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Excerpt

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## INTRODUCTION

Anaxagoras is probably most widely known as the fifth-century author whose book rekindled hopes of philosophy in the breast of Socrates. But it is no secret to students of ancient Greece or of philosophy that nothing survives of that book but a few miserable fragments, which, like all such survivals from the classical and preclassical ages of Greece, have attracted the frequent and exhaustive scrutiny of learned and sensitive critical scholarship. What room, then, for another book about Anaxagoras?

As it so happens, there is no authoritative book written in English that is devoted wholly to Anaxagoras. The last thirty years have seen a succession of fine shorter essays, some published as journal articles, others as chapters of general books on the Presocratics. But there seemed to be scope for a longer study, in which author and reader could at their leisure mull over the very texture of Anaxagoras's writing and reflect upon their own expectations of a philosopher so distant in time and in idiom and so disjointedly preserved. This book suggests that there is a considerable gap between what we hope for and what we find in the case of Anaxagoras. A Pythagorean table of opposites will flatten any subtleties in the argument but introduce some of the main contrasts which it explores:

<i>Ideal philosopher</i>	<i>Actual Anaxagoras</i>
argumentative	narrative
enquiring	dogmatic
cooperative	didactic
reason	authority
common sense	special insight
clear	ambiguous
determinate	indeterminate
classical	archaic
fluent literate	early literate
epistemological	metaphysical

So the book is an essay, and an essay particularly on the problems which the dogmatism and ambiguity of Anaxagoras's fragments pose for the philosophical interpreter. It makes no attempt to discuss the important and often influential views which Anaxagoras appears to have expressed on many topics - particularly in cosmology, perception and physiology - that are not mentioned in the fragments. Nor does it examine all the fragments, nor scrutinise with equal care each that it does take up.

We begin with the longest and most important of all the fragments, Fragment 12 on the cosmogonical activity of mind. We set aside some of the hoarier questions which Anaxagoras's account has provoked, in the hope of exploiting our best chance of seeing what a continuous stretch of Anaxagoras was actually like. We shall find that it poses very sharply many of the interpretative issues which have already been adumbrated. Chapter 2 turns to Anaxagoras's thesis of primordial mixture, expounded at the very beginning of his book: for this is presumably where Anaxagoras wanted us to begin upon the task of understanding his physical theory. The chapter asks what status the thesis has in his system: axiom or theorem. With the assistance of Aristotle a speculative answer is worked out in rather more a *priori* fashion than anything else in the book. Chapter 3 continues the exploration of Anaxagoras's primordial mixture, and in particular pursues in the detail of three fragments (Fragments 1, 3 and 6) his pioneering conception of the infinite smallness of things in the mixture. Finally, in Chapter 4 we launch our assault on the central doctrine of Anaxagoras's system, the thesis that in everything there is a portion of everything, which poses formidable problems of ambiguity even if it is the one major element in the system upon which its author appears to have brought argument to bear at a fundamental level. Every interpreter feels the desire to improve upon the rather divergent evidence of the fragments and of the secondary sources about what Anaxagoras actually meant by this doctrine. The chapter, and indeed the monograph as a whole, aims to give him a finer understanding of the prospects of success and failure.

Chapter 1  
 MIND

*ANAXAGORAS'S DOGMATISM*

τὰ μὲν ἄλλα παντὸς μοῦτραν μετέχει, νοῦς δὲ ἐστὶν ἄπειρον καὶ αὐτοκρατὲς καὶ μέμεικται οὐδενὶ χρήματι, ἀλλὰ μόνος αὐτὸς ἐφ' ἑαυτοῦ ἐστὶν. εἰ μὴ γὰρ ἐφ' ἑαυτοῦ ἦν, ἀλλὰ τεφ' ἐμέμεικτο ἄλλῳ, μετεῦχεν ἂν ἀπάντων χρημάτων, εἰ ἐμέμεικτό τεφ' ἐν παντὶ γὰρ παντὸς μοῦτρα ἔνεστιν, ὥσπερ ἐν τοῖς πρόσθεν μοι λέλεκται· καὶ ἂν ἐκώλυεν αὐτὸν τὰ συμμεμειγμένα, ὥστε μηδενὸς χρήματος κρατεῦν ὁμοίως ὡς καὶ μόνον ἐόντα ἐφ' ἑαυτοῦ. ἔστι γὰρ λεπτότατόν τε πάντων χρημάτων καὶ καθαρώτατον, καὶ γνώμην γε περὶ παντὸς πᾶσαν ἔσχει καὶ ἰσχύει μέγιστον, καὶ ὅσα γε ψυχὴν ἔχει, καὶ τὰ μείζω καὶ τὰ ἐλάσσω, πάντων νοῦς κρατεῖ. καὶ τῆς περιχωρήσιος τῆς συμπάσης νοῦς ἐκράτησεν, ὥστε περιχωρῆσαι τὴν ἀρχήν. καὶ πρῶτον ἀπὸ τοῦ μικροῦ ἤρξατο περιχωρεῖν, ἐπὶ δὲ πλεόν περιχωρεῖ, καὶ περιχωρήσει ἐπὶ πλεόν. καὶ τὰ συμμισγόμενά τε καὶ ἀποκρινόμενα καὶ διακρινόμενα πάντα ἔγνω νοῦς. καὶ ὅποια ἐμελλεν ἕσσεσθαι καὶ ὅποια ἦν<sup>1</sup> καὶ ὅσα νῦν ἔστι καὶ ὅποια ἔσται, πάντα διεκόσμησε νοῦς, καὶ τὴν περιχώρησιν ταύτην ἦν νῦν περιχωρεῖ τὰ τε ἄστρα καὶ ὁ ἥλιος καὶ ἡ σελήνη καὶ ὁ ἀήρ καὶ ὁ αἰθήρ οἱ ἀποκρινόμενοι.

The other things share in a portion of everything, but mind is unlimited and self-controlling and has not been mixed with anything, but exists alone itself by itself; for if it were not by itself but had been mixed with something else, it would share in all things, if it had been mixed with any (for in everything there is a portion of everything, as I have said earlier); and the things mixed together with it would be preventing it so that it would not control any thing in the same way as it actually does being alone by itself. For it is finest of all things and purest; and moreover it harbours every discerning judgement about everything, and [so] harbours greatest strength; and moreover all the things that have soul,

both the greater and the smaller, all of them mind controls.

And mind controlled the whole revolution, so that it started to revolve at the beginning. And first it began to revolve in a small way, but it is revolving more, and it will revolve more. And the things that were being mixed together and separated off and distinguished, mind knew them all. And whatever things were to be - both those which were and those which are now and those which will be - all these mind ordered, and also this revolution in which now revolve the stars and the sun and the moon and the air and the aither which are being separated off.<sup>2</sup>

The extract I have quoted and translated constitutes the greater part of what is by far the longest fragment of Anaxagoras surviving to us (Fragment 12).<sup>3</sup> And although this cannot be shown to have had anything to do with its survival,<sup>4</sup> it is easily the most striking and memorable of all the fragments - and indeed among the most powerful passages in all Greek prose in its intensity and slow-moving grandeur. Anaxagoras has chiselled out a style perfectly fitted to the expression of a profoundly synoptic vision of the nature of things. This is no mere academic philosophy, occupied with logic chopping or abstruse technical theory, we say to ourselves; it is more like a hymn<sup>5</sup> to the remote yet familiar power of νοῦς.

That, at any rate, is what one might feel in a sympathetic mood. In another, Fragment 12 might strike one as dogmatic, high-falutin poppycock. It is just the sort of speculation Aristophanes in the *Clouds* held up to ridicule as tedious, silly and unnatural. Sir Kenneth Dover thinks we might find Aristophanes's attitude hard to comprehend. 'It is difficult for the modern reader', he claims, 'to understand how a writer as sensitive and subtle as Aristophanes could have taken the field with such vigour on the side of the philistines against that spirit of systematic, rational inquiry which we regard as an essential ingredient of civilization.'<sup>6</sup> I do not myself see the difficulty, for humorists and satirists are often conservatives distrustful of ideas. But even if we do not feel a need to defend Aristophanes, it is worth quoting Dover's concluding observation on the matter: 'Exciting though some Greek philosophical and scientific speculations now seem to have been, viewed as an early stage in the intellectual history of Europe, they were not

always expressed in a way which would necessarily make them appear, even to a rational man, more plausible than Hesiodic myths.<sup>7</sup> Does not Anaxagoras's Fragment 12 look like a case in point? It is usually taken to be not so much a virtue as the duty of a philosopher both to argue for his assertions and to make evident the vast importance he attaches to argument. But in most of our passage Anaxagoras seems to try to win our assent by the methods of the hierophant, not the dialectician.

Contrast Parmenides. Anaxagoras appears to have been deeply impressed by the arguments of Parmenides. It is probable that some of the basic theses of his own physics were worked out in the spirit of a demonstration that, although Parmenides was right to rule the ideas of coming to be and perishing meaningless, nonetheless change and plurality were still possible.<sup>8</sup> Now Parmenides's Way of Truth is hard, terse argument – the word deserves repetition – throughout, despite its presentation as a religious revelation. And its author bids us discount the expectations of indisputability aroused by revelation when he has his goddess say: 'Judge by reason (λόγος) my much-contested refutation (ἔλεγχος).'<sup>9</sup> So if Anaxagoras tacitly acknowledged that, precisely by the force of argument, Parmenides had necessitated a radical revision of the terms in which physical speculation was conducted, why did he argue so little himself?

Or contrast Diogenes of Apollonia. Diogenes, like Anaxagoras, was in the business of cosmological theory, not of metaphysical paradox. In philosophy and literary style alike he was heavily influenced by the older thinker. And he followed Anaxagoras in giving a fundamental place in his scheme of things to mind, or more strictly to intelligence or understanding (νόησις). He differed from Anaxagoras in predicating intelligence of matter (he was a monist), but also in his willingness to argue the case for ascribing a crucial role in physics to intelligence. Thus Simplicius reports that he presented the following consideration in support of the claim that the single basic stuff has much intelligence in it (B3):<sup>10</sup>

οὐ γὰρ ἄν, φησίν, οἷόν τε ἦν οὕτω δεδάσθαι ἄνευ νοήσιος ὥστε πάντων μέτρα ἔχειν, χειμῶνός τε καὶ θέρους καὶ νυκτὸς καὶ ἡμέρας καὶ ὑετῶν καὶ ἀνέμων καὶ εὐδελῶν· καὶ τὰ ἄλλα, εἴ τις βούλεται ἐννοεῖσθαι, εὐρίσκοι ἄν οὕτω διακείμενα ὡς ἀνυστὸν

κάλλιστα.

For, he says, it would not be possible without intelligence for it so to be divided up that it has measures of all things - of winter and summer and night and day and rains and winds and fair weather. The other things, too, if one wishes to consider them, one would find disposed in the best possible way.

It seems that this was not Diogenes's only argument for his thesis. For Simplicius tells us that he went on to say (B4):<sup>11</sup>

ἔτι δὲ πρὸς τούτους καὶ τάδε μεγάλα σημεῖα. ἄνθρωποι γὰρ καὶ τὰ ἄλλα ζῶια ἀναπνέοντα ζῶει τῷ ἀέρι. καὶ τοῦτο αὐτοῦς καὶ ψυχὴ ἐστὶ καὶ νόησις, ὡς δεδηλώσεται ἐν τῇδε τῇ συγγραφῇ ἐμφανῶς, καὶ ἐὰν τοῦτο ἀπαλλαχθῆ ἀποθνήσκει καὶ ἡ νόησις ἐπιλείπει.

Further, in addition to those, there are these important indications too. For men and the other living creatures live by means of air, through breathing it. And this is for them both soul and intelligence, as will get clearly shown in this treatise; and if this is removed, they die and intelligence fails.

Diogenes evidently thought it was not good enough simply to assert (as Anaxagoras had done) that mind ordered all things: from the presence of order he *inferred* intelligence. And in general, he took the place of mind in nature to be a topic on which evidence (σημεῖα) should be brought to bear. Not a whisper of evidence in Fragment 12 of Anaxagoras, where it would surely not have come amiss. Yet Diogenes is usually and rightly held to be an inferior thinker.

Of course, our extract from Fragment 12 is not dogmatic throughout. In a fine but neglected article of 1933 Karl Deichgräber argued that in it two quite different styles can be distinguished.<sup>12</sup> It was his main purpose to draw attention to the style of solemn predication, as he called it, in which attributes are heaped upon their subject, νοῦς, in clauses of the simplest possible form, linked by nothing but the reiterated particle καὶ. Although these and other features of the style are found outside the archaic period, in Anaxagoras they must count as characteristic marks of the archaic nature of his prose. Indeed, this passage provides a classic example of the paratactic syntax, and of the verbal repetitions needed to organize a paragraph from such simple units,

which the labours of Norden, Fränkel and others have taught us (following Aristotle's description of the archaic λέξις εἰρομένη, 'strung-together style') to associate with the period,<sup>13</sup> which lasted longer in prose than in poetry.<sup>14</sup>

The dominant style of our extract, then, is that of solemn predication. But there is a stretch running from εἰ μὴ γὰρ...ὡς καὶ μόνον ἔόντα ἐφ' ἑαυτοῦ which is altogether more complicated in syntax, and has two features in particular which set it off from the rest of the extract. First, it is a complex piece of argument. Anaxagoras here argues for his claim that νοῦς is not mixed with anything by showing that the consequences of denying that claim are unacceptable; in other words, by an indirect proof:<sup>15</sup> if νοῦς were mixed with anything, it would be mixed with all things; but if it were mixed with all things, they would prevent it from controlling anything in the way that it actually does unmixed, on its own. The second distinctive mark of this passage is its cross-reference to an earlier part of Anaxagoras's book. As Deichgräber says, this is very much in the manner of a treatise or text-book, not appropriate in hymn-like writing. In a deeper sense, this whole argumentative section is a piece of cross-reference. Its function is to show the place of νοῦς in the ontology of Anaxagorean physics, to substantiate in physical detail the contrast with other things adumbrated at the beginning of the fragment. Argument is used to explain the internal consistency of Anaxagoras's views, not to defend his basic theses.

It should not be thought that this more complex argumentative style is without archaic features. Notice the artless economy of ὁμοίως ὡς καὶ μόνον ἔόντα ἐφ' ἑαυτοῦ. Anaxagoras could have written, more mechanically, ὁμοίως ὡς καὶ νῦν κρατεῖ *vel sim.*, and then added by way of conclusion: νοῦς is therefore *not* mixed with all things, and so not mixed with anything. As it is, by writing μόνον ἔόντα ἐφ' ἑαυτοῦ he indicates the moral without laboriously rehearsing it. He thus manages both to avoid losing his reader or hearer in the toils of his logic and to achieve an anaphoric return to his point of departure (and, as it turns out, to the style of solemn predication): as beautiful an example of that favourite device of archaic style, ring composition, as one could hope to find. One might feel that the repetition of εἰ ἐμέμελκτό τεφ (recalling εἰ...

τηφ ἐμέμεικτο ἄλλῃ) is less happy: it is logically otiose, and the sentence which it concludes is so short that Anaxagoras cannot have intended it as an *aide-mémoire*, which is at any rate one of the functions of the similar (but not so exactly repetitious) words εἰ μὴ οὕτω συνίστατο ὥστε ταῦτὸ εἶναι at the end of the penultimate sentence of Diogenes B2. But it does help the reader – and still more the hearer (if we imagine the fragment read aloud) – to focus on the premiss of the argument, i.e. on the consideration which governs all that follows. The emphatic clarity achieved by this sort of repetition, particularly of subordinate clauses, is primitive but effective: compare Hesiod, *Theogony* 65–7 (where the iteration of the succulent phrase ἐρατὴν/ἐπήρατον ὄσσαν ἰεῦσαι is designed to convey the dreamlike seductiveness of the song of the Graces), the Berezan lead letter of c. 500 B.C.<sup>16</sup> (where iteration expresses desperate urgency), and P.Oxy. 3070 of the first century A.D. (where an iterated conditional clause helps the recipient of the letter – although its illustrations admittedly do the job already – to concentrate on its indecent proposal).<sup>17</sup>

So it has to be allowed that there *is* argument in our extract. But the argumentation is clearly subordinate in emphasis and substance to the declarations which Anaxagoras makes in his style of solemn predication. It is almost as if he had inserted a footnote after μόνος αὐτὸς ἐφ' ἑαυτοῦ ἐστίν, to explain the physical rationale for the claim he has just made to readers interested in the fine print of his ontological theory. But, of course, it is *not* a footnote. It is carefully welded into the text at beginning and end (notice ἔστι γὰρ λεπτότατον κτλ.). It seems to gain in importance from the weight which attaches to the phrase μέμεικτα...ἐφ' ἑαυτοῦ ἐστίν within the clause νοῦς δέ...ἐφ' ἑαυτοῦ ἐστίν. And its very length and prominence cause it to have a very decided effect on the tone of the whole fragment. Deichgräber is quite right to argue that there is much about the style of solemn predication here to remind us of monotheistic hymnody.<sup>18</sup> He points to the simple massing of attributes of νοῦς, to the reiteration of πάντων...περὶ παντὸς πάσαν...πάντων...σμπάσης κτλ., to the reiteration of περιχωρεῖν and its cognates, to the recurrent νοῦς at the end of clauses and sentences, repetitions which, as Denniston remarked, 'flood and permeate, rather than strike, the ear'.<sup>19</sup> There is no



doubt that these elements of the solemn style dominate our extract. But the presence of the argumentative passage surely cannot but suggest that even if, as they stand, they are only affirmations, Anaxagoras's grandiose statements about νοῦς are the product of subtle ratiocination, and could be justified by it if need be.

It might also be argued that the structure of the extract as a whole implies a form of argument, despite the absence of inferential particles in the greater part of it. For the extract seems to fall naturally into two paragraphs. The first of these runs from τὰ μὲν ἄλλα to πάντων νοῦς κρατεῖ. It hangs together both in content and as a syntactic unit. This is easily demonstrated. We have already seen how the argumentative passage εἰ μὴ γὰρ...έόντα ἐφ' ἑαυτοῦ is subordinated grammatically and logically to καὶ μέμεικται...ἐφ' ἑαυτοῦ ἐστίν. No less clearly ἔστι γὰρ...πάντων νοῦς κρατεῖ attaches grammatically to what precedes (although the logic of the attachment is more obscure); the reiterated καὶ...γε ties each clause to its predecessor ('and what is more').<sup>20</sup> The whole paragraph constitutes a description of the nature of νοῦς, beginning with its most general characteristics and moving to a consideration of its relations with other things. Contrast the section which runs from καὶ τῆς περιχώρησος to οἱ ἀποκρινόμενοι. This is much less obviously a syntactic unit, although its end at least is clearly marked (the next sentence begins ἡ δὲ περιχώρησος - a change of subject, emphasized by initial δέ). But it is evidently concerned with a single topic, namely, the role of νοῦς in cosmogony. All the verbs predicated of νοῦς are aorists. The first sentence, καὶ τῆς περιχώρησος...τὴν ἀρχήν, gives a general account of νοῦς's activity; καὶ τὰ συμμισγόμενά...οἱ ἀποκρινόμενοι is more detailed, specifying separately νοῦς's knowledge and its ordering of the process of περιχώρησος. Now it is evidently quite attractive to see the claims of this second section as meant to be supported by those of the first paragraph. For the attributes ascribed to νοῦς in its cosmogonical role - control, knowledge, ordering - are precisely those ascribed to it in the first paragraph. It is as though Anaxagoras were seeking to justify his choice of νοῦς as what controlled the cosmogony by reference to properties of νοῦς which can be more directly seen to belong to it.<sup>21</sup> Perhaps this is his way of arguing that νοῦς uniquely possesses those powers which are required to

initiate and control the coming into being of a world.

But, of course, Anaxagoras's manner here is not that of a writer attempting any sort of justification. His second paragraph is surely presented more as amplification of the praises sung to νοῦς in the first than as an inference drawn from them. The most we are entitled to claim, I think, is that Anaxagoras adopts the natural logical order of exposition for one who is in fact if not professedly deriving a cosmogonical hypothesis from features of the world as it is at present. No doubt the logical order is also rhetorically effective.

We shall resume discussion of Anaxagoras's dogmatism in the third section of the present chapter. It is now time to turn our attention to the other main feature of his work which this book will explore: his ambiguity.

#### ANAXAGORAS'S AMBIGUITY

Ambiguity is pervasive in Fragment 12. Consider Anaxagoras's very first assertion about νοῦς, the claim that it is ἀπειρον. Zeller was so puzzled by it that he wanted to emend the text, offering ἄμωρον or ἀπλόον instead of ἀπειρον.<sup>22</sup> Context seems to indicate that νοῦς differs from other things in its possession of this, as of the other attributes ascribed to it. But that does not get us very far. Perhaps Anaxagoras means that νοῦς is not constrained by any physical boundaries or limitations<sup>23</sup> - both in the negative sense that it is not confined to a definite location, and in the more positive sense that it is able to range, in Epicurus's fashion, throughout the whole of the infinite universe:<sup>24</sup>

Ergo vivida vis animi pervicit, et extra  
 processit longe flammantia moenia mundi  
 atque omne immensum peragravit mente animoque.

Or perhaps the point is that whereas, if you examine any other thing, you will (or could in theory) find portions of everything else in it, the opposite is true of mind: the further you investigate, the more mind - just mind - you discover, whether because its capacity for initiating action and acquiring knowledge is inexhaustible, or because when you have investigated everything there is still your own investigation to be investigated. On this interpretation, Anaxagoras would presumably have been thinking of