

PRE SOCRATICS

THALES

War broke out between the Lydians and the Medes and continued for five years. . . . Another combat took place in the sixth year, in the course of which, just as the battle was growing warm, day was on a sudden changed into night. This event had been foretold by Thales, the Milesian, who forewarned the Ionians of it, fixing for it the very year in which it actually took place (May 28, 585 B.C.). The Medes and the Lydians, when they observed the change, ceased fighting, and were alike anxious to have terms of peace agreed on. . . .

As to the quantity and form of this first principle, there is a difference of opinion; but Thales, the founder of this sort of philosophy, says that it is water (accordingly he declares that the earth rests on water), getting the idea, I suppose, because he saw that the nourishment of all things is moist, and that warmth itself is generated from moisture and persists in it (for that from which all things spring is the first principle of them); and getting the idea also from the fact that the germs of all beings are of a moist nature, while water is the first principle of the nature of what is moist.

ANAXIMANDER

Among those who say that the first principle is one and movable and infinite, is Anaximander of Miletus, son of Praxiades, pupil and successor of Thales. He said that the first principle and element of all things is infinite, and he was the first to apply this word to the first principle; and he says that it is neither water nor any other one of the things called elements, but the infinite is something of a different nature, from which came all the heavens and the worlds in them.

Wherefore they (the Syrians) reverence the fish as of the same origin and the same family as man, holding a more reasonable philosophy than that of Anaximander; for he declares, not that fishes and men were generated at the same time, but that at first men were generated in the form of fishes, and that growing up as sharks do till they were able to help themselves, they then came forth on the dry ground.

ANAXIMENES

Infinite air is the first principle, from which arise the things that have come and are coming into existence, and the things that will be, and gods and divine beings, while other things are produced from these.

And the form of air is as follows: When it is of a very even consistency, it is imperceptible to vision, but it becomes evident as the result of cold or heat or moisture, or when it is moved. It is always in motion; for things would not change as they do unless it were in motion. It has a different appearance when it is made more dense or thinner; when it is expanded into a thinner state it becomes fire, and again winds are condensed air, and air becomes cloud by compression, and water when it is compressed farther, and earth and finally stones as it is more condensed. . . . /

PYTHAGORAS

~~The Pythagoreans say that~~
~~there is but one number, the mathematical,~~ but things of sense are not separated from this, for they are composed of it; indeed, they construct the whole heaven out of numbers, but not out of unit numbers, for they assume that the unities have quantity; but how the first *one* was constructed so as to have quantity (magnitude), they seem at a loss to say.

The universe is made from five solid figures, which are called also mathematical; of these he says that earth has arisen from the cube, fire from the pyramid, air from the octahedron, and water from the icosahedron, and the sphere of the all from the dodecahedron.

HERACLITUS

Nature loves to hide.

This world that is the same for all, neither any god nor any man shaped it, but it ever was and is and shall be ever-living Fire that kindles by measures and goes out by measures.

Fire lives the death of Air, and Air the death of Fire;
Water lives the death of Earth, and Earth of Water.⁴

Upon those who step into the same rivers, different and again different waters flow.

[It is not possible to step twice into the same river]. . . . It scatters and again comes together, and approaches and recedes.

We step into and we do not step into the same rivers. We are and we are not.

Cold things grow warm, what is warm chills; the moist dries, the dry dampens.

Men do not understand how what is divided is consistent with itself; it is a harmony of tensions like that of the bow and the lyre.

The way up and the way down are one and the same.

It is pleasure for souls to become wet.

By changing it rests.

A man's character is his destiny.

XENOPHANES

Homer and Hesiod attributed to the gods all things which are disreputable and worthy of blame when done by men; and they told of them many lawless deeds, stealing, adultery, and deception of each other.

They have sung of many lawless deeds on the part of the gods, stealing, adultery, and deception of each other.

But mortals suppose that the gods are born (as they themselves are), and that they wear man's clothing and have human voice and body.

But if cattle or lions had hands, so as to paint with their hands and produce works of art as men do, they would paint their gods and give them bodies in form like their own—horses like horses, cattle like cattle.

God is one, supreme among gods and men, and not like mortals in body or in mind.

The whole [of god] sees, the whole perceives, the whole hears.

But without effort he sets in motion all things by mind and thought.

For all things come from earth, and all things end by becoming earth.

She whom men call Iris [rainbow], this also is by nature cloud, violet and red and pale green to behold.

PARMENIDES

For the same thing can be thought as can be.

It must be that that, which may be spoken of and thought of, is what *is*; for it is possible for it to be, but it is impossible for nothing to be.

There is one way left for us to tell of, that *it is*; many signs in this way point to this, that what *is* is without beginning, indestructible, entire, single, unshakable, endless; neither *has* it been nor *shall* it be, since not it *is*; all alike, single, solid. For what birth could you seek for it? Whence and how could it have grown? I will not let you say or think that it was from what is not; for it cannot be said or thought that anything is not. What need made it arise at one time rather than another, if it arose out of nothing and grew thence? So it must either be entirely, or not at all.

But it lies motionless in the limit of mighty bonds, without beginning and without surcease, since beginning and destruction have been removed far away, and true belief has thrust them aside. Being the same and remaining in the same place it likewise lies within itself and so remains locked in the same position; for *Anangké* (Necessity), being the stronger, holds it in the bonds of its limitation which confine it all about. Hence that which is is not allowed to be infinite; for it is in need of nothing, but if it were infinite it would be in need of everything.

So, since there is a limit at its extremity, it is finite on all sides, like the bulk of a well-rounded sphere, equally balanced from the center in every direction; for there is no need for it to be greater or smaller in one place than another; for there is nothing that is not, which could prevent its coming together, nor is it possible for what is to be greater or less in any place than what is, since it is all inviolate; for [the center] which is equidistant from every side, is just as much within the limits.

Boys are conceived on the right side, girls on the left.

Parmenides supposes that the all is one and eternal, and without beginning and spheroidal in form; but even he does not escape the opinion of the many, for he speaks of fire and earth as the first principles of the all, of earth as matter, and of fire as agent and cause, and he says that the earth will come to an end, but in what way he does not say.

ZENO

If there is such a thing as space, it will be in something, for all being is in something, and that which is in something is in some space. So this space will be in a space, and so on *ad infinitum*. Accordingly, there is no such thing as space.

1. If, Zeno says, everything is at rest when it is in a space equal to itself, and the moving body is always in the present moment in a space equal to itself, then the moving arrow is still. Therefore the arrow in flight is stationary.

The slow runner will never be overtaken by the swiftest, for it is necessary that the pursuer should first reach the point from which the pursued started, so that necessarily the slower is always somewhat in advance.

EMPEDOCLES

... And these [elements] never cease changing place continually, now being all united by Love into one, now each borne apart by the hatred engendered of Strife, until they are brought together in the unity of the all, and become subject to it. Thus inasmuch as one has been wont to arise out of many and again with the separation of the one the many arise, so things are continually coming into being and there is no fixed age for them; and farther inasmuch as they [the elements] never cease changing place continually, so they always exist within an immovable circle.

/The elements are four—fire, water, aether, earth. And the cause of these is Love and Strife. From the first mixture of the elements he says that the air was separated and poured around in a circle; and after the air the fire ran off, and not having any other place to go to, it ran up from under the ice that was around the air. And there are two hemispheres moving in a circle around the earth, the one of pure fire, the other of air and a little fire mixed, which he thinks is night. And motion began as a result of the weight of the fire when it was collected.

THE SOPHISTS

PROTAGORAS

He was the first to exact a fee of a hundred minae and the first to distinguish the tenses of verbs, to emphasize the importance of seizing the right moment, to institute contests in debating, and to teach rival pleaders the tricks of their trade. Furthermore, in his dialectic he neglected the meaning in favor of verbal quibbling.

he asserts that all sense impressions and opinions are true and that truth is a relative thing inasmuch as everything that has appeared to someone or been opined by someone is at once real in relation to him.

Of all things the measure is man, of existing things that they exist and of non-existing things that they exist not.

As to the gods, I have no means of knowing either that they exist or that they do not exist. For many are the obstacles that impede knowledge, both the obscurity of the question and the shortness of human life.

GORGIAS

For in his book entitled *Concerning the Non-existent* or *Concerning Nature* he tries to establish successively three main points—firstly, that nothing exists; secondly, that even if anything exists it is inapprehensible by man; thirdly, that even if anything is apprehensible, yet of a surety it is inexpressible and incommunicable to one's neighbor.

It is not a simple truth which Gorgias said. And he said that being is unknowable if it does not achieve appearance, and appearance is of no consequence if it does not achieve being.