

Fragments and Commentary

Thales

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DK 11 A13 (Theophrastos, *Dox.* 475) Simpl. *Phys*, 23, 21.

[AF]¹ Of those who say that the first principle [*arche*] is one and movable, to whom Aristotle applies the distinctive name of physicists, some say that it is limited; as, for instance, Thales of Miletos, son of Examyces, and Hippo who seems also to have lost belief in the gods. These say that the first principle is water, and they are led to this result by things that appear to sense; for warmth lives in moisture and dead things wither up and all germs are moist and all nutriment is moist. Now it is natural that things should be nourished by that from which each has come; and water is the first principle of moist nature . . . ; accordingly they assume that water is the first principle of all things, and they assert that the earth rests on water.

DK 11 B1 = (Theophrastos, *Dox.* 475) Simpl. *Phys*, 23, 29

[AF] Thales is the first to have set on foot the investigation of nature by the Greeks; although so many others preceded him, in Theophrastos' opinion he so far surpassed them as to cause them to be forgotten. It is said that he left nothing in writing except a book entitled 'Nautical Astronomy.'

DK 11 A5 = Herod.1,74

[KR] In the sixth year of the war, which they [Medes and Lydians] had carried on with equal fortunes, an engagement took place in which it turned out that when the battle was in progress the day suddenly became night. This alteration of the day Thales the Milesian foretold to the Ionians, setting as its limit this year in which the change actually occurred.

DK 11 A11 = Procl. in Eucl. 65,3

[KR] Thales, having first come to Egypt, transferred this study [geometry] to Greece . . .

DK 11 A12 = Aristot.Met.I 3.983b6 ff.

[EW] Most of the early students of philosophy thought that first principles in the form of matter, and only these, are the sources of all things; for that of which all things consist, the antecedent from which they have sprung, and into which they are finally resolved (in so far as being underlies them and is changed with their changes), this they say is the element and first principle of things.

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DK 11 A12 (b) = Aristot.Met.I 3.983b17 ff.

[EW] 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 beings 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. And there are some who think that the ancients, and they who lived long before the present generation, and the first students of the gods, had a similar idea in regard to nature; for in their poems Okeanos and Tethys were the parents of generation, and that by which the gods swore was water,-the poets themselves called it Styx ; for that which is most ancient is most highly esteemed, and that which is most highly esteemed is an object to swear by. Whether there is any such ancient and early opinion concerning nature would be an obscure question; but Thales is said to have expressed this opinion in regard to the first cause.

DK 11 A13b = Aet. ii. 1, (D. 327).

[AF] Thales and his successors hold that the universe is one.

DK 11 A13 = Aet. ii. 12,1 (D. 340).

[AF] Thales et al. hold that the sphere of the entire heaven is divided into five circles which they call zones ; and of these the first is called the arctic zone, and is always visible, the next is the summer solstice, the next is the equinoctial, the next the winter solstice, and the next the antarctic, which is invisible. And the ecliptic in the three middle ones is called the zodiac and is projected to touch the three middle ones. All these are cut by the meridian at a right angle from the north to the opposite quarter.

DK 11 A14 Arist. *de Caelo* ii. 13; 294 a 28.

[JLS] Others say the earth rests upon water. This, indeed, is the oldest theory that has been preserved, and is attributed to Thales of Miletus. It was supposed to stay still because it floated like wood and other similar substances, which are so constituted as to rest upon water but not upon air.

DK 11 A15 = Aet. iii. 11,1 (D. 377).

[AF] It is in the midst of the universe.

DK 11 A16 = Herod.2,20

[KR] Of these, one theory says that the Etesian winds are the cause of the river flooding, by preventing the Nile from Running out to sea.

DK 11 A16 = Aet. iv. 1,1 (D. 384).

[AF] Thales thinks that the Etesian winds blowing against Egypt raise the mass of the Nile , because its outflow is beaten back by the swelling of the sea which lies over against its mouth.

DK 11 A17a = Aet. ii. 13,1 (D. 341).

[AF] The stars consist of earth, but are on fire.

DK 11 A17a = Aet. ii. 20,9 (D. 349).

[AF] The sun consists of earth.

DK 11 A17a = Aet. ii. 24,1 (D. 353).

[AF] The eclipses of the sun take place when the moon passes across it in direct line, since the moon is earthy in character ; and it seems to the eye to be laid on the disk of the sun.

DK 11 A17b = Aet. ii. 27,5 (D. 358).

[AF] The moon is lighted from the sun.

DK 11 A20 = Procl. in Eucl. 352, 14.

[KR] Eudemus in the History of Geometry refers this theorem to Thales; for the method by which they say he demonstrated the distance of ships out at sea must, he says, have entailed the use of this theorem.

DK 11 A22a = Aet. iv. 2, 1 (D. 386).

[AF] Thales was the first to declare that the soul is by nature always moving or self-moving.

DK 11 A22(a) Arist. *de Anima* i. 2; 405 a 19.

[JAS] Thales, too, to judge from what is recorded about him seems to have held soul to be a motive force, since he said that the magnet has a soul in it because it moves the iron.

DK 11 A22(b) Arist. *de Anima* i. 5 ; 411 a 7.

[JAS] Certain thinkers say that soul is intermingled in the whole universe, and it is perhaps for that reason that Thales came to the opinion that all things are full of gods.

DK 11 A23 = Aet. i 7,11 (D. 301).

[AF] Thales said that the mind in the universe is god, and the all is endowed with soul and is full of spirits ; and its divine moving power pervades the elementary water.

DK 11 A23 = Cic. *de Nat. Deor.* i. 10; *Dox.* 531.

[AF] For Thales of Miletos, who first studied these matters, said that water is the first principle of things, while god is the mind which formed all things from water, if gods exist without sense and mind, why should god be connected with water, if mind itself can exist without a body?

Passages relating to Thales in Plato and Aristotle

Plato, *Theatetus* 174a4-8. The story about Thales is ... [that] he was looking upwards in the course of his astronomical investigations, and fell into a pothole, and a Thracian serving-girl with a nice sense of humour teased him for being concerned with knowing about what was up in the sky and not noticing what was right in front of him at his feet.

[AF] Plato, *De Legg.* X. 899 B. And as for all the stars and the moon and the years and the months and all the seasons, can we hold any other opinion about them than this same one—that inasmuch as soul or souls appear to be the cause of all these things, and good souls the cause of every excellence, we are to call them gods, whether they order the whole heavens as living

beings in bodies, or whether they accomplish this in some other form and manner? Is there any one who acknowledges this, and yet holds that all things are not full of gods?

[AF] Simpl. in Arist. *de Anima* 8 r 32, 16.3 -Thales posits water as the element, but it is the element of bodies, and he thinks that the soul is not a body at all. 31, 21 D.-And in speaking thus of Thales he adds with a degree of reproach that he assigned a soul to the magnetic stone as the power which moves the iron, that he might prove soul to be a moving power in it; but he did not assert that this soul was water, although water had been designated as the element, since he said that water is the element of substances, but he supposed soul to be unsubstantial form. 20 r 73, 22. For Thales, also, I suppose, thought all things to be full of gods, the gods being blended with them; and this is strange.

Further Passages relating to Thales in the Doxographers

[AF] Hipp. i. ; *Dox.* 555. It is said that Thales of Miletos, one of the seven wise men, was the first to undertake the study of physical philosophy. He said that the beginning (the first principle) and the end of all things is water. All things acquire firmness as this solidifies, and again as it is melted their existence is threatened; to this are due earthquakes and whirlwinds and movements of the stars. And all things are movable and in a fluid state, the character of the compound being determined by the nature of the principle from which it springs. This principle is god, and it has neither beginning nor end. Thales was the first of the Greeks to devote himself to the study and investigation of the stars, and was the originator of this branch of science; on one occasion he was looking up at the heavens, and was just saying he was intent on studying what was overhead, when he fell into a well; whereupon a maidservant named Thratta laughed at him and said : In his zeal for things in the sky he does not see what is at his feet. And he lived in the time of Kroesos.

[AF] Plut. *Strom.* 1 ; *Dox.* 579.5 He says that Thales was the earliest thinker to regard water as the first principle of all things. For from this all things come, and to it they all return.

[AF] Aet. *Plac.* i. 2 ; *Dox.* 275. Thales of Miletos regards the first principle and the elements as the same thing. But there is a very great difference between them, for elements are composite, but we claim that first principles are neither composite nor the result of processes. So we call earth, water, air, fire, elements ; and we call them first principles for the reason that there is nothing antecedent to them from which they are sprung, since this would not be a first principle, but rather that from which it is derived. Now there is something anterior to earth and water from which they are derived, namely the matter that is formless and invisible, and the form which we call entelechy, and privation. So Thales was in error when he called water an element and a first principle.

[AF] Aet. i. 3 ; 276. Thales the Milesian declared that the first principle of things is water, [This man seems to have been the first philosopher, and the Ionic school derived its name from him; for there were very many successive leaders in philosophy. And Thales was a student of philosophy in Egypt, but he came to Miletos in his old age.] For he says that all things come from water and all are resolved into water. The first basis for this conclusion is the fact that the seed of all animals is their first principle and it is moist ; thus it is natural to conclude that all

things come from water as their first principle. Secondly, the fact that all plants are nourished by moisture and bear fruit, and unless they get moisture they wither away. Thirdly, the fact that the very fire of the sun and the stars is fed by the exhalations from the waters, and so is the universe itself.

[AF] Aet. i 8; 307. Thales et al. say that spirits are psychical beings ; and that heroes are souls separated from bodies, good heroes are good souls, bad heroes are bad souls,

[AF] Aet. i 8; 307, The followers of Thales et al. assert that matter is turned about, varying, changing and in a fluid state, the whole in every part of the whole.

[AF] Aet. i 12; 310. Thales and his successors declared that the first cause is immovable,

[AF] Aet. i 16; 314. The followers of Thales and Pythagoras hold that bodies can receive impressions and can be divided even to infinity; and so can all figures, lines, surfaces, solids, matter, place, and time.

[AF] Aet. i 18; 315. The physicists, followers of Thales, all recognise that the void is really a void.

[AF] Aet. i 21 ; 321. Thales : Necessity is most powerful, for it controls everything.

[AF] Aet. ii. 29; 360. Thales et al. agree with the mathematicians that the monthly phases of the moon show that it travels along with the sun and is lighted by it, and eclipses show that it comes into the shadow of the earth, the earth coming between the two heavenly bodies and blocking the light of the moon.

[AF] Aet. iii. 9-10; 376. The earth is one and spherical in form.

[AF] Aet. iii. 15 ; 379. Thales and Demokritos find in water the cause of earthquakes.

[AF] Aet. v. 26; 438. Plants are living animals; this is evident from the fact that they wave their branches and keep them extended, and they yield to attack and relax them freely again, so that weights also draw them down.