpse into an otherwise dark future by learning how to make out the meaning of cryptic 'showings' from the gods in the form of omens and portents—unusual occurrences such as the cries of birds and vivid dreams or natural marvels such as thunder, lightning, solar and lunar eclipses, rainbows, comets, or shooting stars.²² When, therefore, Xenophanes asserts in Fr. 18.1 that not from the outset did gods 'secretly show' or 'intimate' all sorts of things to mortals, his comment can be given a clear and precise sense by reference to this virtually ubiquitous conventional view.²³

In denying that $\pi \acute{a}\nu \tau \alpha \theta \in \mathring{o} \wr \theta \nu \eta \tau \circ \mathring{o} ; \mathring{v}\pi \acute{e}\delta \in \iota \xi \alpha \nu$, Xenophanes would not have challenged popular belief in all forms of divine activity and benevolence. Consistently with this remark he could allow that gods have aided mankind in countless other ways—even that they once showered it with all the goods of life in some original paradise. He could even have consistently allowed that human discovery would be impossible without all sorts of divine assistance in other forms. What he specifically precluded was the possibility, from the very outset forward to the present time, that the gods communicated all sorts of things to mortals through partial, indirect, or secretive revelations.

²² Cf. also Pindar, Frs. 116 and 131—on what dreams foreshadow (δείκυυσι), *Paean* ix—on an eclipse as a τ έρας and σ ημα, and *Pyth*. iv 189—on the flight of birds as indicators of the will of heaven; Thucydides, vii 50—Nicias' famous decision to delay the army's departure because of the occurrence of a total lunar eclipse; Xenophon, *Apol*. 13 on the ubiquity of human belief in divination through natural signs, etc., and for a Biblical parallel—the rainbow sent by God to Noah as a token of his covenant; *Genesis* 9.13-17.

²³ Several centuries after Xenophanes the astronomer Aratus will restate the conventional opinion in language that parallels closely the πάντα θεοὶ θνητοῖσ' ὑπέδειξαν of Fr. 18.1 (*Phaenomena* 732):

πάντη γὰρ τά γε πολλὰ θεοὶ ἄνδρεσσι λέγουσιν.

For on every hand signs in multitude do the gods reveal to man. (Mair trans.)

Aratus elsewhere (736) concedes that we do not yet (ούπω) know everything from Zeus there is to know, but, unlike Xenophanes, has no doubt that Zeus shows his will to mortals everywhere through astronomical σήματα. Xenophanes' attempt to separate astronomy from theology is discussed in section IV following.

IV. The Rationale behind the Thesis of Fr. 18.1

In several surviving fragments Xenophanes offers thoroughly physical descriptions of phenomena themselves long regarded as divinities, 24 and is reported to have explained other traditional portents such as solar and lunar 'eclipses' or disappearances (DK A 41, 41a, 43), and shooting stars, meteors, comets, etc. (A 44) as in reality only the ignition and quenching of clouds in the heavens. Aëtius and Cicero reported (in A 52) that he repudiated divination from signs (μαντική) in its entirety, a repudiation perhaps based in part on these naturalistic explanations of portents, or on the fraudulence of self-styled seers (cf. the mention of a rebuke of Epimenides in A 1), or on alternative accounts of other traditional omens or portents. 25

Dodds (1951, 183, 196n) has been one of the few who recognized the larger importance of these details in Xenophanes' physical theories. He also noted that we possess a rival account of one natural marvel, Iris—rainbow, in Xenophanes' own words (Fr. 32):

ην τ' ³Ιριν καλέουσι, νέφος καὶ τοῦτο πέφυκε, πορφύρεον καὶ φοινίκεον καὶ χλωρὸν ἰδέσθαι.

And she whom they call Iris, this too is by nature a cloud, purple, red, and greenish-yellow to look upon.

The fragment is rich with details relevant to the rejection of a belief in divine communication with mortals through the marvels of nature. Iris was the famous messenger deity, the daughter of Thaumas (full name: 'Iris Marvel'!). Homer and Hesiod tell of her travels over great distances carrying messages to and from the gods. She is frequently identified with the optical phenomenon we know as the rainbow.²⁶ In offering his rival view of Iris-messenger as in reality a multi-colored cloud Xenophanes struck at the very heart of the concept of divine 'intimations to mortals'. In characterizing the rainbow as 'a cloud, purple, red, and greenish-yellow to look upon', Xenophanes said implicitly that the rainbow was not a wonder or marvel²⁷ but a certain sort of cloud—one whose nature could be defined in terms of its observable physical properties. These two lines of Fr. 32 embody, in a remarkably compressed way, the intellectual revolution Xenophanes and his fellow Ionian physiologoi initiated: nature is not a bulletin board displaying cryptic signals from deities, it is a realm of physical realities to be described, named, and classified in terms of their perceptible qualities, and understood entirely in terms of ordinary natural substances and forces.

²⁴ Frs. 27-29, 33: on Gaia/Earth; Fr. 30: on Pontos/Sea; Fr. 31: on Helios/Sun; Fr. 32: on Iris/Rainbow; and DK A 39: on the Dioscuri.

²⁵ For the outlines of a possible Xenophanean fragment on the Dioscuri, see Mourelatos 1989, 280 ff.).

²⁶ Cf. the epithets 'storm-footed'—Il. xxiv 77, and 'golden-winged'—Il. viii 398) and as a portent or omen ($\tau\epsilon\rho\alpha_S$) of evil (Il. xi 28; xvii 548).

²⁷ His audience could hardly have missed the contrast between νέφος...χλωρὸν ἰδέσθαι, and the poets' famous—often similarly line final—phrase, θαῦμα ἰδέσθαι.

Xenophanes' rejection of divine intimations to mortals can also be explained in connection with a conception of a divine being for whom such activity would have been wholly unfitting. In stark contrast to the anthropomorphic deities of the Homeric pantheon, Xenophanes' one greatest god is devoid of human traits (Frs. 14-16), 'completely unlike mortals in body and thought' (Fr. 23, 24), unmoving (Fr. 26), yet able to 'shake all things' through the exercise of his thought alone (Fr. 25). Given this conception of the deity, it would be impossible for a truly divine being to possess those special physical qualities of (loud) voice, (shining) clothing, (un-blinking) eyes, and (extra-large) size popularly regarded as the telltale signs of a materialized deity, nor could gods any longer make their personal appearances in different parts of the world. Xenophanes' assertion that this state of affairs has remained constant since the outset $(\alpha \pi, \alpha \rho \chi \hat{\eta} s)$ can also be understood in this light: the lack of communication between gods and men is not a new development signalling a change of divine heart; on the contrary, the divine has been incommunicado all along-as a consequence of its fixed and eternal nature. God is as always; human discovery, by contrast, emerges in the course of time.28

Xenophanes' view of a de-mythologized nature, therefore, neatly complemented his view of a de-naturalized deity. The clear consequence of both would have been that communication through natural signs from gods to mortals, that is, the whole idea of 'divine $\dot{\nu}\pi\dot{o}\delta\epsilon\iota\xi\iota\varsigma$ ', was untenable.²⁹

V. Fr. 18.2: An Alternative Approach

If in line one of Fr. 18 Xenophanes had dispensed with the idea that gods communicated with mortals through various natural marvels or other special signs, we might anticipate that in line two he would proceed to allude to some alternative approach for discovering the truth. That appears to be just the point of the phrase ζητοῦντες ἐφευρίσκουσιν— 'as they seek—or by seeking—they discover'. But what specific sort of inquiry and discovery did he have in mind? Neither verb possesses a sufficiently precise meaning to enable us to answer the question on semantic grounds alone. Έφευρίσκω, for example, like its parent verb εὐρίσκω, could have meant either 'discover', 'find', 'find out that', or 'invent'. Similarly, ζητέω in early writers meant simply 'searching about' for

²⁸ Χρόνφ—see the comments following in section V on the latter day emergence of inquiry into nature. For a parallel use of the aorist—here ὑπέδειξαν—to indicate the absence of an action of a certain sort throughout an earlier period of time, cf. II. i 106-108: 'never yet have you said to me what is desired...—οὑ πώ ποτέ μοι τὸ κρήγυον εἶπας—a good word you have never yet spoken nor brought to pass...—οὑτε τί πω εἶπας ἔπος οὕτ ἐτέλεσσας'). Cf. also the use of the aorist ἴδεν in Xenophanes' Fr. 34.1: '...the clear and certain truth no man saw/has seen...'.

²⁹ Thus, while the wording of line one alone might have allowed one to regard Xenophanes as concerned merely to deny a belief in *total* revelation or in a *total initial* revelation, the views expressed in his other teachings point up a concern to deny revelation through natural signs per se and, hence, to read line one as in option (3): $ούτοι \dot{α}π' \dot{α}ρχ\hat{η}ς πάντα θεοί θνητοῖσ' ὑπέδειξαν—'not from the very outset have gods intimated all sorts of things to mortals'.$

³⁰ Especially when paired with a verb of 'seeking', ἐφευρίσκω often meant 'discovering in a

something or someone, but it will later cover cases of distinctly theoretical inquiry.³¹ Other evidence relating to Xenophanes' views on inquiry and discovery is slight and indirect. Fortunately, it converges toward a single view.

Fr. 32 provides the first helpful clue. Like Fr. 18 it starts from a conventional point of view: 'she whom they call Iris'. Mortals adopt a name for a natural phenomenon that confers on it both divine status and a feminine nature. When Xenophanes asserts that 'this $(\tau \circ \hat{\upsilon} \tau \circ)$ is naturally a cloud...to look upon $(i\delta \acute{\epsilon} \sigma \theta \alpha \iota)$ ', he challenges the prevailing view of the rainbow along each of three separate axes: not a deity but a natural substance, not a 'she' but an 'it', and not to be identified through the name mortals have assigned to it but rather by reference to the qualities it can be observed to have. Xenophanes elsewhere calls attention to ways in which the things that mortals hope to understand are actually there to be discovered if only they will take a look. ³²

It is also relevant to our question that Xenophanes appeared next to his fellow Ionian, Hecataeus of Miletus, in Heraclitus' famous put-down of the popular paragons of wisdom: 'much-learning does not teach understanding—or else it would have taught Hesiod and Pythagoras and again Xenophanes and Hecataeus' (Fr. 40). Hecataeus is known to have written extensive family geneologies and geographical treatises full of facts about peoples, places, and things thoughout the Mediterranean region.³³ This mention of the two Ionians can only be read as an indication of Heraclitus' dissatisfaction with an exclusively 'fact-finding' approach to knowledge.³⁴ For all their fact-finding, the two Ionian inquirers failed to 'learn ν 60s'—i.e., they failed to grasp the unity of the opposites.³⁵ A similar indictment of inquiry in the form of travel and observation appears to have been the point of his Fr. 45: 'one would never discover ($\dot{\epsilon}\xi$ $\dot{\epsilon}$ $\dot{\nu}$ ρ 0ι0—from

moment of encounter' (for Homeric ἐφευρίσκειν Cunliffe offers 'to find, light or come upon' and 'to come upon and find doing something specified' as in *Od.* xxiv 145, where the suitors catch Penelope in the act of unravelling her weaving; Heitsch 1983, 138 similarly translates ἐφευρίσκειν here in Fr. 18 as 'vorfinden, antreffen'). But as used by 5th-century writers the verb commonly means 'invention' or 'intellectual discovery' (cf. Pindar, *Pyth.* iv 262; and xii 7, both referring to a god's invention of an art).

31 Cf. H. Pyth. Apollo 214: ζητεύων κατὰ γαῖαν ἔβης—'you went searching throughout the earth'; cf. Il. xiv 258; Hesiod, Erga 40; H. Hermes 392; Alcman 33.8, etc.) In Aeschylus P.V. 264, 318, however, we cannot imagine that Prometheus is being urged to attempt the manifestly impossible 'travel about', but rather to 'seek', i.e., 'try to devise or invent' a way of escaping from his bonds. When Parmenides described the 'only ways of inquiry available for thinking' (Fr. 2.2: ὁδοὶ μοῦναι διζήσιός εἰσι νοῆσαι) he clearly did not have overseas travel in mind, nor was Heraclitus' 'I sought (for) myself' (Fr. 101: ἐδιζησάμην ἐμεωυτόν) a report of his unaccompanied travels.

³² Cf. also Fr. 36: 'however many they have made manifest for mortals to look upon'; for the particulars of Xenophanes' 'empiricism' see Fränkel's well-known 1925 study; Xenophanes' rejection of mythical accounts in favor of direct observation was also noted by Kleingünther 1933, 42.

³³ See further, Heidel 1943, 263ff. Hecataeus' journeying about the world was the subject of his *Periêgêsis*.

³⁴ Kahn 1979, 108, comments: 'they represent the diffusion of Milesian *historiê* in literary form'.

³⁵ Cf. Frs. 57 and 106—on Hesiod; Fr. 41 on 'the wise as one thing'; and Fr. 51: 'they do not comprehend how what is at variance agrees with itself', etc.

 $\dot{\epsilon}$ ξευρίσκω) the limits of the soul, should one traverse every road—so deep a measure does it possess' (Robinson trans). In both comments Heraclitus appears to reject the idea that traversing roads is the way to go about discovering 'deep truth' (although, as his Frs. 35 and 55 suggest, such inquiry might well play an essential *preliminary* role).

Inquiry in the form of 'searching about' was of course just the $i\sigma\tau$ opí η for which the Milesian philosopher-scientists were famous.³⁶ That their approach was still adopted well after Xenophanes' time is clear from Herodotus' comments on his preferred method for gaining reliable information about people and customs in distant regions of the world.³⁷

The appositeness of Heraclitus' categorization of Xenophanes (though perhaps not the complete fairness of the criticism) is confirmed by various details of Xenophanes' teaching: by his references to what can be learned about natural phenomena through observing them, by his allusion to a lifetime of travel,³⁸ and especially by this unusally detailed report from Hippolytus:

And Xenophanes thinks that a mixture of the land with the sea comes about, but that in the course of time (the land) becomes freed from the moisture. He cites the following as arguments: that shells are found inland and in mountains, and he says that in quarries in Syracuse imprints of a fish and of seals were found; and in Paros the imprint of coral in the deep of the marble and on Malta slabs of rock containing all sorts of sea creatures (DK A 33, 35).

While is not certain that Xenophanes himself travelled to each of these locations we can nevertheless sense in Hippolytus' account an appreciation for the value of evidence garnered from distant locales. We can glimpse a similar wideranging interest at work in other comments.³⁹

But Xenophanes was clearly interested in discovering more than just the facts. As the passage just quoted makes clear, shells and fossil traces were of interest to

³⁶ For Thales as its—probably largely honorary—founder: Simplicius, Fr. 1 (Diels 23.29) and Fr. 19 discussed above; for his travels to Egypt: Aëtius i 3.1; Proclus, *in Euclidem* (DK 11 A 11); for his activities as observer: Diogenes Laertius, i 23; i 27; as well as the anecdotes in Plato, *Theat*. 174a and Aristotle, *Pol*. 1259a9, both of which traded on the image of Thales as intent observer; but also, more credibly, the references to the travels of Hecataeus (e.g., Agathermus i 1—DK 12A6) and Anaximander (D. L., ii 1—DK 12A1; Aelian, *V.H.* iii 7—DK 12 A 3).

³⁷ 'Moreover, wishing to get clear and certain knowledge of a matter $(\sigma \alpha \phi \in \mathcal{F} \tau \iota \in \hat{\iota} \delta \hat{\epsilon} \nu \alpha \iota)$ where that was possible to do, I took ship to Tyre in Phonice, where I heard there was a holy temple of Heracles. There I saw it $(\hat{\epsilon} \hat{\iota} \delta o \nu)$...therefore what I have discovered by inquiry plainly shows $(\tau \hat{\alpha} \mu \hat{\epsilon} \nu \nu \hat{\nu} \nu \hat{\iota} \sigma \tau \rho \rho \eta \mu \hat{\epsilon} \nu \alpha \delta \eta \lambda \hat{\alpha} \hat{\alpha} \sigma \phi \hat{\epsilon} \omega \mathcal{F})$...' (ii 44).

³⁸ Cf. 'thoughout the Greek land' and 'from city to city' in Frs. 8 and 45; reports of his contacts with the citizens of Elea, Zancle, Catana, and Egypt in A 1 and 13, and with the court of Hieron in Syracuse in A 11.

³⁹ On differing conceptions of the gods among Thracians and Ethiopians (in Fr. 16, cf. A 13), on the presence of water in underground caverns (Fr. 37), a mention of the mountain Eryx in Sicily (Fr. 21a), frogs (Fr. 40), cherry-trees (Fr. 39), and reports of his interest in volcanic eruptions off the coast of Sicily (A 48), and 'eclipses' (or 'cessations of light') in different regions of the world (A 41, 41a).

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him not for so much for their own sake, but because they supplied the evidence (Hippolytus' term is $\mathring{\alpha}\pio\delta\epsilon(\xi\epsilon\iota\varsigma)$ on the basis of which he constructed an answer to the sort of question first raised by the Milesian philosophers—'What are the basic principles of all things?' Xenophanes proposes several such answers. ⁴⁰ Travel and direct observation appear to have been, at least on some occasions, ⁴¹ his preferred method of fact-finding, but what he sought to learn from the facts he had gathered were the basic principles and forces at work throughout nature. ⁴²

The Milesian thinkers, in sum, appear to have initiated inquiry about natural phenomena in the form of travel and direct observation of the world. In a variety of ways Xenophanes affirms the importance of observation for knowledge and appears, on at least some occasions, to carry out research in the form of Milesian $t\sigma\tau o\rho(\eta)$ in order to acquire it. We can, therefore, understand the full significance of his preaching about inquiry here in Fr. 18 in the light of his general practice. 'At length, as they search they discover...' is all he said, but what he almost certainly meant by saying it was that 'as mortals, at length, have begun to travel about the world and observe its features directly for themselves, they have begun to acquire information that enables them to identify, albeit with less than complete certainty, a number of the basic forces at work in nature'.

VI. Inquiring and 'Discovering Better'

We began by arguing against a progressivist reading of Fr. 18. Have we not now established at least one variant of the 'faith in progress' view—namely, a 'faith in scientific progress'?⁴³ Two important differences need to be noticed. First, defenders of the scientific-progress reading have generally given Fr. 18 a

⁴⁰ That nature perpetually destroys and regenerates itself (A 32, 33), that all things that come into being and grow are earth and water (Frs. 29, 33); that the phenomena of the heavens can all be understood in terms of moist exhalations from the surface of the sea (A 46—and similarly, that whatever comes out of the earth winds up in it, Fr. 27); that the various forms of light in the heavens can all be accounted for by the ignition and quenching of burning clouds (A 32-45); that the earth extends downward indefinitely far (Fr. 28); that the sea is the source of all winds, rains, and rivers (Fr. 30); and that men's ideas of the gods are reflections of their own attributes and ways of life (Frs. 15, 16).

⁴¹ I leave open here the question of whether Xenophanes would have countenanced the possibility of knowledge (about the divine nature) through the exercise of a priori reasoning. Fr. 34 tends to suggest not, but the Xenophanes of the doxographical tradition (especially the pseudo-Aristotelian treatise *de Melisso Xenophane Gorgia*) was highly adept in such matters. I personally regard the odds in favor of an Eleatic dialectician-Xenophanes as extremely remote. In this sense Cherniss (1951) was probably right: Xenophanes—the a priori theologian of the *MXG*—did 'become a figure in the history of philosophy by mistake'—or by a series of them.

⁴² His assertion in Fr. 34 that no man has known or will ever know τὸ σαφϵς about 'the gods and such as I say about all things' can be understood in this regard as setting the limits within which travel and direct observation can lead to the discovery of the clear and certain truth, and as a concession that no universal scientific principles can be known for certain to be true (parallel to his concession in Fr. 35). But to say all this would only reaffirm the importance of carrying out direct observation whenever the opportunity to do so lay within reach.

⁴³ Proposed by Gomperz 1901-1912, i 162; Untersteiner 1956, ccxxxiv-ccxxxv; and Zeller 1963, i 673.

strongly humanistic flavor: by searching men discover *on their own*.⁴⁴ Partly for reasons others have already given,⁴⁵ it is not clear that this was actually Xenophanes' view. Second, there is still no good reason to attribute to Xenophanes a *faith in progress*, scientific or otherwise. Consider the following pair of assertions: not from the outset did gods intimate all things to mortals, but mortals will in time continue to find better and better explanations for natural phenomena. Why should the collapse of the old approach have led Xenophanes (or anyone else) to imagine that *progressively* better results would be obtained from some new one? In fact, there is a perfectly natural and far more plausible sense of 'better' to adopt here: inquiry through travel and direct observation leads to 'discovering (a) better'; that is, to an understanding of nature superior to one which regards events occurring in nature as cryptic messages from the gods.

Asserting the superiority of a new approach to one currently in vogue would have been a perfectly natural use of the adjective $\check{a}\mu\epsilon\iota\nu\rho\nu$. Since the neuter accusative singular of the comparative form of the adjective also provides the comparative form of the adverb, $\check{a}\mu\epsilon\iota\nu\rho\nu$ might actually have had an adverbial sense: 'they discover in a better way' or 'they do better at discovering'.⁴⁷

Xenophanes elsewhere refers to his own (political) wisdom or expertise as 'better', not in the sense of an *improvement* over previous versions, but as a commodity *superior* to one presently held in higher esteem by his fellow citizens (Fr. 2.10-12):

And even if [the athlete] were to win with horses he would get all these [prizes], but he would not be as worthy as I. For our expertise $(\sigma o \phi(\eta))$ is better than $(\mathring{\alpha} \mu \epsilon (\nu \omega \nu))$ the strength of men and horses.

He proclaims his $\sigma o \phi (\eta)$ both as 'good' (2.14) and as 'better than' the athletic prowess of those whom the city chose to honor, referring (in all probability) to the wise counsel—concerning how to honor the gods, how to avoid faction, and so on—he had offered to the citizens through his poetry. He shows here in Fr. 2—as perhaps elsewhere⁴⁸—that he did not hesitate to remind his audiences of

⁴⁴ Cf. Kleingünther 1933, 41: 'die Menschen selbst finden das Bessere...dieses Bewußtsein der eigenen Leistung...'.

⁴⁵ Cf. Shorey's critique of Gomperz and Xenophanes' mention of a role played by θ εός in Xenophanes' Fr. 38 and—implicitly— θ εοί in Fr. 36.

⁴⁶ Homer's warriors and counsellors frequently refer to a new approach or plan for action as 'better than' a rival one: 'a better μῦθος' (II. vii 358;), 'a better νόος' (II. ix 104; xv 508), or 'a better μῆτις' (II. ix 423; xiv 107; xv 508). Nestor's famous hymn to the power of 'cunning intelligence' (μῆτις) includes the statement that 'brains are better than (ἀμείνων) brawn' (II. xxiii 315). An apothegm attributed to Thales (to 'teach and learn τὸ ἄμεινον'; DK, i 64.8), might similarly have recommended the Milesian's way of thinking as superior to some popular alternative.

 $^{^{47}}$ Cf. Herodotus viii 35: πάντα δ' ἡπίστατο...ἄμεινον ἣ τὰ ἐν τοῖσι οἰκίοισι; Theognis, 670: γνοὺς ἄν ἄμεινον; Plato, *Ion* 537c2: γνοίη ἄμεινον; cf. also Theognis 796 = Mimnermus 11: ἄμεινον ἐρεῖ, etc.

⁴⁸ Cf. Reinhardt's account of Fr. 22 as Xenophanes' device for focusing the dinner conversation on his own exploits.

the excellent results his thinking had produced.⁴⁹ Fr. 18, understood as a claim of the superiority of his new approach to gaining an understanding of nature, is what one might expect from a philosopher already on record on the superiority of his own $\sigma o \phi i \eta$.

VII. Conclusion

I have argued that in Fr. 18.1—'Truly, not from the outset did gods intimate all sorts of things to mortals'—Xenophanes rejected not the traditional view of the gods as mankind's original benefactors but rather, in virtue of both his novel theology and scientific view of nature, the specific belief that gods communicated with mortals through special natural signs. In Fr. 18.2—'but, at length, by searching they discover better'—he voiced not his faith in continuing cultural, social, or scientific progress, but rather his regard for the recently developed ἱστορίη as a superior approach to discovering the truth. He did not suppose that any account of the nature of the gods and the principles of 'all things' resulting from human inquiry could qualify as 'the best', that is, knowledge of the clear and certain truth. But the many detailed explanations he already had in hand would have given him excellent reason to claim that ἱστορίη provided explanations superior to those available from conventional sources of wisdom, and was therefore a better way of finding out the truth. If we believe, as we must, that Ionian science represented the first phase of a process of thought that has led to our modern scientific understanding of the world, then we ought to regard Xenophanes' promotion of Milesian inquiry here in Fr. 18 as one of the turning points in the history of western thought, more a splendid example of human progress than a famous early expression of faith in it.⁵⁰

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⁴⁹ Cf. Socrates at *Apol*. 30a5-7: οὐδέν...μεῖζον ἀγαθὸν γενέσθαι ἐν τῆ πόλει.

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