V

The Divine Philosophy of Xenophanes

(a) A wandering minstrel

Xenophanes of Colophon was a four-square man, remarkable for the breadth of his interests, the depth of his thought, and the length of his life. He was a poet and satirist of note, an erudite and versatile polymath, and a considerable philosopher. The range of his accomplishments, and his unflinching devotion to the gods of reason, make him a paradigm of the Presocratic genius.

His longevity deserves a paragraph. By his own account a non-agenarian (21 B 8), he may have achieved a century (Censorinus, A 7). In all probability his life fell within the period from 580 to 470 and thus overlapped with the life-spans of most of the major Presocratic thinkers. He travelled widely; he was a celebrated and controversial figure in his life-time; he was familiar with, and often highly critical of, the thoughts of his predecessors and contemporaries (B 7; B 19; Diogenes Laertius, IX. 18=A 1; Plutarch, apud Proclus, A 20); and it can hardly be doubted that his opinions influenced and were influenced by those of his peers. Yet those influences cannot be charted with any certainty, and that for a simple reason: with two uninteresting exceptions (B 2; B 8), we do not know at what point in his life Xenophanes formulated or made public his views. If his birth and his death can be dated with modest precision, his intellectual biography is a tract of darkness some eighty years across.

What holds of Xenophanes holds of the other Presocratics: they did not usually date their works, and they left behind them no *Nachlass* from which busy scholars might reconstruct their spiritual careers; even where the gross, corporeal chronology of their births and deaths is discoverable, the finer dating of their mental histories remains perfectly unknown. Scholars have combed the surviving fragments for internal evidence of influence and reaction; in a few cases they have produced results commanding general assent; more often the assessment of one scholar nicely balances the contradictory assessment of another. But even where some influence is indubitable, the direction of influence can hardly be discovered in the absence of a detailed external chronology. Thus Xenophanes is often thought to have influenced Parmenides; but the opposite influence is chronologically possible, and has been staunchly maintained. Again, the relation between Parmenides and Heraclitus is as controversial as it is obscure. And later it will emerge that the mutual connexions between the later Eleatics (Zeno and Melissus) and the early neo-Ionians (Empedocles and Anaxagoras) are beyond our grasp.

Any account of Presocratic thought will impose some overall pattern on the material; and at a very high level of abstraction some pattern is indeed discernible. Details, however, escape us; and detail is the stuff of history.

Xenophanes' long life produced a large *oeuvre*. The extent of his enquiries is unquestionable: Heraclitus marked, and scorned, his polymathy (A3=22 B 40); and the

documents testify to a vast knowledge. There is evidence for a detailed cosmology on the Milesian model (e.g., **B 17–33**; pseudo-Plutarch, **A 32**; Hippolytus, **A 33**); there are social and political comments which might be dignified into apolitical theory (e.g., **B 2–3**); there is contemporary history (Diogenes Laertius, IX. 21=**A 1**); and there are substantial pieces of a more strictly philosophical nature.

Of this *oeuvre* some forty-odd fragments are all that survives;³ and the most considerable of these have a literary rather than a philosophical interest. Moreover, the origin of the scientific and philosophical remnants is disputed. Some scholars imagine a fairly formal treatise *Concerning Nature*; others suppose a systematic set of beliefs expressed piecemeal in a variety of poems; the majority view maintains that 'Xenophanes expressed such scientific opinions as he had incidentally in his satires', and had no systematic thoughts to present—that intellectually he was a thing of shreds and patches.⁴

The majority view has no intrinsic merits and is supported by no ancient testimony. Against it there stands the doxography, which recognizes Xenophanes as a well-rounded thinker, and which thrice refers to a work *Concerning Nature*. Furthermore, one fragment (**B 43**, which I shall analyse in a later chapter) appears to have the form of a prologue, or to come from a poem or a passage introducing Xenophanes' philosophical reflexions. In it Xenophanes mentions 'the gods and everything about which I speak': I shall argue later that the phrase refers to theology and natural philosophy; and I believe that **B 34** implies the existence, if not of a poem *Concerning Nature*, at least of a fairly systematic and comprehensive parcel of scientific and philosophical verses. If that is so, then Xenophanes was a professional and self-conscious thinker, and not a poet and satirist whose polemical whims occasionally led him to paddle in philosophical ponds.

As a philosopher, Xenophanes has not received a universally appreciative audience: he is dismissed as unoriginal, 'a poet and rhapsode who has become a figure in the history of Greek philosophy by mistake'. There is, it is true, an ancient error about Xenophanes' philosophical achievement: in the *Sophist* (242DE=A 29) Plato, jesting, makes Xenophanes the first Eleatic monist; Aristotle repeated the point (*Met* 986b21=A 30); Theophrastus felt obliged to refer to it; and the doxographers slavishly follow their master (Cicero, A 34; pseudo-Galen, A 35). The doxographical tradition has no value here; and Xenophanes cannot qualify as a philosopher by pretensions to a monistic ontology. There are, however, other opinions which are securely attributed to Xenophanes on the basis of his own words and which, in my opinion at least, indicate a brilliant, original and sophisticated talent. Those opinions concern epistemology and natural theology. I shall reserve Xenophanes' remarks on the nature and extent of human knowledge for a later chapter; here I deal with his theology.

(b) Summa theologiae

At a symposium, Xenophanes says, 'first of all, pious men should hymn the god with decent stories and pure words' (**B 1**, 13–14). It is as a theologian that Xenophanes is most celebrated; for even if it is true, in general, that 'when one reads the Presocratics with an open mind and sensitive ear, one cannot help being struck by the religious note

in much of what they say', ⁷ nevertheless, in the majority of Presocratic writings the note forms part of the harmony: in Xenophanes alone is it thematic.

Xenophanes was, as I have said, an accomplished satirist; and many of his divine *dicta* are negative and polemical in form. Most scholars deny him a systematic theology, and we may readily concede that Xenophanes was no Aquinas, his writings no formal *Summa*. For all that, the various theological sayings which have come down to us can be fitted into a coherent and impressive whole.

I start by listing the divine dogmas whose ascription to Xenophanes is secured by actual fragments of his poems. They are seven in number:

- (1) God is motionless.
- (2) God is ungenerated.
- (3) 'There is one god, greatest among gods and men.'
- (4) God is not anthropomorphic.
- (5) God thinks and perceives 'as a whole'.
- (6) God moves things by the power of his mind.
- (7) God is morally perfect.

If we have in (1)–(7) the bones of a theology, is it a natural or a revealed theology? According to Nietzsche, Xenophanes was merely 'a religious mystic'; and modern scholarship concurs:'...in Xenophanes we find a new motif, which is the actual source of his theology. It is nothing that rests on logical proof, nor is it really philosophical at all, but springs from an immediate sense of awe at the sublimity of the Divine.' In Xenophanes a 'mystical intuition' replaces the 'pure speculation' of his Ionian predecessors. If that is true, then Xenophanes is the progenitor of that pestilential tribe of theological irrationalists, whose loudest member is Martin Luther and whose recent aspirations to philosophical respectability have been encouraged from the grave by the palsied shade of the late Wittgenstein. Must Xenophanes really incur such profound and posthumous guilt?

There is, I think, no evidence in the fragments to support a mystical or irrational interpretation of Xenophanes' theology: there is no appeal to sublime intuition, no descent to mere enthusiasm. And there is evidence that tells in the opposite direction.

The immobility of God, dogma (1), is thus stated in **B 26**:

Always he remains in the same state, in no way changing; Nor is it fitting for him to go now here now there (62).

For the moment I ignore the first line of the couplet. The second line both states and justifies (1); the justification is conveyed by the word 'fitting (epiprepei)'. Some scholars take the notion of what is 'fitting' to be an aesthetic one: locomotive gods are not pretty, hence god does not move. It is incredible that any thinker should have advanced such a fatuous piece of reasoning. Fortunately, the word 'fitting' need not be held to a strictly aesthetic sense; it is readily interpreted in a logical fashion: the phrase 'it is not fitting' is Xenophanes' archaic and poetical version of 'it is not logically possible'. It does not 'fit' the essential nature of god, or our concept of what it is to be divine, to imagine that divinities locomote: that is to say, 'God moves' is self-

contradictory. That interpretation does not, I think, strain the Greek; and it will turn out to be consonant with the general tenor of Xenophanes' theological reasoning.

The logical aspect of Xenophanes' theology is further exhibited by dogma (2), divine ungenerability. Here the fragments fail us; **B 14** reads:

Mortals opine that gods are born, And have their clothes and voice and form (63).

We may safely infer (2) from **63**; but for argument we must apply to the doxography. And in fact we are offered three reasonings.

The first argument is found in Aristotle:

Xenophanes used to say that 'those who assert that the gods are born are as impious as those who say that they die', for in both cases it follows that the gods at some time fail to exist (64: *Rhet* 1399b6–9=A 12).

Gods are essentially sempiternal (cf. Cicero, A 34): even in Homer they are 'the gods who always exist' (*theoi aei eontes:* e.g., *Iliad* I. 290). Everyone recognizes that the gods cannot therefore die; yet the theogonies nonchalantly tell of divine births. ¹⁰ Xenophanes points out that birth and death are analogous in that each entails a denial of sempiternity: a consistent Homer or a clear-eyed theist will reject divine generation for precisely the same reason for which he rejects divine destruction.

The argument is pointed but not profound: perhaps there is an asymmetry between birth and death; perhaps divine death is ruled out not because it conflicts with sempiternity, but because it implies that something can get the better of the gods and force them out of existence. Thus it is divine power which precludes divine death; and divine power does not similarly preclude divine birth.

That objection is in effect answered by the second and third arguments for (2) which our sources ascribe to Xenophanes. Of the three relevant doxographical reports—in Simplicius, in pseudoPlutarch, and in the pseudo-Aristotelian treatise *de Melisso, Xenophane, Gorgia* (A 31; A 32; A 28)¹¹—the fullest is the last:

And he says that it is impossible, if anything exists, for it to have come into being—stating this in the case of god. For it is necessary that what has come into being should have come into being either from like or from unlike. But neither is possible; for it is not suitable (*prosêkein*) that like should be sired by like rather than sire it (for things that are equal have all their properties the same and in similar fashion as one another); nor that what is unlike should come into being from unlike (for if the stronger came into being from the weaker, or the greater from the less, or the better from the worse—or the reverse: the worse from the better—what is would come into being from what is not, which is impossible) (65: 977a14–22=A 28).

This report is contaminated by later Eleatic logic; yet that it contains a Xenophanean core is proved not only by certain turns of phrase but also by a striking fragment of Epicharmus.

Epicharmus was a Sicilian playwright, active at the beginning of the fifth century BC. The surviving fragments of his works exhibit an. interest, satirical but not superficial, in the philosophical issues of his day; in particular, Epicharmus knew Xenophanes' poems, and parodied them more than once. ¹² Fate has preserved a fragment in dialogue form on the birth of the gods; it is evidently a pastiche of Xenophanes:

- —But the gods were always about and never off the scene; and they are always about in the same way and always with the same habits.
 - —But Chaos is said to have been first born of the gods.
- —How so? if he didn't have anything from which or to which he could be the first to come?
 - —Then nothing came first?
- —No—and nothing second either of the things we're now talking about; but they always existed (66:23 B 1).

In this fragment Epicharmus is tilting at Hesiod (*Theogony* 116–17); but the thought it contains was influential (it drove Epicurus to philosophy: Sextus, *adv Math X.* 18); and from it and **65** we can construct two Xenophanean arguments for (2). The nerve of each argument is the claim that a generated god must have something to 'come from'. (I ignore the jocular suggestion in Epicharmus that a generated god must also have something to 'come to'). More generally:

(8) If a comes into being, then for some x a comes into being from x. I have noted, in another connexion, the ambiguity of the phrase 'from x' (above, pp. 39–40). How is it to be glossed in (8)? Epicharmus uses the colourless verb gignesthai for 'come into being'; in the MXG the word teknoun, 'to sire', is employed: it is tempting to suppose that this represents Xenophanes' original thought. If that is so, then 'come into being' in (8) means 'be born'; and (8) states the necessary truth that everything that is born has a parent. But, so construed, (8) supports not (2) but the weaker assertion that gods are not born: may not a god come into being without being born? may not divine generation be spontaneous generation? Perhaps Xenophanes would have replied that coming into being cannot be simply inexplicable: a divine generation, like any other, requires a moving cause; and what could a cause of divine generation be but a parent or quasiparent? Thus divine generation is either divine birth or something logically equivalent to divine birth; and there is no room to drive a wedge between the generation in (8) and the generation in (2).

However that may be, we still have to link (8) to (2). Epicharmus suggests the following supplementary premiss:

- (9) If a comes into being from b, then b existed before a existed. That is surely a tautology; and (2) follows from (8) and (9), in conjunction with:
 - (10) If a is a god, then nothing existed before a existed.

Now if gods are essentially creative beings, and if nothing exists except as a result of divine creativity, then (10) suggests itself. But the suggestion is hasty: for all that has

been said so far, gods may be created, provided that their creators are themselves divine. And the traditional theogonies do, of course, give generated gods divine parents. Thus (10) must be weakened to:

(10*) If a is a god, then if b exists before a, b is a god.

I now anticipate myself and call upon Xenophanes' dogma (3), which I shall argue is a statement of monotheism: if there is at most one god, and (10*) is true, then (10) is true too. Thus by tacitly assuming (3), Xenophanes may properly argue from (10), (9), and (8) to (2). That exegesis is undeniably contorted; yet I can see no other way of extracting a decent argument from Epicharmus.

The MXG presents a different set of considerations. I shall here draw from the text what I think is its Xenophanean kernel, though I confess that my account has a somewhat arbitrary air. The crucial premiss is:

(11) If a comes into being from b, then b is at least as great as a. What might commend (11) to Xenophanes? There is a general theory of causation which asserts that 'There is as much reality in the cause as in the effect'. We tend to associate the theory with the name of Descartes; but in fact it is much older. Indeed in the next chapter I shall suggest that the Synonymy Principle, as I call it, has a Presocratic origin (below, p. 119); and it is, I think, possible that Xenophanes implicitly rested premiss (11) upon it: if b gives greatness to a, then b must itself possess greatness. But a less general argument suggests itself: if I am able to make a powerful product, then I must surely have as much power as that product possesses; for a product, which owes its power to its producer, can hardly have more power than that producer. Indeed, the power enjoyed by my products is, in a sense, enjoyed by me; for the labour exerted by the products of my labour is itself, at one remove, my labour. The argument will not, and should not, convince the thoughtful reader; but it may suffice to give an air of plausibility to (11).

Now I shall shortly argue that Xenophanes subscribed explicitly to:

(12) If a is a god, then a is greater than anything else. From (8), (11) and (12) the conclusion (2) follows deductively.

Thus we have three *a priori* arguments for (2), one from Aristotle, one from Epicharmus, and one from the *MXG*, the two latter arguments using a common premiss. Did Xenophanes use any or all of these arguments? It would be gratuitously sceptical to deny all three arguments to Xenophanes; and since I can see no good reason for singling out any one of them as peculiarly Xenophanean, I conclude that all originate with him.

I turn now to the most notorious, and the most interesting, of Xenophanes' theological tenets: monotheism. The doxographical tradition generally makes Xenophanes a monotheist (e.g., MXG, A 28; Simplicius, A 31; Hippolytus, A 33; Cicero, A 34; pseudo-Galen, A 35; but pseudo-Plutarch, A 32, implies polytheism). Most modern scholars have followed the doxographers, finding monotheistic hints in various fragments (especially B 24–6), and an explicit assertion in the first line of B 23, of which the orthodox translation reads:

There is one god, greatest among gods and men (67).

Some, however, are unhappy with this; and they attack the monotheistic stronghold itself: How, they ask, can **B 23** state monotheism in its first two words (*heis theos*), when the very next phrase ('greatest *among gods*': *en...theoisi*) is unequivocally

polytheistic? It is customary to answer this by saying that the phrase 'gods and men' is a 'polar expression', and that such expressions may be used in Greek even when one pole, in this case the divine one, is wholly inapposite. Thus, 'greatest among gods and men' means no more than 'greatest of all'; and the phrase carries no polytheistic baggage. ¹³ But that suggestion leaves Xenophanes with a verse that is inept, to say the least; and if that is the best that can be done for him on the standard translation, then there is much to be said for a different translation.

The Greek has been thought to allow the following version: 'The one greatest god among gods and men is...'. This translation turns Xenophanes into a polytheist, and a polytheist of the traditional Homeric type: there is a hierarchy of divinities ruled by a greatest god, as the Homeric Zeus rules, with uncertain sway, the Olympian pantheon. ¹⁴ The suggestion restores consistency to the first line of **B** 23: no monotheistic claim opposes the plural *en...theoisi*. But consistency is purchased at a high price: the translation is strained (Xenophanes' Greek-speaking admirers and detractors never conceived of it); it flouts the doxography; it is obliged to ignore the monotheistic hints of the other fragments; and it replaces a polemical thesis by a traditional platitude.

Perhaps further reflexion will allow us to keep the orthodox translation without falling into elementary inconsistency. Let us approach the question by asking what argument Xenophanes could have advanced in favour of monotheism. Again, the fragments give no help, and we are forced back upon the doxography. First, the *MXG*:

And if god is most powerful of all, he [sc. Xenophanes] says that it is suitable (*prosêkein*) for him to be unique. For if there were two or more, he would no longer be most powerful and best of all. For each of the several, being a god, would equally be such. For this is what a god and a god's capacity is—to have power and not to be in someone's power (*kratein alla mê krateisthai*), and to be most powerful of all. Hence, in so far as he is not more powerful, to that extent he is not a god (**68:**977a24–9=**A 28**).

Second, Simplicius:

...[Xenophanes] proves that [god] is unique from his being most powerful of all; for if there were several, he says, having power would necessarily belong to them all alike; but god is what is most powerful of all and best (69: A 31).

Third, pseudo-Plutarch:

And about the gods he says that there is no leadership among them; for it is not holy for any of the gods to have a master (*despozesthal*), and none of them stands in need (*epideisthai*) of anything at all (70: A 32).

The three reports presumably go back to Theophrastus. A happy chance allows us to trace their argument into the fifth century: in his *Hercules Furens* Euripides has Theseus say:

But *I* do not believe that the gods love beds which right denies them, and that they manacle one another I have never credited, nor shall I be persuaded; nor that one is by nature master (*despotês*) of another. For god—if he is genuinely a god—needs (*deitai*) nothing: these are the wretched tales of poets (**71:**1341–6=**C 1**). ¹⁵

The last three lines of this passage contain our argument: their context is Xenophanean, and the verbal coincidences between Euripides and pseudo-Plutarch make it probable that the *Hercules* is here paraphrasing a poem of Xenophanes.

The four passages I have just quoted differ in two minor ways and in one major. First, pseudo-Plutarch grounds god's mastery or power on holiness ('for it is not holy'), while Simplicius and the *MXG* make mastery a conceptual requirement of divinity ('but god is...'; 'for that is what a god is....'). My prejudice in favour of the latter reading is supported by Euripides ('if he is genuinely a god'¹⁶). Second, pseudo-Plutarch conjoins divine mastery with divine independence: gods lack nothing; and in Euripides, independence grounds god's mastery. I shall soon return to divine independence; but it is not immediately relevant to the present argument, and the *MXG* and Simplicius have not ignored anything of importance in their presentation of the matter.

The major difference between our reports concerns the premiss expressing divine mastery. In pseudo-Plutarch and in Euripides we find something that can be paraphrased by:

(13) If a is a god, then nothing is greater than a.

(Note, first, that I treat power and mastery as identical, using the general notion of greatness; and second, that in Euripides' version the consequent of (13) reads: '...then no god is greater than a'. But since it goes without saying that no non-god can be greater than a, (13) can be deployed without qualms.) In Simplicius and the MXG, on the other hand, we get not (13) but:

(14) If a is a god, then a is greater than everything else.

Now (13) and (141) are notequivalent: (14) entails (13) but (13) does not entail (14). Which premiss is to be preferred? The textual evidence inclines us to (13); for Euripides is our earliest and perhaps our most faithful source. (13) does not support monotheism: it is compatible with a plurality of potent divinities, each of which is at least as great as anything else in existence. And since pseudo-Plutarch does not present (13) as part of a monotheistic argument, we might conclude that Simplicius and the *MXG*, misrepresenting Xenophanes' premiss by (14), have falsely fathered on him an argument for a monotheism which he never recognized.

I am not content with that conclusion. If we reject (14), we must accept one of two positions: either Xenophanes asserted monotheism in **B 23**, but did not argue for it by way of (14); or else **B 23** is polytheistic. The latter position imports an inconsistency; for the only polytheism with which (13) is compatible is egalitarian, and the only polytheism with which **B 23** is compatible is hierarchical. The former position has Xenophanes assert a novel creed, come within an ace of arguing for it, and then rest content with (13). For these reasons, I prefer to believe that Xenophanes uttered (14). He may, I suppose, have uttered (13) as well (if pseudo-Plutarch is reporting a distinct

argument from that in Simplicius and the MXG); but it is easier to believe that pseudo-Plutarch has misrepresented (14) by (13).

From (14) it is easy to infer:

(15) There is at most one god.

And this, together with the premiss that there are gods (a premiss to which I shall return) amounts to monotheism.

How, finally, is all that to be reconciled with the first line of **B** 23? In 67 that line was translated: 'There is one god, greatest among gods and men.' It is, I think, not implausible to see here a highly concise epitome of the argument I have just developed; for the line may be paraphrased: 'There is one god, since (by definition) a god is greater than anything else, whether god or man.' The paraphrase seems remote when the line is taken in isolation; but if we imagine B 23 to have followed an exposition of the argument from (14), then I do not think that the paraphrase imposes an unbearable intellectual strain.

Xenophanes, I conclude, was a monotheist, as the long tradition has it; and he was an a priori monotheist: like later Christian theologians, he argued on purely logical grounds that there could not be a plurality of gods.

The next three dogmas, (4), (5) and (6), go together; for we may reasonably take (5) and (6) as partial explanations of (4), which simply says, in general and negative terms, that god is

not at all like mortals in form or even in thought (72: B 23.2).

Some have found an argument for (4) in Xenophanes' assertion that worshippers make their gods in their own image: the dark and hook-nosed Ethiopians, he observes, pray to dark and hook-nosed gods: the gods of the auburn, blue-eyed Thracians are blue-eyed redheads (cf. **B 16:** see below, p. 142). More caustically:

If cows and horses or lions had hands. or could draw with their hands and make the things which men can,

then horses would draw pictures of gods like horses, and cows like cows, and they would make bodies in just the form which each of them has itself (**73: B 15;** cf. Aristotle, *Pol* 1252b24–7).

The actual practice of human worshippers and the hypothetical practice of animal statuaries show that ordinary beliefs about the gods are entirely determined by the nature of the believer; hence, Xenophanes implies, those beliefs cannot pretend to the status of knowledge. I shall consider this splendid argument when I turn to Xenophanes' epistemology: here I content myself with the elementary point that 73 and B 16 do not license a conclusion to (4): if the common belief in the anthropomorphic nature of god does not amount to knowledge, it does not follow that the belief is mistaken, and that the gods in fact are non-anthropomorphic; for the belief, irrational and ill-based though it is, may yet accidentally enshrine the truth.

If we require an argument for (4) we may better look to (5) and (6). Doctrine (5) comes from **B 24**:

He sees as a whole, he thinks as a whole, and he hears as a whole (74). 17

That does not imply, as commentators from Clement onward have asserted, that god is incorporeal, nor even that he perceives without the use of sensory organs; it need mean no more than that any divine organs are, so to speak, spread evenly over the divine body: god is, as Hippolytus says, 'perceptive in all his parts' (A 33; cf. *MXG* 977a37=A 28; Simplicius, A 31). Why should that be so? It is probable that Xenophanean gods were omniscient: direct evidence is flimsy (see B 18; B 36; Arius Didymus, A 24), but divine omniscience is both traditional (e.g., *Iliad* II.485; *Odyssey* IV. 379, 468), and a plausible corollary of divine mastery. ¹⁸ If god is omniscient, his organs of perception can hardly be localized: he needs eyes in the back of his head.

Dogma (6) comes from **B 25**:

Without effort, by the will of his mind he shakes everything (75).

We may imagine that Xenophanes moved readily enough to (6) from (1) and the fundamental assertion of god's mastery.

(5) and (6) are enough to prove (4): since god's sensory organs are not localized, he is not like mortals 'in form'; since he can move things 'by the will of his mind', he is not like mortals 'in thought'.

Finally, we have god's moral perfection. That Xenophanes upheld (7) is an inference from **B 11**:

Homer and Hesiod ascribed to the gods everything that brings shame and reprobation among men—theft, and adultery, and mutual deception (**76:** cf. **B 12**).

Plainly, Xenophanes is appalled by the brazen assertion of divine peccation; and it is, I think, quite reasonable to infer that he himself was devoted to divine decency. The texts offer no explicit statement of (7); but Simplicius and the *MXG* say that god is essentially 'best'.¹⁹

Xenophanes' theology is a rational construction, relying on logic and not on mystical intuition: he has earned the title of natural theologian. It remains to be shown that a simple systematic pattern can be discovered in, or imposed upon, his thoughts.

Suppose, with Euripides, that god lacks nothing, or is perfect, and lay this down as an axiom of theology.²⁰ The axiom first yields the two pivotal theorems found in the MXG and Simplicius: god is all powerful, and god is all good. The second pivotal theorem amounts to (7). The first pivotal theorem yields uniqueness (3), ungenerability (2), and the attribute of being creator and sustainer of all things (6). Next, the axiom of

perfection implies immutability (as line 1 of **62** perhaps states),²¹ and hence motionlessness (1). Thus god's sustaining actions must be effected by the mere exercise of his will. Third, perfection implies omniscience; and this in turn requires a peculiar mode of perception (5). Given (5) and (6), we must deny anthropomorphism and assert (4).

I do not suggest that any Xenophanean poem set out a theology in that systematic fashion (though I am strongly tempted to think that Xenophanes' thoughts were arranged with a moderate degree of clarity and coherence in his mind). I do not suggest that the propositions I have discussed constitute the sum of Xenophanes' theology (I shall shortly mention two other candidates from the doxography). I do not suggest that Xenophanes' theology is a logically coherent system (for I doubt if any natural theology of this sophisticated kind is strictly coherent). But I do suggest that Xenophanes' theology is a remarkable achievement; and that its author managed to attain an astounding level of abstraction and rationality in a field where abstract thought frequently produces only high-sounding vacuity and reason rapidly gives place to ranting.

(c) Theology and science

Strictly speaking, Xenophanes' natural theology does not establish monotheism: *a priori* argument leads to the conclusion that there is at most one god; but it does not supply the further proposition that there is at least one god. Why, then, was Xenophanes a theist? On what grounds did he assert that there exist gods? In order to answer this question I shall digress briefly and discuss the evidence for early Ionian theological beliefs.

Aristotle distinguishes the *phusiologoi* who offer argument (*apodeixis*) in support of their opinions from the *theologoi* who simply tell stories or speak *muthikôs* (*Met* 1000a9–20). The decisive innovation of the *phusiologoi* was not that they abandoned the gods and eschewed theology, but that they replaced stories by arguments. Nonetheless, their general cast of mind may well seem not merely rationalistic but also hostile to any form of theism. Science and theology are, after all, natural antagonists: the Darwinian controversy was one unusually violent campaign in an extended war. Poseidon once stirred the sea and Zeus the air; but, taught by science, we no longer expect reference to those divinities in the meteorological forecasts.

Shall gods be said to thump the clouds When clouds are cursed by thunder? Be said to weep when weather howls? Shall rainbows be their tunics' colours?

Well might Bishop Hermias mutter to himself that 'philosophy took its start from the fall of the angels'.

The antagonism between science and religion was as vivid in the Greek as in the English mind: Aristophanes' Socrates asserts, in the *Clouds*, that 'gods are not currency with us' (247), and he explains at length how physical science has ousted the old divinities from their seat (365–411). In about 430 BC Diopeithes persuaded the liberal democrats of Athens to impeach 'those who disbelieve in things divine or teach doctrines about the heavens (*ta metarsia*)' (Plutarch, *Pericles* 32). Anaxagoras is said to have been caught by this decree (see below, p. 306); and the accusers of Socrates conjoined in their charge atheism and the study of astronomy (Plato, *Apology* 23D). The same conjunction is found in Euripides (fr. 913).

The matter is clearly stated by Plato:

[Most people] think that those who apply themselves to astronomy and the other arts associated with it become atheists when they see that things can come about by necessity and not by an intelligent will concerning the accomplishment of good things (77: Laws, 967A).²²

Science substitutes natural necessity for divine efficacy: the gods, put out of work, drop out of existence. Hippo, who mined the old Milesian veins in the mid-fifth century, was nicknamed 'the Atheist' 'because he assigned the cause of everything to nothing else beside water' (Philoponus, 38 A 8; cf. Simplicius, A 4; Alexander, A 9). A later epigram puts it neatly (B 2):

This tomb is Hippo's whom the fates, 'tis said, Made equal to the immortal gods—he's dead.

Atheism is not an invariable effect of science: on the contrary, Plato argues that a proper appreciation of astronomy leads men to god (*Laws* 886AE), and his argument has Presocratic antecedents (below, p. 99). Again, a naturalistic science may restrict the scope of divine activity without reducing it to nothing. Thus Xenophanes says of the rainbow:

What men call Iris, that too is by nature a cloud, purple and red and green to see (78:21 B 32).

and he said something similar of at least one other such phenomenon, namely St Elmo's fire 'which some men call the Dioscuri' (Aëtius, A 39). In strictness of logic, those sentences do not entail that meteorological occurrences have no spark of divinity in them; but it is plain that by talking of 'what men *call*' Iris or the Dioscuri Xenophanes implies that there is, in reality, nothing divine about those phenomena: rainbows have a purely natural explanation; divine interference is an unnecessary hypothesis. For all that, Xenophanes is no atheist.

Again, though you expel god with a pitchfork, tamen usque recurret: if nature or the stuff of the world usurped the function of god, why then nature or the stuff of the world

was thereby shown to *be* god. Socrates, having declared an uncompromising atheism at line 247 of the *Clouds*, asserts eighty lines on that his clouds are gods (329); and natural divinities figure frequently in the ensuing scene.

In sum, the advance of science may affect theism in at least three ways: it may seem to abolish the gods entirely, replacing their agency by purely natural operations; it may appear to limit but not to annihilate their realm, taking some phenomena from their control and leaving others within it; and it may give a new twist to our conception of the divine nature, ousting anthropomorphism and introducing a more abstract notion of divinity. In a later chapter I shall return to this theme; here I ask what attitude the Milesians adopted to religion. The answer must rely on a doxography whose evidence is scant and brittle.

According to Diogenes, Thales said that The universe is alive and full of spirits (79: I. 27=11 **A 1**).

But this report derives ultimately from a conjecture of Aristotle's:

And some say that a soul is mingled in the whole universe—which is perhaps why Thales thought that everything is full of gods (80: An 411a7=A 22).

If Thales did say that everything is full of gods or spirits, he probably only adverted to his belief in the ubiquity of animation (above, p. 8): there is no good reason to make him a pantheist. Again, according to some, Thales said that 'god is the mind which makes everything from water' (Cicero, A 23; cf. Aëtius, A 23; pseudo-Galen, 35); according to others, water itself was Thales' god (Hippolytus, *Ref. Haer.* I. 3). Both reports are in all probability late guesses.

The evidence for Anaximander is not much better. A controversial tradition ascribes to him belief in innumerable worlds; and the doxographers make those worlds gods (Cicero; Aëtius, **12 A 17**; pseudo-Galen, 35). The reports are not probative. Text **16** speaks not of the worlds but of Anaximander's principle: 'And this [i.e. the unlimited body] is the divine; for it is immortal and deathless, as Anaximander and most of the *phusiologoi* say' (Aristotle, *Phys* 203b13–5=**A 15**; above, p. 31). Aristotle does not explicitly say that Anaximander made 'the Unlimited' a divinity. Some scholars ascribe to Anaximander Aristotle's inference from immortality to divinity; others reject the ascription.²³ I see no way of deciding the issue.

Finally, in the case of Anaximenes there are a few weak and disparate reports. Cicero and Aëtius say that Anaximenes called his principle a god (13 A 10). Hippolytus' text contains the following absurdity:

He said that the principle was unlimited air, from which what comes about and what came about and what will be and gods and divine things come to be, and the rest from the offspring of this (81: A 7; cf. Augustine, A 10).

Hippolytus is garbled; Cicero and Aëtius carry little weight.

It would not require a very ardent scepticism to conclude that the Milesians had no theology at all. If they were not atheists in the sense of positively denying the existence of any gods, at least they were negative atheists: they left no room in their systems for gods, and were not perturbed by the omission. And even if we are disposed to accept the little evidence we have, we shall scarcely imagine that the Milesians were profoundly interested in gods and the divine; at most they said, unemphatically and uninterestedly, that their principles—or some of the things produced therefrom—were gods or godlike.

The case of Heraclitus is quite different. His system was, as I have already argued, scientific in the Milesian manner; and it was also self-consciously deterministic (below, pp. 131–5). Yet Heraclitus had a developed, if idiosyncratic, theology. I shall not expound or examine the material here; for Heraclitus, so far as we know, had nothing of Xenophanes' subtle and complex interest in natural theology. But there are important points of contact both with Xenophanes and with the Milesians: Heraclitus was, probably, a monotheist; his god, like that of Xenophanes, in some fashion or other governed the world; and it is at least possible that this theology was in some sense pantheistic: God and Fire, are, if not identical, at least closely assimilated to one another.

Science and theism are uneasy bedfellows, and the Milesians may have sensed the fact; yet they did lie together, in the thought of Heraclitus and possibly in that of his Milesian models. And they lay together in the mind of Xenophanes. We might expect Xenophanes, the logical theologian, to have said something about the nature of their union. Did he do so?

The doxography adds two further propositions to the seven from which Xenophanes' theology was reconstructed: his god is said to have been spherical (Diogenes Laertius, IX. 19=21 A 1; MXG 977b1=A 28; Simplicius, A 31; Hippolytus, A 33; Cicero, A 34; Sextus, A 35); and he is identified with the universe (Simplicius, A 31; Cicero, A 34). These reports are generally dismissed as late fabrications; but the dismissal is not indisputable.²⁴

The sphericality of god is supposed to be due to an Eleatic interpretation of Xenophanes: his god foreshadowed the 'Eleatic One'; 'the One' was a sphere; hence Xenophanes' god must have been a sphere. A different story can be told. The *MXG* and Simplicius take the fact that god is 'similar in every respect (homoion hapantêi)', and infer sphericality from that. A fragment of Timon says that Xenophanes made his god 'equal in all ways (ison hapantêi)' (fr. 60=A 35); and there is something to be said for the view that this phrase, like the rest of the fragment, echoes Xenophanes. For Timon was an avid admirer and imitator of Xenophanes; he had access to his poems; and he is unlikely to have been influenced by any disreputable Peripatetic inventor who insinuated ison hapantêi into the Xenophanean corpus in order to make his own account of Xenophanes' god seem more authentic. Thus Xenophanes may well have said that god is ison hapantêi, 'equal in all ways'; and the only reasonable interpretation of that phrase is the traditional one—his god was a sphere.

The identification of god and the universe derives from Aristotle. Xenophanes, he reports,

looking at the whole heaven, says that the One is god (82: *Met* 986b24=A 30).

A second fragment of Timon makes Xenophanes speak as follows:

For wherever I turned my mind, everything was reduced to one and the same thing; and everything that exists, however it was twisted, always came to rest in one similar nature (83: fr. 59=A 35).

Aristotle may be indulging his imagination; and Timon is writing satire, not history. Yet there is something to be said for the conjecture that Aristotle and Timon each allude to a lost line of Xenophanes; for both reporters, independently of one another, ascribe to him a view for which we find no evidence in the extant fragments. In some lost verses, I suggest, Xenophanes grounded his belief in god on a contemplation of the vast and ordered wonders of the heavens; and Aristotle and Timon each reflect those verses.

If there is anything in these two suggestions, we may add to our picture of Xenophanes the natural theologian: science and astronomical speculation led Xenophanes to god; the starry vastnesses convinced him not of a divinity but of their divinity, and he came to adopt a spherical pantheism. Observing the world in the light of Ionian science, and with a clear and unconventional reasoning power, Xenophanes remained a theist while rejecting the traditional forms of theism. Pure logic moulded his conception of god; science gave his conception substance and matter.

On this view, Xenophanes' thought assumes a sort of unity: science and theology are not dissociated elements in a jackdaw production; rather, science grounds theology, and theology frees science from the shadow of atheistical mechanism. The Milesians may have paid lip-service to the gods, and Heraclitus certainly paid heart-service: Xenophanes used his head; he attempted to construct a new Ionian theology that might be a fitting partner to the new Ionian science. It is clear that Xenophanes failed, and that his pantheism is hardly intelligible or consistent; but his project as a whole, and the execution of many of its parts, are sufficiently remarkable to prove that the initiator of natural theology was by no means its least practitioner.