9. ANAXAGORAS OF CLAZOMENAE

Although Presocratic thinkers after Parmenides had their own views and theories about many of the traditional subjects, they were faced with the problem of how to reconcile giving a successful rational account of the changing world of sense experience with Parmenides' arguments against coming-to-be and passing-away and his requirements for genuine being. Anaxagoras of Clazomenae proposed one of the most intriguing of these theories. Like the earlier Ionians he had an interest in explaining the cosmos, but that interest was tempered by an awareness of the metaphysical implications of the work of Parmenides. (As in Empedocles, some of the passages in Anaxagoras are echoes of Parmenides.) Anaxagoras was born in Clazomenae, in Ionia, probably around 500 BCE. He went to Athens, the first of the early Greek philosophers to live there, and spent about thirty years in the city, where he became an associate of Pericles, the politician. He was said to have predicted the fall of a meteorite at Aegospotami in 467. This is no doubt connected with his view that the sun and the other stars are fiery stones that are snatched up from the surface of the earth by the force of the revolving mass of ingredients and sometimes fall back to earth when shaken loose from their orbits. His political associations combined with his nonconformist views (he said that the heavenly bodies are stones and that none is a god) resulted in his being prosecuted for impiety, a charge the Athenians would later make against both Socrates and Aristotle. Convicted, Anaxagoras was exiled from the city and went to Lampsacus, in northern Ionia. He was much revered in that city, and died there in about 428. According to Aristotle, Anaxagoras was older than Empedocles, but his work became known later than Empedocles' did.

Anaxagoras envisions an original state of the cosmos in which, as he says, "All things were together." All things except Mind (Nous), which is pure and unmixed, and which knows and controls all things. At some point Nous sets the original mixture of ingredients into motion: a rotation begins, and spreads out through the unlimited mass of ingredients. As a result, ingredients begin to be separated and recombined with one another, eventually producing the world that we perceive. The details of Anaxagoras' theory are controversial,

but it is clear that he thinks that it is ingredients that are basic rather than perceptible objects such as human beings, geological formations like mountains, plants, and other animals, which are temporary emergences from the mixture of ingredients.

Note on the texts: The translations of the fragments and testimonia given here are slightly revised versions of those by Patricia Curd in *Anaxagoras of Clazomenae.*

1. (59B1) All things were together, unlimited both in amount and in smallness, for the small, too, was unlimited. And because all things were together, nothing was evident on account of smallness; for air and Aithēr dominated all things, both being unlimited, for these are the greatest among all things both in amount and in largeness.

(Simplicius, Commentary on Aristotle's Physics 155.26-30)

- (B2)... for both air and Aithēr are being separated off from the surrounding mass, and what is surrounding is unlimited in extent. (Simplicius, *Commentary on Aristotle's Physics* 155.31–156.1)
- **3.** (B3) Nor of the small is there a smallest, but always a smaller (for what-is cannot not be)—but also of the large there is always a larger. And [the large] is equal to the small in extent (*plēthos*), but in relation to itself each thing is both large and small.

(Simplicius, Commentary on Aristotle's Physics 155.26-30)

4. (B4) Since these things are so, it is right to think that there are many different things present in everything that is being combined, and seeds of all things, having all sorts of forms, colors, and flavors, and that humans and also the other animals were compounded, as many as have soul. Also that there are cities that have been constructed by humans and works made, just as with us, and that there are a sun and a moon and other heavenly bodies for them, just as with us, and the earth grows many different things for them, the most valuable of which they gather together into their household and use. I have said this about the separation off, because there would be separation off not only for us but also

9. ANAXAGORAS OF CLAZOMENAE

elsewhere. . . . Before there was separation off, because all things were together, there was not even any color evident; for the mixture of all things prevented it, of the wet and the dry and of the hot and the cold and of the bright and the dark, and there was much earth present and seeds unlimited in number, in no way similar to one another. For no one of the others is similar to another. Since these things are so, it is right to think that all things were present in the whole.

(Simplicius, Commentary on Aristotle's Physics 34.29–35.9, 34.21–26)

5. (B5) Even though these things have been dissociated in this way, it is right to recognize that all things are in no way less or more (for it is impossible that they be more than all), but all things are always equal.

(Simplicius, Commentary on Aristotle's Physics 156.10–12)

6. (B6) Since the shares of the large and the small are equal in number, in this way too, all things will be in everything; nor is it possible that [anything] be separate, but all things have a share of everything. Since it is not possible that there is a least, it would not be possible that [anything] be separated, nor come to be by itself, but just as in the beginning, now too all things are together. In all things there are many things present, equal in number, both in the greater and in the lesser of the things being separated off.

(Simplicius, Commentary on Aristotle's Physics 164.26–165.1)

- 7. (B7) ... so as not to know the extent of the things being separated off, either in word or in deed.
 (Simplicius, Commentary on Aristotle's On the Heavens 608.26)
- 8. (B8) The things in the one *kosmos* have not been separated from one another, nor hacked apart with an axe—neither the hot from the cold nor the cold from the hot.

(Simplicius, Commentary on Aristotle's Physics 175.12–14; 176.29)

9. (B9) . . . as these things are revolving in this way and being separated off by force and swiftness, the swiftness produces force; and their swiftness resembles the swiftness of nothing that is now present among humans, but is altogether many times as fast.

(Simplicius, Commentary on Aristotle's Physics 35.14-18)

- 10. (B10) For how . . . can hair come from what is not hair, and flesh from what is not flesh?(Scholium on Gregory of Nazianzus, *Patrologia Graeca* 36.911)
- **11.** (B11) In everything there is a share of everything except *Nous* (Mind), but there are some things in which *Nous*, too, is present. (Simplicius, *Commentary on Aristotle's Physics* 164.22)
- **12.** (B12) The other things have a share of everything, but *Nous* is unlimited and self-ruling and has been mixed with no thing, but is alone itself by itself. For if it were not by itself, but had been mixed with anything else, then it would partake of all things, if it had been mixed with anything (for there is a share of everything in everything, just as I have said before); and the things mixed together with it would thwart it, so that it would control none of the things in the way that it in fact does, being alone by itself. For it is the finest of all things and the purest, and indeed it maintains all discernment (gnome) about everything and has the greatest strength. And Nous has control over all things that have soul, both the larger and the smaller. And Nous controlled the whole revolution, so that it started to revolve in the beginning. First it began to revolve from a small region, but it is revolving yet more, and it will revolve still more. And *Nous* knew (egno) them all: the things that are being mixed together, the things that are being separated off, and the things that are being dissociated. And whatever sorts of things were going to be, and whatever sorts were and now are not, and as many as are now and whatever sorts will be, all these Nous set in order. And Nous also ordered this revolution, in which the things being separated off now revolve, the stars and the sun and the moon and the air and the Aither. This revolution caused them to separate off. The dense is being separated off from the rare, and the warm from the cold, and the bright from the dark, and the dry from the moist. But there are many shares of many things; nothing is completely separated off or dissociated one from the other except Nous. All Nous is alike, both the greater and the smaller. Nothing else is like anything else, but each one is and was most manifestly those things of which there are the most in it.

(Simplicius, Commentary on Aristotle's Physics 164.24–25, 156.13–157.4)

- **13.** (B13) When *Nous* began to move [things], there was separation off from the multitude that was being moved, and whatever *Nous* moved, all this was dissociated; and as things were being moved and dissociated, the revolution made them dissociate much more. (Simplicius, *Commentary on Aristotle's Physics* 300.31–301.1)
- **14.** (B14) *Nous,* which always is, most assuredly is even now where all the other things also are, in the surrounding multitude, and in the things that were joined together and in the things that have been separated off.

(Simplicius, Commentary on Aristotle's Physics 157.7-9)

15. (B15) The dense and the wet and the cold and the dark came together here, where <the> earth is now; but the rare and the hot and the dry <and the bright> moved out to the far reaches of the Aithēr.

(Simplicius, Commentary on Aristotle's Physics 179.3-6)

16. (B16) From these, as they are being separated off, earth is compacted; for water is separated off from the clouds, and earth from the water, and from the earth stones are compacted by the cold, and these stones move farther out than the water.

(Simplicius, Commentary on Aristotle's Physics 179.8-10; 155.21-23)

17. (B17) The Greeks do not think correctly about coming-to-be and passing-away; for no thing comes to be or passes away, but is mixed together and dissociated from the things that are. And thus they would be correct to call coming-to-be mixing-together and passing-away dissociating.

(Simplicius, Commentary on Aristotle's Physics 163.20-24)

- **18.** (B18) The sun places the light in the moon. (Plutarch, *On the Face in the Moon* 929b)
- **19.** (B19) We call the reflection of the sun in the clouds a rainbow. (Scholium on *Iliad* 17.547)
- **20.** (B21) Owing to their [the senses'] feebleness, we are not able to determine the truth.

(Sextus Empiricus, Against the Mathematicians 7.90)

- **21.** (B21a) Appearances are a sight of the unseen . . . (Sextus Empiricus, *Against the Mathematicians* 7.140)
- **22.** (B22) . . . egg whites are bird's milk. (Athenaeus, *Sophists at Dinner* 2.57B)
- **23.** (A102) But in all these [physical skills that animals possess] we are more unfortunate than the beasts, but by experience and memory and wisdom and art according to Anaxagoras, we make use of their activity (?) and take their honey and milk them and herding them together, use them as we will. There is nothing of chance here, but all is wisdom and forethought.¹

(Plutarch, On Fortune 3 98F)

- 24. (A52) Anaxagoras probably supposed [the principles] to be unlimited in this way because he accepted as true the common opinion of the physicists that nothing comes to be from what is not. That is why they say: "all things were together," and why Anaxagoras makes the generation of a thing of a certain sort into alteration. (Aristotle, *Physics* 1.4 187a23–b6)
- **25.** (A43) Anaxagoras says just the opposite of Empedocles about the elements. For [Empedocles] claims that fire and earth, and things of the same rank, are elements of bodies and that all things are compounded of them; but Anaxagoras says the opposite. For he claims that the homogeneous stuffs are elements—I mean, for instance, flesh and bone and each of the things of that sort—and that air and fire are mixtures of them and of all the other seeds; for each of them is a collection of all the invisible homogeneous stuffs.

(Aristotle On the Heavens 3.3 302a28)

26. (A46) [Anaxagoras] makes the homogeneous stuffs elements, for instance, bone and flesh and marrow and the others of which the part is called by the same name [as the whole].

(Aristotle, On Coming to Be and Passing Away I.1 314a18)

1. This phrase was given by DK as B21b. Following other scholars, I think it more likely that the passage is a testimonium. There are textual problems here; I read *sphōn ti* instead of *te*.

27. (A58) When someone said that *Nous* is present—in nature just as it is in animals—as the cause of the *kosmos* and of all its order, he appeared as a sober man among the random chatterers who preceded him. We know that Anaxagoras clearly held these views, but Hermotimus of Clazomenae gets the credit for holding them earlier.

(Aristotle, Metaphysics I.3.984b15)

28. (A117) Anaxagoras and Empedocles say that plants are moved by desire, and they also assert that they sense and can be made sad and happy. Anaxagoras said that they are animals and feel joy and sadness, taking the fall of their leaves as evidence...

([Aristotle], On Plants I.1.815a15)

Suggestions for Further Reading

All of these entries have further bibliographies. Complete bibliographical information for collections may be found in the bibliography in the Introduction, pp. 10–12. See also the relevant chapters in Barnes; Guthrie; McKirahan; and Kirk, Raven, and Schofield.

- Curd, P. "Anaxagoras and the Theory of Everything," in Curd and Graham, pp. 230–49.
 - ------. 2007. Anaxagoras of Clazomenae: Fragments. Text and Translation with Notes and Essays. Toronto: University of Toronto Press.
- Furley, D. J. 1976. "Anaxagoras in Response to Parmenides." In New Essays in Plato and the Pre-Socratics, edited by R. A. Shiner and J. King-Farlow. Canadian Journal of Philosophy Supplementary Volume 2: pp. 61–85.

——. 2002. "Anaxagoras, Plato, and the Naming of Parts," in Caston and Graham, pp. 119–26.

Furth, M. 1991. "A 'Philosophical Hero'? Anaxagoras and the Eleatics." Oxford Studies in Ancient Philosophy 9: pp. 95–129.

Graham, D. W. 1994. "The Postulates of Anaxagoras." Apeiron 27: pp. 77-121.

------. "Empedocles and Anaxagoras: Responses to Parmenides," in Long, pp. 159–80.

-------. 2004. "Was Anaxagoras a Reductionist?" *Ancient Philosophy* 24: pp. 1–18.

Inwood, B. 1986. "Anaxagoras and Infinite Divisibility." Illinois Classical Studies 11: pp. 17–33.

- Laks. A. 1993. "Mind's Crisis: On Anaxagoras' NOUS." The Southern Journal of Philosophy 31, Supplementary Volume: pp. 19–38.
 - -----. "Soul, Sensation, and Thought," in Long, pp. 250–70.
- Lesher, J. H. 1995. "Mind's Knowledge and Powers of Control in Anaxagoras DK B12." *Phronesis* 40: pp. 125–42.
- Schofield, M. 1980. An Essay on Anaxagoras. Cambridge: Cambridge University Press.
- ——. 1996. "Anaxagoras' Other World Revisited." In *Polyhistor: Studies in the History and Historiography of Ancient Philosophy*, edited by K. Algra, P. Van der Horst, and D. T. Runia, pp. 3–20. Leiden: Brill.
- Sider, D. 2005. *The Fragments of Anaxagoras: Edited with an Introduction and Commentary*, 2nd edition. Sankt Augustin: Academia Verlag.
- Stokes, M. C. 1965. "On Anaxagoras." Archiv für Geschichte der Philosophie 47: "Part I: Anaxagoras' Theory of Matter," pp. 1–19; "Part II: The Order of Cosmogony," pp. 217–50.
- Strang, C. 1963. "The Physical Theory of Anaxagoras." *Archiv für Geschichte der Philosophie* 45: pp. 101–18.

Taylor, C. C. W. "Anaxagoras and the Atomists," in Taylor, pp. 208–43.

Vlastos, G. 1950, 1995. "The Physical Theory of Anaxagoras." *Philosophical Review* 59: pp. 31–57; reprinted in G. Vlastos, *Studies in Greek Philosophy, Vol. I: The Presocratics*, edited by D. W. Graham, pp. 303–27. Princeton: Princeton University Press.

—. 1975. "One World or Many in Anaxagoras?" In *Studies in Presocratic Philosophy, Vol. II*, edited by R. E. Allen and D. Furley, pp. 354–60. London: Routledge and Kegan Paul.