

Anaxagoras of Clazomenae

Anaxagoras hailed from Clazomenae (an Ionian city in modern day Turkey), but seems to have been among the first prominent philosophers to have resided in Athens. He is credited with influential views concerning mind (*nous*), matter, parts and wholes, and mixture.

[6] Anaxagoras, the son of Hegesibulus or Eubulus, was a native of Clazomenae. He was a pupil of Anaximenes, and was the first who set mind above matter, for at the beginning of his treatise, which is composed in attractive and dignified language, he says:

All things were together; then came Mind and set them in order.

This earned for Anaxagoras himself the nickname of *Nous* or Mind, and Timon in his *Silli* says of him:

Then, I ween, there is Anaxagoras, a doughty champion, whom they call Mind, because forsooth his was the mind which suddenly woke up and fitted closely together all that had formerly been in a medley of confusion.

He was eminent for wealth and noble birth, and furthermore for magnanimity, in that he gave up his patrimony to his relations.

[7] For, when they accused him of neglecting it, he replied, 'Why then do you not look after it?' And at last he went into retirement and engaged in physical investigation without troubling himself about public affairs. When some one inquired, 'Have you no concern in your native land?' 'Gently,' he replied, 'I am greatly concerned with my fatherland,' and pointed to the sky. He is said to have been twenty years old at the invasion of Xerxes and to have lived seventy-two years. Apollodorus in his *Chronology* says that he was born in the 70th Olympiad [500–497 BC], and died in the first year of the 88th Olympiad [428 BC]. He began to study philosophy at Athens in the archonship of Callias when he was twenty; Demetrius of Phalerum states this in his list of archons; and at Athens they say he remained for thirty years.

[8] He declared the sun to be a mass of red-hot metal and to be larger than the Peloponnesus, though others ascribe this view to Tantalus; he declared that there were dwellings on the moon, and moreover hills and ravines. He took as his principles the homoeomerics or homogeneous molecules; for just as gold consists of fine particles which are called gold-dust, so he held the whole universe to be compounded of minute bodies having parts homogeneous to themselves. His moving principle was Mind; of bodies, he said, some, like earth, were heavy, occupying the region below, others, light like fire, held the region above, while water and air were intermediate in position. For in this way over the earth, which is flat, the sea sinks down after the moisture has been evaporated by the sun.

[9] In the beginning the stars moved in the sky as in a revolving dome, so that the celestial pole which is always visible was vertically overhead; but subsequently the pole took its inclined position. He held the Milky Way to be a reflection of the light of stars which are not

shone upon by the sun; comets to be a conjunction of planets which emit flames; shooting-stars to be a sort of sparks thrown off by the air. He held that winds arise when the air is rarefied by the sun's heat; that thunder is a clashing together of the clouds, lightning their violent friction; an earthquake a subsidence of air into the earth. Animals were produced from moisture, heat, and an earthy substance; later the species were propagated by generation from one another, males from the right side, females from the left.

[10] There is a story that he predicted the fall of the meteoric stone at Aegospotami, which he said would fall from the sun. Hence Euripides, who was his pupil, in the *Phaëthon* calls the sun itself a 'golden clod.' Furthermore, when he went to Olympia, he sat down wrapped in a sheep-skin cloak as if it were going to rain; and the rain came. When some one asked him if the hills at Lampsacus would ever become sea, he replied, 'Yes, it only needs time.' Being asked to what end he had been born, he replied, 'To study sun and moon and heavens.' To one who inquired, 'You miss the society of the Athenians?' his reply was, 'Not I, but they miss mine.' When he saw the tomb of Mausolus, he said, 'A costly tomb is an image of an estate turned into stone.' ...

[12] He says that Anaxagoras declared the whole firmament to be made of stones; that the rapidity of rotation caused it to cohere; and that if this were relaxed it would fall. Of the trial of Anaxagoras different accounts are given. Sotion in his *Succession of the Philosophers* says that he was indicted by Cleon on a charge of impiety, because he declared the sun to be a mass of red-hot metal; that his pupil Pericles defended him, and he was fined five talents and banished. Satyrus in his *Lives* says that the prosecutor was Thucydides, the opponent of Pericles, and the charge one of treasonable correspondence with Persia as well as of impiety; and that sentence of death was passed on Anaxagoras by default. ...

[13] Hermippus in his *Lives* says that he was confined in the prison pending his execution; that Pericles came forward and asked the people whether they had any fault to find with him in his own public career; to which they replied that they had not. 'Well,' he continued, 'I am a pupil of Anaxagoras; do not then be carried away by slanders and put him to death. Let me prevail upon you to release him.' So he was released; but he could not brook the indignity he had suffered and committed suicide.

[14] Hieronymus in the second book of his *Scattered Notes* states that Pericles brought him into court so weak and wasted from illness that he owed his acquittal not so much to the merits of his case as to the sympathy of the judges. So much then on the subject of his trial. He was supposed to have borne Democritus a grudge because he had failed to get into communication with him. At length he retired to Lampsacus and there died. And when the magistrates of the city asked if there was anything he would like done for him, he replied that he would like them to grant an annual holiday to the boys in the month in which he died; and the custom is kept up to this day.

Diogenes Laertius 2.6–14, trans. RD. Hicks

The following translations are drawn from D. Graham, *The Texts of Early Greek Philosophy* (Cambridge University Press, 2010) and P. Curd, *Anaxagoras of Clazomenae* (University of Toronto Press, 2007).

Anaxagoras the son of Hegesibulus, of Clazomenae, sharing in the philosophy of Anaximenes, first changed the opinions about principles by supplying the missing cause, making the corporeal principles infinite. For all the homoeomerics, such as water, fire or gold, are ungenerated and imperishable, but they appear to come to be and perish only by congregation and segregation, since everything is in everything, though each thing is characterized by what predominates in it. For instance that appears as gold in which there is much gold, even though everything else is also in it. Hence Anaxagoras says that in everything there is a portion of everything and each one is and was most manifestly those things of which it has the most. And Theophrastus says that Anaxagoras sounds like Anaximander in this: for the former says that in the segregation of the boundless, like things travel toward each other, and what was gold in the whole emerges as gold, what was earth as earth. And similarly with each of the other things insofar as nothing comes to be but was previously present. And Anaxagoras established as the cause of motion and coming to be, mind, by which things being segregated produced the worlds and the nature of everything else in them. 'And on this interpretation', Theophrastus says, 'Anaxagoras would seem to make the material principles infinite but the cause of change and coming to be singular, namely mind. And if one supposes that the mixture of all things has a single nature indefinite in form and size, one is forced to say that there are two principles: the nature of the infinite and mind. So he clearly makes the corporeal elements like those of Anaximander'.

Simplicius *In Phys.* 27.2–23 = DK 59 A41, trans. D. Graham

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 *De Caelo* 302a28–b4 = DK 59 A43, trans. D. Graham

[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, *De Generatione et Corruptione* 314a18 = DK 59 A46, trans. D. Graham

Anaxagoras, son of Hegesibulus, of Clazomenae, asserted the homoeomerics to be the principles of all things. For he thought the most puzzling difficulty was to explain how from what-is-not something could come to be, or how something could perish into what-is-not. For instance, we partake of simple food of one kind, bread and water, and from this are nourished hair, veins, arteries, flesh, sinews, bones, and the other parts. So since these things happen, it must be granted that in the food consumed are all these entities, and from these entities all things grow. And in that food are parts productive of blood, sinews, bones, and the rest, which parts are grasped by reason. For one should not appeal to sensation in everything, because although bread and water provide nourishment, the parts in them are grasped by reason.

Aëtius 1.3.5 = DK 59 A46, trans. D. Graham

Anaxagoras says from a single mixture, in which everything is in everything, homoeomerous things unlimited in quantity are separated off, but each being characterized by what predominates. He explains this in the first book of his *On Nature*, when he says at the outset: '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 aether dominated all things, both being unlimited, for these are the greatest among all things both in amount and in largeness' (DK 59 B1). And a little later he says: 'for both air and aether are being separated off from the surrounding mass, and what is surrounding is unlimited in extent' (DK 59 B2).

Simplicius *In Phys.* 155.23–31 = DK 59 B1, 2, trans. P. Curd

For in fact Anaxagoras says directly at the beginning of the book that [the ingredients] were unlimited: 'all things were together, unlimited both in amount and in smallness', and that there is neither a smallest nor a largest among the first principles: '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, but in relation to itself each thing is both large and small.' For if everything is in everything and if everything is separated off from everything, then from what seems to be the smallest something yet smaller than that will be separated off, and what seems to be the largest was separated off from something larger than itself.

Simplicius *In Phys.* 164.14–20 = DK 59 B3, trans. P. Curd

And, again, he says: 'Before there was separation off, because all things were together, there was not even any colour 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.' And this whole would be the one being of Parmenides'.

Simplicius *In Phys.* 34.20–7 = DK 59 B4b, trans. P. Curd

He makes clear that none of the homogeneous stuffs either comes to be or passes away, but that they are always the same, by saying: '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.' He says these things, then, about the mixture and the homogeneous stuffs.

Simplicius *In Phys.* 156.9–13 = DK 59 B5, trans. P. Curd

Elsewhere, too, he also says this: '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 *In Phys.* 164.25–165.1 = DK 59 B6, trans. P. Curd

When Anaxagoras discovered the old belief that nothing comes from that which is not in any way whatsoever, he did away with coming-to-be, and introduced dissociation in place of coming-to-be. For he foolishly said that all things are mixed with each other, but that as they grow they are dissociated. For in the same seminal fluid there are hair, nails, veins and arteries, sinew, and bone, and it happens that they are imperceptible because of the smallness of the parts, but when they grow, they gradually are separated off. 'For how,' he says, 'can hair come from what is not hair, and flesh from what is not flesh?' He maintained this, not only about bodies, but also about colours. For he said that black is in white and white in black. And he laid down the same thing with respect to weights, believing that light is mixed with heavy and vice versa.

Scholium On Gregory Nazianzus, *Patrologia Graeca* 36.911 Migne = DK 59 B10, trans. P. Curd

In everything there is a share of everything except *Nous*, but there are some things in which *Nous*, too, is present.

Simplicius *In Phys.* 164.22 = DK 59 B11, trans. P. Curd

He has written the following about *Nous*: '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 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 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 aether. 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 *In Phys.* 156.13–157.4 = DK 59 B12, trans. P. Curd

Anaxagoras says clearly in the first book of the *Physics* that coming-to-be and passing-away are combining and dissociating, writing this: '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 *In Phys.* 163.19–24 = DK 59 B17, trans. P. Curd