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PREDICATION AND IMMANENCE:
ANAXAGORAS, PLATO, EUDOXUS, AND ARISTOTLE

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1. Introduction

A theory of predication invokes immanence, as I shall use the word, if it explains why snow is white by introducing something that is in snow that accounts for its being white.

Aristotle's theory of predication in the Categories is partly immanentist: it explains what we may call accidental predications (Aristotle does not use this terminology in the Categories) in terms of immanence. A stick is white because white, or, better, whiteness, is in the stick, but Socrates is a man not because of anything in him. In the Categories, nothing explains the latter predication: Socrates just is a man. Elsewhere, with the apparatus of matter in place, it is the fact that Socrates is a composite of a form or essence and matter that makes him a man: and then there is something that is in him that accounts for his being a man, and the theory is more thoroughly immanentist.

In the Categories, Aristotle says (2. 1a24-25):

By 'in a subject' I mean what belongs in something not as a part but (as) incapable of being separately from that in which it is (ἐν ὑποκειμένῳ, δὲ λέγω ὃ ἐν τινι ἢ ὡς μέρος ὑπάρχον ἀδύνατον χωρὶς εἶναι τοῦ ἐν ᾧ ἐστίν).

My object here is to shed some indirect light on this passage. It has aroused considerable controversy; what I have to say does not bear directly on that controversy. The only point touching the controversy that is relevant is this: these lines do not define the 'in' of immanence. To do that, they would have to distinguish being in a subject from being said of a subject; but it is equally true of something that is said of a subject that it is not a part of that subject and is incapable of existing separately from that of which it is said. As Aristotle later tells us (5. 2b5-6b):²

¹ See Ackrill, ACat&Int (1963 pp. 74f.); Owen, "Inherence" (1965); Matthews & Cohen, "The One and the Many" (1967/68); Allen, "Individual Properties" (1969) and "Substance and Predication" (1973); Jonas, "Individuals" (1972); Anna, "Individuals" (1974); Frede, "Individuen" (1978); Hainanen, "Non-substantial Individuals" (1981). My own contribution is "First Thoughts" (1975); this has been challenged by Wedin, "Said of" (1980). (For full citations, see "Bibliography" below.)

² Ninio-Paluello's text, but not quoting his 6b-c. The textual difficulties are not here relevant.

So without there being primary substances (it would be) impossible for any of the other (things) to be: for all the others are either said of these as subjects or in these as subjects (ἢ εἰσὼν οὐδ' τῶν πρώτων οὐσιῶν ἀδύνατον τῶν ἄλλων τι εἶναι κἀνα γὰρ τὰ ἄλλα ἢτοι καθ' ὑποκειμένων τούτων λέγεται ἢ ἐν ὑποκειμέναις αὐταῖς ἐστίν).

My suggestion is the following. The comment in 1a24-25 is a disclaimer. It responds to an immanentist theory of predication under discussion in the Academy, according to which the something that is immanent in snow that makes it white is a physical ingredient. This theory was an idea of Eudoxus'. Aristotle was sympathetic to the position, and his own sounded a lot like it. But he was not that position, and so it was important to distance himself from it.

The idea that snow is white because white or whiteness is a constituent of snow has one obvious drawback: it cannot be generalized to cover all the predicates that attach to things. It will not cover the predicates that are not physical ones: we can hardly say that Socrates is ironic because he has irony-stuff in him. Nor will it cover all the physical predicates: we cannot say that Socrates is a small man because he has some smallness-stuff and some non-stuff mixed in with the rest of his properties.

I shall not pay such attention to this drawback. We can think of Eudoxianism as a partial theory, intended to explain certain physical predications and elsewhere silent. And besides, when we consider Aristotle's objections to the theory, we shall find that there is no record of an objection on this score. But it is a drawback, and there will be times when we shall have to notice it.

Here is a disclaimer of my own. According to a scholarly tradition still current, when Aristotle arrived and enrolled as a freshman at the Academy, Plato was off in Sicily trying to make a philosopher out of a king and had left Eudoxus in charge. That tradition rests on a single late text, already known to contain inaccuracies, which has been emended, on the basis of a Latin translation, to make it say this, and the result of the emendation does not clearly say this anyway. It could, for all anyone knows, be right; perhaps it would even be pretty, given what I see

³ Apparently started by F. Jacoby, Apollodora Chronik (1902) 324 n. 18; continued by E. Sachs, De Theaeteto 17-18 n.2; Jaeger, Aristotle 16-17 n. 2; Düring, AABT (1957) 159-160 and Aristoteles (1966) 1; Merlan, Studies (1960) 99 n. 14. For dissent, see Friedländer, Plato (English tra, 1958 or 1969) 353 n. 15; Gigon, "Interpretationen" (1958) 159 n. 22 and Vita (1962) 49; Leszl, Il 'De ideis' (1975) 339. Huxley, "Eudoxian Topics" 84-85 expresses qualified assent, but the story is absent from his "Eudoxus" (1971). See also Lasserre, Fragments des Eudoxos 138 (it is incompatible with Lasserre's favored birthdate for Eudoxus; 391/390 [138-139], as Leszl points out [339]); Ianardi Parente, Studi (1979, but the article was first published in 1977) 132-133 n. 186; Guthrie, HGP v (1978) 447-448, n. 1 p. 448.

suggesting.⁴ But we cannot trust it, and anyway it would make no difference: Eudoxus, at some point or other in the relevant period, hung around the Academy and, apparently, made some contribution relevant to our understanding of what was going on.⁵

To get in on the ground floor of immanentism, we should go back to Anaxagoras. We shall find Aristotle bracketing Anaxagoras and Eudoxus, and Aristotle's objections against Anaxagoras will be essential background for understanding his objections against Eudoxus, so this is not merely a Sunday excursion.

2. Anaxagoras

Anaxagoras does not clearly have a name for what Aristotle would call his 'principles' (e.g., Phys. A 1184a11, 16, etc.), 'underlying bodies' (e.g., Phys. A 4. 187a13), or 'elements' (e.g., De caelo F 3. 302a32). He speaks of 'all things' (πάντα χρήματα or just πάντα; e.g., 598b1, DK ii 32.11, 12f.). Aristotle calls them 'homoeomers' (ὁμοιομερή 187a25, 302a31-32), which I cannot translate or pronounce. Let us say 'ingredients'.

His views about these ingredients and the mixtures they compose were relevant to the concerns of Plato's Academy, for Anaxagoras accounts for the truth of "snow is white" by making white present in snow as a part of it; he even says that snow 'partakes of' white. But, in addition, it cannot be separated

⁴ Frank, "Die Begründung" (1955) 145-150, makes much of this.

⁵ Leszl, II 'De ideis' 335-340 would deny this: he thinks that a theory of forms is incompatible with Eudoxus' known hedonism, and that the dating is against it (see above, n. 3). See below, pp. 23-24.

⁶ But in fact, I think he called them 'seeds' (σπέρματα), as De caelo 302a31-b2 suggests, and as Simplicius in De caelo 603.17-19 says; so also Ross AM i 132 ad 984a14. But this is controversial: see Schofield, Essay (1980) 121ff., esp. 128-132.

⁷ A term that probably does not go back to Anaxagoras: Bailey thought so (Greek Atomists 551-556), but see Mathewson, "Aristotle and Anaxagoras" (1958) 77-81, Guthrie HGP ii 325f.

⁸ As was emphasized long ago by Becker, "Eudoxos-Studien V" (1936) 395ff. It has recently been re-emphasized by Brentlinger, "Incomplete Predicates" (1972) 63-69; see also Furlay, "Anaxagoras" (1976) 80-83 = Anton & Preus (1983) 83-86.

⁹ The analogies prompted Furlay, op cit. (1976) 82 = (1983) 84, to speak of Anaxagoras' ingredients as 'forms'; for his purposes it does no harm. But it might here.

Becker, "Eudoxos-Studien V" (1936) 395 n. 15, drew attention to the phrase σπέρματα πάντων χυρμάτων και ιδέας παντοίας έχοντα και χροιάς και ἡδονάς in 598a at DK ii 34.7-8.

from it.

Aristotle interprets this as an immanentist theory of predication. He thereby interprets Anaxagoras in terms that were unavailable to Anaxagoras. I think there is nothing wrong with that, and that Aristotle's interpretation is correct. But here it is enough to remind ourselves that the positions we are ultimately trying to understand are Eudoxus' and Aristotle's anyway. So it does not matter as much as it might whether Aristotle has read Anaxagoras rightly.

Anaxagoras says, in 598b (=DK 35.13-20):

And since the portions of the great and the small are equal in plurality, so also all {things} would be in¹⁰ everything; and they cannot be separately¹¹, but all things partake of a portion of everything. Since there cannot be a least, it is not possible <for anything> to be separated¹¹, or to come-to-be, by itself, but just as in the beginning also now all things are together. In all things there are present¹⁰ many things, equal in plurality, in the greater and in the smaller of the things being disjoined¹².

καὶ ὅτε δὲ ἴσαι μοῖραι εἰσι τοῦ τε μεγάλου
καὶ τοῦ μικροῦ πλήθος, καὶ οὕτως ἂν εἴη ἐν παντί
15 πάντα οὐδὲ χωρὶς ἔστιν εἶναι, ἀλλὰ πάντα παντός
μοῖραν μετέχει. ὅτε τοῦλάχιστον μὴ ἔστιν εἶναι, οὐκ ἂν
δύναίτο χωρισθῆναι, οὐδ' ἂν ἐφ' ἑαυτοῦ γενέσθαι, ἀλλ'
ὅμοιωσεν ἀρχὴν εἶναι καὶ νῦν πάντα ὁμοῦ. ἐν παντί δὲ
20 πολλὰ ἔνεστι καὶ τῶν ἀποκρινομένων ἴσα πλήθος ἐν
τοῖς μείζονσι τε καὶ ἐλάσσονσι.

In 598b (= DK ii 36.14-16), he says:

The things in the one cosmos are not separated¹¹, not cut off from each other with an ax, neither the hot from the cold, nor the cold from the hot (οὐ κεχώρισται ἀλλήλων τὰ ἐν τῷ ἐνὶ κόσμῳ οὐδὲ ἀνοκέονται κελέκει οὔτε τὸ θερμὸν ἀπὸ τοῦ ψυχροῦ οὔτε τὸ ψυχρὸν ἀπὸ τοῦ θερμοῦ).

In B12 at DK ii 39.2-4 he says:

But nothing is totally disjoined¹² and disconnected¹³ from

¹⁰ With εἴη ἐν, ἔνεστι, etc. in these places cf. Cat. 1a20-21, etc.

¹¹ With χωρὶς, χωρισθῆναι, etc. in these places cf. χωρὶς in Cat. 1a25.

¹² In these places the words are ἀνοκέομαι and its cognates: often translated using the English 'separate' (e.g., Kirk & Raven [impressions of 1957 through 1963] 376; Kirk, Raven & Schofield [1983] 366). Elegance has been sacrificed in favor of uniformity in translating words for separation.

¹³ ἀνοκέομαι and cognates: see nn. 11 and 12.

anything else except mind (παντάσκι δὲ οὐδὲν ἀποκρίνεται οὐδὲ ἀκακρίνεται ἕτερον ἀπὸ τοῦ ἑτέρου πλὴν νοῦ).

"Just as in the beginning also now all things are together": he thinks there once was a Cosmic Soup in which everything was mixed. In that Cosmic Soup, "when all <things> were together, nothing was manifest" (B1, 32.12-13: καὶ πάντων ὄρου ἕστιν οὐδὲ ἐνθάδον ἦν); specifically, "no color was manifest" (B4, 34.17-18: οὐδὲ χρομὴ ἐνθάδον ἦν οὐδεμία). But we want him to tell us why snow is white. So we can pass up the Soup course, except for one point.

The ingredients that were all together in the Cosmic Soup and still are all together are "unlimited in plurality" (B1, 34.11); Aristotle says that Anaxagoras made the ἀρχαὶ unlimitedly many (Met. A 3. 984a11-13; Phys. A 4. 187a25, 26f., P 3. 203a19-20, etc.).¹⁴ So there is no end (or beginning, or middle) to the list of features covered by Anaxagoras' theory of predication; as Aristotle will tell us, the accidents of a thing are unlimited (ἀνεπερὶ γὰρ ἂν τῷ ἐνὶ σωμαίν, Phys. B 5. 196b28-29). Even so, it is only a partial theory. For the Cosmic Soup, which had all the ingredients in it, had no horses or men or turnips.

Here we first encounter the Drawback mentioned at the outset. And, since Anaxagoras' position is a response to Parmenides' denial of the possibility of anything's coming-to-be, the problem is acute, for that denial is completely general.

But this is the norm for the fifth-century cosmologists: Empedocles and the atomists also respond only partially to Parmenides' challenge. So, for the present, let us ignore the Drawback.

"Since there cannot be a least, it is not possible <for anything> to be separated, or to come-to-be by itself": if there were atoms of white or cold, one could imagine detaching one. He thinks there aren't: there is no least quantity of any ingredient. But this does not show the impossibility of isolating some pure white or pure cold; it merely denies one of the conditions under which that would be possible.¹⁵ Anaxagoras' argument for the inseparability of white must be sought elsewhere.

"All" things are "in everything"; "all things partake of a portion of everything": snow has white in it, along with every-

thing else; everything else has snow, and white, and everything else in it. This, the "Principle of Universal Mixture",¹⁷ is the proximate explanation for the inseparability of Anaxagoras' ingredients: there is no getting the white out of the snow because then there would be white that had nothing else in it and snow that had no white in it.

So the question is: why does Anaxagoras accept Universal Mixture? Or rather, why does Aristotle think Anaxagoras accepted it?¹⁸

After commenting, in *Physics* A 4, that Anaxagoras employs unlimitedly many principles, Aristotle gives an explanation (187a26-b2):

Anaxagoras seems to have thought this unlimited in that way because of his taking the opinion common to the physicists to be true, that nothing comes-to-be out of what is not (for a30 because of this they say that all things were together, and he makes such-and-such a thing's coming-to-be an alteration, while they <make it> combination and disconnection¹⁹); and again, from the fact that the contraries come-to-be from each other; therefore they were present in²¹ <it before>; for if everything that comes-to-be necessarily comes-to-be either from things that are or things that are not, and of these <alternatives>, that it comes-to-be from things that are not is impossible (for about this a35 all those concerned with nature thought the same), they thought that the remaining <alternative> followed of necessity, and it comes-to-be from things that are and are present 187b in²¹ <it beforehand>, but imperceptible to us because of the smallness of their bulks. Which is why they say that everything is mixed into everything, because they see everything coming-to-be from everything.

ἕτοιμα δὲ ἄντα-

17 Kerferd, "Anaxagoras" (1969), in Mourelatos (1974) 491.

18 Again, I think the answers are the same, *pace* Schofield *Essay* 106-107 and ff.

19 Anaxagoras. I find the sequence of references to Anaxagoras (a26 singular, a29 plural, a30 singular, b1 plural) puzzling, but apparently no one else does.

20 "οὐ δὲ refers primarily to Empedocles, whose doctrine Aristotle often refers to as identifying γένεσις with εὐχηριστις καὶ διακρίσις, though this is equally true of, and is ascribed by Aristotle elsewhere to, Anaxagoras." (Ross *AP* 484f.) See Anaxagoras fr. 17 for the identification; but the only passage in Aristotle that Ross cites (*De gen. et corr.* 314a13) makes Anaxagoras identify γένεσις with ἀλλοιωσις, as here in 187a30: (*AP* 484 ad 29-30). Perhaps he has in mind *Phys.* P 4. 203a27-30, where διακρίσις and γένεσις seem to be interchangeable.

21 ἐνυπόρχητο: cf. ἐν . . ὑπόρχον *Cat.* 1a24-25.

14 There are many other passages in which Aristotle says this: see B2 *Ind* 49a58-61. But Schofield is reluctant to accept it as an interpretation of fr. 1: see *Essay* p. 77 w. n. 12 p. 156 and pp. 78-79. If the identification mentioned in n. 6 above were accepted, this would follow from 59B4 at 35.1-2, where Anaxagoras speaks of "seeds unlimited in plurality in no way resembling each other" (ἑσπερῶν ἀείρων πλῆθος οὐδὲν ἑοικότερον ἀλλήλοις) as being present in the Cosmic Soup.

15 See Furley, "Anaxagoras" (1976) 64-66 = Anton & Preus (1983) 73-74 *et passim*. I am not entirely clear what Furley's solution to the problem is.

16 So also, I take it, Schofield *Essay* 89-94.

ἕκαστος ἀπειρα οὕτως οἰηθῆναι διὰ τὸ ὑπολαμβάνειν τὴν κοι-
 νὴν δόξαν τῶν φυσικῶν εἶναι ἀληθῆ, ὡς οὐ γινόμενον οὐδέ-
 νος ἐκ τοῦ μὴ ὄντος (διὰ τοῦτο γὰρ οὕτω λέγουσι, ἢ ὄνου
 a30 πάντα, καὶ τὸ γίγνεσθαι τοιοῦτο καθεστῆκεν / ἀλλοιοῦσθαι,
 οἱ δὲ σύμφηρον καὶ διάκρητον) ἔτι δ' ἐκ τοῦ γίγνεσθαι ἐε ἀλ-
 λήλων πάναντία ἐνυπήρχεν ἅρα εἰ γὰρ μὴ μὲν τὸ γι-
 γνόμενον ἀνάγκη γίγνεσθαι ἢ ἐε ὄντων ἢ ἐκ μὴ ὄντων, τούτων
 δὲ τὸ μὲν ἐκ μὴ ὄντων γίγνεσθαι ἀδύνατον (περὶ γὰρ ταύτης
 a35 ὁμοχρωροῦσι τῆς δόξης ἀπαντες οἱ περὶ φύσεως), τὸ λοι-
 πὸν ἡδὴ συρραίνειν ἐε ἀνάγκης ἐνόησαν, ἐε ὄντων μὲν καὶ
 ἐνυπαρχόντων γίγνεσθαι, διὰ μικρότητα δὲ τῶν ὄγκων ἐε
 187b ἀναισθήτων ἦν. διὸ φασὶ μὴ ἐν παντὶ γερῆσθαι, διότι
 μὴ ἐκ παντός ἐώρων γινόμενον.

Aristotle's presentation of the argument is not orderly, but it is clear. The overarching premise is the one 'common to the physicists', which Aristotle formulates twice in this passage (a28-29, 33-34):

(1) Nothing can come-to-be from what it is not already. ²² Aristotle elsewhere (*Phya* I 4, 203a28-29) puts Anaxagoras' view as "τὸ γινόμενον ἐκ τοῦ τοιούτου γίγνεται σώματος"; this might be translated 'what comes-to-be comes-to-be from the sort of body <it is>'; ²³ it is another version of (1).

In our text, Aristotle adds to (1) (187b1-2):
 (2) Everything comes-to-be from everything, or perhaps, referring again to Aristotle's account elsewhere (203a24):

(2*) Anything comes-to-be from anything, no doubt, as Simplicius explains, "even if not immediately, still, in due course" (εἰ καὶ μὴ ἀμέσως, ἀλλὰ κατὰ τάξιν, in *Phys.* 460.13). And he concludes:

(3) Everything (or anything) already is everything (or anything).

But nothing *seems* as if it were everything; there is a difference between being something and manifestly being something, between being something and both being and seeming to be something. Aristotle next says (*Phys.* A 4, 187b2-7):

but <they say things> show up and are named differently from each other from that which most exceeds in plurality in the mixture of the unlimited things; for <they say> there is no
 b5 whole purely white or black or flesh or bone, but whatever

²² Following Furley "Anaxagoras" (1976) 64, 68 n. 18; (1983) 72, 75, 88 n. 18. Schofield *Essay* 167 n. 67 says "this seems improbable in the light of 187a32ff.": I do not see what it is about 187a32ff. that renders it improbable.

²³ So I am inclined to think, with Philoponus in *Phys.* 397.26-27, 396.27, Simplicius in *Phys.* 460.12, Hardie and Gaye (Oxford trs.), and Carleton (Budé) 96. But Schofield denies this (*Essay* 153 n. 34), and other recent translators and commentators take it differently: Wagner *Physikvorlesung* 66, Hussey *APiiv* 7 (trs.) & 75 (com.).

each thing has most of, that the nature of the thing is taken to be.

φαίνεσθαι δὲ διαφέροντα καὶ προσαγορεύεσθαι ἕτερα ἀλλήλων ἐκ τοῦ γάλισθ' ὑπερέχοντος διὰ πλεῖθος ἐν τῇ μίξει τῶν ἀκρίων εἰδικρινῶς μὲν γὰρ ὅλον λευκὸν ἢ μέλαν ἢ χλωμὸν ἢ σάρκα ἢ ὄστυον οὐκ εἶναι, ὅτου δὲ πλεῖστον ἕκαστον ἔχει, τοῦτο δοκεῖν εἶναι τὴν φύσιν τοῦ πράγματος.

Here he is accurately representing Anaxagoras; in 59B12 (at DK 11 39.6-7 we read):

but whatever <things> there is most of in <anything>, these <things> each one thing is and was (ἀλλ' ὅτων πλεῖστα ἐνι, ταῦτα ἐνάλλοτάτα ἐν ἕκαστῶν ἐσσι καὶ ἦν).

This principle ²⁴ needs a bit of commentary: ²⁵ snow is white because white predominates in the mixture that is snow, but that does not mean every feature apart from white is blanked out, for snow is also cold. It must be that, in the mixture that is snow, white predominates over black, and cold over hot.

At this rate, the features the theory is to account for must come in contrary pairs: for a feature to predominate, it must have something to predominate over. ²⁶ It is not obvious how this could be made to apply to some of the features most popularly associated with Anaxagoras' doctrine: flesh, bone, hair, bread and so on (see, for these examples, *De caelo* I 3, 302a32-b1, *De gen. an.* A 18, 723a10-11 Simplicius in *Phys.* 460.15-17 = DK 11 18.14-16, 'Aëtius' 1.3.5 at DK 11 18.34-36). But if the scholiast on Gregory of Nazianzus is not lying, ²⁷ Anaxagoras said (59B10, DK 11 37.6-7):

For how could hair come-to-be from not hair and flesh from not flesh? (ὡς γὰρ ἐν ἐκ μὴ τρίχος γένοιτο θρῖξ καὶ σὰρξ ἐκ μὴ σαρκός;)

And then he was in possession of a cheap device for manufacturing contraries *ad lib.*

²⁴ The "Principle of Predominance": Kerferd, *loc. cit.* n. 17 above.

²⁵ So also Furley, "Anaxagoras" (1976) 81 = Anton & Preus (1983) 84. But Furley's commentary is different from mine.

²⁶ Perhaps when Aristotle says, in 187a25-26, that Anaxagoras makes the underlying bodies "the homoeomers and the contraries" (τὰ τε ὁμοιομερῆ καὶ τὰναντία), we should translate "the homoeomers, that is, the contraries".

²⁷ I am not convinced by Schofield's assaults on him: "Doxographica" (1975) 14-24 and *Essay* 135ff. Schofield's skepticism is shared, to some degree, by Furley, "Anaxagoras" 66-67 = Anton & Preus (1983) 74-75.

3. Plato

Plato had some things to say about forms. And some of the things he said sound immanentist.²⁸

3.1 Immanentist language in the early dialogues

There is a group of immanentist passages in the early dialogues. They have sometimes been taken as showing that Plato once held an immanentist theory of forms.²⁹ They do not show that. In these early passages, Plato is arguing about matters other than metaphysics (namely ethics, or something like ethics)³⁰ and drawing such distinctions as he thinks he needs to make points about these. His arguments require no backing by any metaphysical system, whether immanentist or separatist.³¹

²⁸ Ross' survey of Plato's language about the theory of forms (PTI 228-230) is a useful place to start, but so selective that his claim (228) that "it is near enough to being complete to furnish a true indication of Plato's usage" (or Brentlinger's ["Incomplete Predicates" 68 n. 9] that it covers "all the important dialogues") is seriously misleading. Among my complaints are that he takes no note of the immanentist language in the Phd., and he makes no reference whatever to the Chrm. (the latter is also voiced by R.K. Sprague, La&Chrm [1973] 65 n. 22). For some different complaints, see Owen, "Tim", Allen (1965) 321 n. 2; Cherniss, "Tim", (1957) 250f.; Allen (1965) 363 = Cherniss (1977) 323f.; Allen, PlEuthphr 146 n.2. Allen's complaint is that Ross cites idioms which he takes to "indicate 'transcendence' in the early dialogues".

Fujisawa, "Ἐπεὶ, Μετέχειν" (1974) provides a different list (p. 42), but I have some reservations about that one as well. For one thing, numerous occurrences of μετέχειν in the Protagoras and elsewhere are ignored, presumably because the context is not one in which Socrates is seeking a definition. See also below, nn. 34, 37.

This is one of the many points at which Brandwood's Index (1976) is indispensable.

²⁹ Notably, by Ross, PTI 21, 228-230.

³⁰ So also Allen, on the 'first friend' of Lysis 219cd (Plato's Euthyphro 155). But Allen seems to me to use this device only when it suits him: cf. next note.

³¹ So I find myself in disagreement not only with Ross but with Allen (op. cit. n. 30, and "Plato's Earlier Theory" (1971)) who sees in the early dialogues a metaphysics of separate (as opposed to immanent) forms. Prauss, Platon (1966) 17-22 speaks of 'the existence of the universal' ("die Existenz des Allgemeinen") as simply self-evident to Socrates and the early Plato (see p. 18), and even this seems to me to go too far. On the other hand, I find myself in virtually complete agreement

For example: in the initial conversation in the Hippias Major, the word καλόν and its cognates are used with great freedom. It occurs to Socrates to ask Hippias what he thinks it means, or, if you prefer, what the beautiful is. He sets up this question by first asking Hippias whether he thinks there is such a thing as the beautiful (287c4, c6-8, d1-2). This does not require anyone to reflect on the ontological status of the beautiful: it simply nails down the topic for discussion.³²

But philosophers sometimes do fall to reflecting about ontology. They ask: what is the status of meanings, or essences, or universals, or intentions, or forms, or ideas, or the general, or whatever? Are such things to be identified with, or distinguished from any of the ordinary things we encounter here on the ground? And so on. And when they do, their starting-point for understanding is likely to be just such conversations as the one between Socrates and Hippias, or those we are about to notice. Plato must at some point have asked himself: how seriously should I take Socrates', or my own, language in places like these?

The occurrences of ἐν in Laches 191e5, e6, e10, 192a2, a3, a5, a9, b6, b7 are sometimes cited. We cannot count all of these: at 191e5, e6, 192b6, b7 what courage, cowardice and quickness are in are not the people or even the actions that are courageous, cowardly, or quick, but the circumstances and conditions in which people do courageous, cowardly, or quick things. Still, in 191a1-6 Socrates says:

But I mean it like this: just as if I were to ask what is quickness, which we happen on in running, in zither-playing, in speaking, in learning, and in many other things, and we possess something of it worth mentioning in the actions of our hands, legs, mouth, voice, or understanding.

Ἄλλ' ὅδε λέγω, ὡσερ ἂν εἰ τάχος ἠρώτων τί ποιεῖσθαι, ἃ καὶ ἐν τῷ τρέχειν τυγχάνει ὄν ἦρτιν καὶ ἐν τῷ κινθαρίζειν καὶ ἐν τῷ λέγειν καὶ ἐν τῷ γανθάνειν καὶ ἐν ἄλλοις πολλοῖς, καὶ σχεδόν τι αὐτὸ κεκτήμεθα, οὐ καὶ πέρι ἄλλου λέγειν, ἢ ἐν ταῖς τῶν χειρῶν πράξεσιν ἢ σκελῶν ἢ στόματός τε καὶ φωνῆς ἢ διανοίας.

And a little later we get talk of 'partaking of' courage and wisdom (μετέχειν, 193e3, 197e2).³⁴

At Euthyphro 5d1, the pious is the same in every action; in

with Woodruff, PHpMa (1982) 161 et passim.

³² I am, then, inclined against as moderate a position as that of Malcolm, "Place of the Hippias Major" (1968). See Woodruff, "Socrates and Ontology" (1978) 103-109; PHpMa, 45 n. 56, 163-164.

³³ Ross, PTI 228; Brentlinger, "Incomplete Predicates and the Phaedo" (1972 (66)).

³⁴ The first of these is missing from Fujisawa's list. ("Ἐπεὶ, Μετέχειν" 42), although, as far as I can tell, it meets the standards of significance.

Ed3 things are said to have a single idea in as much as they are impious.

When he wrote the Hippias Major, Plato³⁵ seems to have been in love with the word προσίγνεσθαι³⁶, 'to be added to'; at 289d2-4 he refers to what he wants defined as

the beautiful itself, by which all other <things> are adorned and show themselves as beautiful when that form is added to them (αὐτὸ τὸ καλόν, ᾧ καὶ ἅλλα πάντα κοσμεῖται καὶ καλὰ φαίνεται, ἐπειδὴν προσίγνεται ἐκεῖνο τὸ εἶδος).

and the use of this verb in this connection is picked up by Hippias (d8, e5) and reverted to by Socrates (290b7, 292d1). Put up against talk of adding flesh to flesh by eating (Phd 96d1, d3; cf. Tim 82b4, Lg vii 789a5), this sounds immanentist and even Anaxagorean.

In Charmides 157a Socrates discusses an alleged Thracian treatment of the soul with beautiful words; at 157a5-7 he says:

From such words self-control comes-to-be in our souls, which, when it has come-to-be-in and is-present-to <them> it is easy to provide health for the head and the rest of the body (ἐκ δὲ τῶν τοιούτων λόγων ἐν ταῖς ψυχαῖς σωφροσύνην ἐπίγνεσθαι, ἥς ἐγγενομένης καὶ παρούσης ῥάδιον ἤδη εἶναι τὴν ὑγίειαν καὶ τὴν κεφαλῇ καὶ τῷ ἄλλῳ σώματι κορίζεσθαι).

In 158b5-6, he says to Charmides, by way of raising a question:

If self-control is already present-to you and you are adequately self-controlled. . . (εἰ μὲν σοι ἤδη παρέστιν. . . σωφροσύνη καὶ εἰ σώφρων ἱκανῶς. . .).

and when he raises it it has the form (158c2-4):

So do you yourself say that you already adequately partake of self-control. . .? (αὐτὸς οὖν. . . καὶ φη' ἵκανῶς ἤδη σωφροσύνης μετέχειν. . .)?³⁷

And there is more immanentist language to come: self-control is something to be possessed (κείμεσθαι 158d8), something that is present-to (παρεῖναι 158e7, 160d7, 161a9, 175e2) or present-in (ἐνεῖναι 159a1, a2, a9) someone.

In the Gorgias, Socrates gives a more general formulation involving the expression 'presence-to' (497e1-3):

³⁵ Pace Tarrant, Hippias Major (1928), etc. See Woodruff, PHM (1982) 93-103 et passim.

³⁶ It occurs more times in that dialogue than in any other, including the monsters, R and Lg.

³⁷ This also is unaccountably missing from Fujisawa's list (see n. 34 above).

don't you call good men good by the presence-to <them> of goods, just as you call those beautiful whom beauty is present-to? (τοὺς ἀγαθοὺς οὐχὶ ἀγαθῶν παρούσιν ἀγαθοῦ καλεῖς. ὡσαύτ' τοὺς καλοὺς οὐχὶ ἀν καλῶν παρῆ;)

No one wishes to see in this any heavy ontology.³⁸ But suppose we lean on it anyway. It is an odd formulation; in fact, it incorporates two formulations: one, generalized, would be that things are F when F's are present-to them, and the other, generalized, would be that things are F when F-ness is present-to them. As far as I can tell, this point is completely irrelevant to understanding the Gorgias.

But the formulation is one about which Plato was reflective, even before he was asking expressly metaphysical questions.

In the Euthydemus, it is parodied: Socrates is trying to say that there are beautiful things (cf. καλὸν πρῶτον 300e3) that are not the same as the beautiful (301a1-4); "but", he says, "there is some beauty present-to each of them" (301a4: παρέστιν μὲν τι ἐκάστῳ αὐτῶν κάλλος τι).⁴⁰ This is ambiguous between the two formulations we found in the Gorgias, since 'some beauty' has the same idiomatic range in Greek as it does in English. In any case, Dionysodorus skewers him with this (301a5-6):

So if an ox became present-to you, you would be an ox, and because I am present-to you, you are Dionysodorus? ('Εάν οὖν. . . παραγένηται σοι βούς, βούς εἶ, καὶ ὅτι νῦν εἰμι σοι παρέστι, Διονυσόδωρος εἶ;)

to which Socrates responds 'don't even say it!'. No doubt drawing a philosophical moral from slapstick shows failure to grasp the genre, but surely what Socrates should say to Dionysodorus is that it is not just any and every sort of 'presence-to' that makes for character. That would raise the question when it is that something's presence makes a difference (301a8-9). And that, slapstick or no, is precisely Dionysodorus' next question.⁴¹

³⁸ See Dodds, PGR 314 ad 497e1; Irwin, PGR (1979) 202f. ad 497e.

³⁹ Sprague, Plato's Use of Fallacy (1962) 25-30, and, more briefly, PEuthd (1965) 55-57 nn. 95-96, sees here an attack on the theory of forms. The objection, she thinks, is, or is very like, that of Pra 130e5-131c11 ("Pra's Sail" [1967] 95-98; see also Llewelyn Davies, "Theory of Ideas" [1897] 10). Gifford, by contrast, Euthd (1905) 59 ad 301a1 follows Stallbaum in seeing "only the logical doctrine of universals as held by Socrates, upon which Plato afterwards founded his metaphysical doctrine of 'Ideas'". I do not know whether I agree with this or not.

⁴⁰ παρεῖναι was used earlier in the dialogue in the same way: 280b2, b7.

⁴¹ So I think; see Gifford, Euthd 60 ad a8. Contrast Sprague,

Socrates does not answer it, there or anywhere else. But at Lysis 217c3-e1 we find this:

For I say that, for some things, where what is present-to them is such-and-such, they themselves are such-and-such; for others, not. Just as if someone plastered something with some color, I suppose what was plastered on would be present-to what was plastered <with it>.

Very much so.

Then is that which is plastered also therefore at that time of such a color as that which is-on <it>?

I don't understand, he said,

But <it's> as follows, I said. If someone plastered your hair, which is yellow, with white-lead, would it then be white, or seem white?

It would seem white, he said.

And whiteness would be present-to it.

Yes

But nevertheless it wouldn't be any more white, but while whiteness is present-to it it is neither at all white nor black.

True.

But when, my friend, old age brings on it this same color, then it has come-to-be such as what is present-to <it>: white, by the presence-to <it> of white.

How else?

This, then, I am asking now: whether, where something is present-to a thing, that which has it will be such as that which is present-to <it>; or <is it that> if it is present-to <it> in a certain way, it will be, and if not, not?

Rather the latter, he said.

217c

λέγω γὰρ ὅτι ἕνια μὲν, οἷον ἂν ἡ
τὸ παρὸν, τοιαῦτά ἐστι καὶ αὐτά, ἕνια δὲ οὐ. ὡς περ εἰ
S ἐθέλοι τις χρώματι τῷ ὀπίσθῳ (τι) ἀλείψαι, κἀρεστὴν ποῦ
τῷ ἀλειφθέντι τὸ ἐπαλειφθέν. -- Πάνυ γε. -- Ἀρ' οὖν καὶ
D ἐστὶν τότε τοιοῦτον τὴν χροάν τὸ ἀλειφθέν, οἷον τὸ ἐπόν;
-- Οὐ γὰρ θάνα, ἢ δ' ὅς. -- Ἀλλ' ὡς, ἢ δ' ἐγώ. εἰ τις
σου εἰσβάς οὐσας τὰς τρίχας ψιγυβίῳ ἀλείψειεν, πότιον
τότε λευκαὶ εἶεν ἢ φαίνονται ἂν; -- φαίνονται ἂν, ἢ δ' ὅς. --
Kαὶ γὰρ παρέλθῃ ἂν αὐταῖς λευκότης. -- Καί. -- Ἀλλ' ὅπως
S οὐδὲν τι μᾶλλον ἂν εἶεν λευκαὶ πῶ, ἀλλὰ παρούσας λευκό-
τητος οὔτε τι λευκαὶ οὔτε μέλαιναί εἰσι. -- Ἀληθῆ. -- Ἀλλ'
D ὅταν δὴ, ὡ φίλε, τὸ χροάν αὐταῖς ταῦτον τοῦτο χροάν ἐπα-
γάγῃ, τότε ἐγένοντο οἷον περ τὸ παρὸν, λευκοῦ παρουσίᾳ
E λευκαὶ. -- Πῶς γὰρ οὐ; -- Τοῦτο τοῖον ἐρωτῶ νῦν δὴ, εἰ ὅ
E ἂν τι παρῆ, τοιοῦτον ἐστὶ τὸ ἔχον οἷον τὸ παρὸν ἢ ἔαν
γὲν κατὰ τινὰ τρόπον παρῆ, ἐστὶ, ἔαν δὲ γῆ, οὐ; -- Οὕτω
μᾶλλον, ἔφη.

This is certainly fledgling metaphysics, and if it ever flew.

Plato's Use of Fallacy 26-27. Euthd 56 n.; against this, see Guthrie, HGP iv 278 n. 2.

it might be Eudoxianism.⁴² It would account for the fact that something, which I shall call the host entity, is (say) white by the presence in it of an intermediary which is also white.

In the Lysis, it is not worked out. In the case of white, there is no candidate named for the intermediary entity: that cannot be old age, which is the only thing mentioned as explaining why the hair is white, since, as Socrates states it, the intermediary itself possesses the imported property, and old age is not white. If the intermediary were something like a pigment, like the white lead mentioned, that, in old age, was present-to the hair in a special way, as Socrates says, and not just plastered on to the outside, and if this special presence-to were a matter of the pigment's being physically a part of the hair itself, the whole thing might be Eudoxianism.

But it would be an error to charge Plato with Eudoxianism or with any other metaphysical theory here. The passage is a part of an attempt to characterize the paradigm situation in which x is friendly toward or loves y as follows:

y is good, and there is present in x something that is bad, but x is not thereby himself bad (see 217e-218a).

For example, there are people who have (οἱ ἔχοντες 218a6) ignorance, which is bad, but are not yet witless or stupid, and so their possession of ignorance has not yet rendered them bad. These, according to the line Socrates is trying out, are the lovers of wisdom. So he distinguishes cases in which something F (something bad, or white) by its presence in something else makes that something else also F, from cases in which it does not. There is no hint that the notion of 'presence-in' that has to cover physical presence as well as whatever the relationship is between my ignorance and me is embedded in any general account of why things are what they are.⁴³

Socrates once (Chrm. 161a4) quotes⁴⁴ and once (La. 201b2-3) alludes to Odyssey xvii 347:

Modesty is not <a> good <thing> to be-present-to a man in need.
αἰδώς δ' οὐκ ἀγαθὴ κεκρημένῳ ἀνδρὶ κερεῖναι.

We do not want to put Homer on the list of immanentists.⁴⁵ In the Lysis, we have very little better reason for putting Plato on that list. But we shall encounter the relation of presence-to again. And then it will be metaphysics.

⁴² Cf. Becker, "Eudoxos-Studien V" (1936) 394-395.

⁴³ See n. 30 above.

⁴⁴ As Allen, Plato's Euthyphro 146 n. 1 points out.

⁴⁵ See also R i 331a2.

3.2 The Phaedo

Immanentist language is not abandoned when Socrates has been launched into the orbit of the Theory of Forms: there are many passages in dialogues from the period of high theory to consider. Here I confine myself to the *Phaedo*.

There, toward the end (102d7 and ff.), Socrates uses the phrase 'the tallness in us'; so it is thought that he has in his universe not only forms and ordinary things (or, better: forms, ordinary things, and souls) but also 'form-copies'⁴⁶ 'immanent characters', or 'immanent forms';⁴⁷ indeed, to some, the passage is explicit about these. I think there are no such animals as 'immanent characters' or 'form-copies'. I also think there is another kind of immanentist theory in the offing.

3.2.1 The safe theory.

A little earlier Socrates had been discussing theories that explain the truth of true predications. He has his own. It requires, first (100b5-7):

hypothesizing that there is a beautiful itself by itself and a good and a tall and all the others (ὑποθέμενος εἶναι τι καλὸν αὐτὸ καθ' αὐτὸ καὶ ἀγαθὸν καὶ μέγα καὶ ἄλλα πάντα).

He asks Cebes to grant that there are such things (b7: εἶναι ταῦτα).

This existential admission is no longer innocent: we have already had (in 74a-c) the generalized argument (generalized from one in the *Hippias Major*) that puts the forms on a different level from ordinary things.

Next (100c4-6):

It seems to me that, if there is anything else beautiful except the beautiful-itself, it is not because of any other one (thing) beautiful than because it partakes of that beautiful (φαίνεται γάρ μοι εἶ τι ἔστιν ἄλλο καλὸν κληὸν αὐτὸ τὸ καλόν, οὐδέ τι ἕν ἄλλο καλὸν εἶναι ἢ διότι μετέχει ἐκείνου τοῦ καλοῦ).

⁴⁶ Bluck, *PPhd* 17-18, 118.

⁴⁷ Hackforth, *PPhd* 147 et passim; Vlastos, "Reasons and Causes" (1969) 298 = Vlastos (1973 or 1981) 84-85 = Vlastos (1970 or 1978 vol. 1) 140-141.

⁴⁸ Hackforth 162; Keyt, "Fallacies" (1963) 168.

⁴⁹ Nehamas, "Predication" (1972/73) 475; Fujisawa "Ἐχειν" (1974) 45; Gallop, *PPhd* (1975) 195. For further references see Gallop; more recent additions are D. Frede, "Final Proof" (1978) 28; Matthen, "Forms" (1984) 281. There are a few denials: Verdenius, "Notes" (1958) 232-233; O'Brien, "Last Argument, I" (1967) 201-203; Guthrie *HGP* iv (1975) 353-356.

In fact, he can't understand other causes (100c9-10): if somebody says that anything is beautiful because of its color or shape, he gets confused (c10-d3): he says (100d3-8):

but simply, artlessly, and perhaps foolishly I hold on to this, that nothing else makes it beautiful other than the presence-to or communion or however and in whatever way it is added to (things) of that beautiful; for I don't make any further claims about that, but (I do claim) that (it is) by the beautiful that all beautiful (things are) beautiful.

ἀτεχνῶς καὶ ἴσως εὐήθως ἔχω παρ' ἑαυτῷ, ὅτι οὐκ ἄλλο τι ποιεῖ αὐτὸ καλὸν ἢ ἡ ἐκείνου τοῦ καλοῦ εἴτε παρουσία εἴτε κοινωνία εἴτε ὅρα δὴ καὶ ὅπως ὑποπροσγενομένη οὐ γὰρ εἶ τοῦτο ἀποσχυρίζομαι, ἀλλ' ὅτι τῷ καλῷ πάντα τὰ καλά (χίτριται) καλά.

This theory tells us that:

- (1) There are the F-itself, the G-itself, etc.
- (2) If anything is F besides the F itself, it is F because it partakes of the F itself.
- (3) It isn't by anything other than the F itself that anything is F.

But also, there is something about which the theory is explicitly silent: the relationship between the F itself and the things that are F because of it. Socrates mentions as possibilities 'presence-to', 'communion', and 'being added to';⁵⁰ and on the next page he uses various idioms of 'participation' (μετέχειν, μετάσχεις, μεταλαμβάνειν 100c5, 101c3, c4, c5, c6, 102b2). All of these are immanentist formulations, and only the second (used in this connection for the first time here) is new to us. But he is emphatic that he is committed to nothing whatever. He most often talks of participation; but this is now only a place-holder. The nature of the relation is up for grabs, as Aristotle tells us it was.⁵¹

At 102b1-2, *Phaedo* reminds us of what has been so far agreed on: that "each of the forms is something, and the other things by participating in them get named after these themselves" (102b1-2: εἶναι τι ἕκαστον τῶν εἰδῶν καὶ τούτων ἄλλα μεταλαμβάνοντα αὐτῶν τούτων τὴν ἐπωνυμίαν ἴσχειν). The next words are (102b3-6):

Then if, he said, you say these things like that, won't it be

⁵⁰ (1) was his first 'hypothesis', and (2) is the first thing he 'posits' as agreeing with it: see 100a3-5.

⁵¹ See preceding nn.: here Socrates is applying the negative part of his method (100a6-7).

⁵² δὲ ὑποπροσγενομένη; assuming that the text can be kept, or be emended in a way that preserves the word.

⁵³ Cf. Aristotle, *Metaphysics* A 6. 987b13-14.

that, whenever you say that Simias is taller than Socrates, but shorter than Phaedo, you are saying that then both are in Simias, both tallness and shortness? (Εἰ δὲ, ἢ δ' ὅς, ταῦτα οὕτως λέγεις, ἄρ' οὐχ, ὅταν Ἰνυρία Ἰωκράτους ᾗς γείρω εἶναι, ταύτωνος δὲ ἐλάττω, λέγεις τὸν εἶναι ἐν τῷ Ἰνυρία ἀρρότερα, καὶ γείρωος καὶ στικρότητα;)

Here we first run into a Form 'in' Simias. Suppose there were immanent forms or forma-copies here. Socrates' question would be this.

"Consider, Cebes, the sentence 'Simias is taller than Socrates but shorter than Phaedo'. Our theory tells us that for this we must have, to begin with, Socrates, Simias, and Phaedo; then tallness and shortness themselves; and, third, another tallness and another shortness that are in Simias, that mediate between the forms and Simias. Not so?"

And Cebes, a sharp customer, would have replied, "But, O Socrates, where did this third group come from? You only spoke of ourselves, and of forms; you said you knew nothing about the relationship between forms and their mundane participants. When did you learn of these go-betweens?"

That is not Socrates' question. The theory has given us only one tallness: tallness itself. And here he says it is 'in' Simias, where earlier he had said it was 'present to' him. There is no new theory in that.

He continues with 'in' in 102d5 and following. Tallness, he tells us, can't be both tall and short. This is familiar ground: it was part of the underpinning for the argument of 74a-c that showed us that the forms were radically distinct from mundane things. But he now adds that the situation hasn't changed when we turn from consideration of tallness just by itself (αὐτὸ τὸ γείρωος 102d6), which can't admit the short (τὸ στικρόν 102e1) to tallness as it turns up in us: here too it cannot admit the short (102d5-103a2). And again, we are not getting any new theory. There are tallness and Simias, and tallness when it is in Simias still won't be short.

Consider Socrates' reply to the anonymous interlocutor who thinks Socrates is now saying 'just the opposite' of something he had said earlier (103a5-10). Socrates draws a distinction (103b2-c2):

103b For then it was being said that the contrary thing⁵⁵ comes-to-be from the contrary thing, but now, that the contrary itself⁵ can't come-to-be (contrary to itself, neither that in us nor that in nature. For then, my friend, we were speaking about the things that have the contraries, derivatively

54 103 a6 αὐτὸ τὸ ἐναντίον: 'the contrary itself' in Socrates' next speech.

55 τὸ ἐναντίον πράγμα

56 αὐτὸ τὸ ἐναντίον

naming them after those, but now (we are speaking) about those things themselves which, when they are in (them), the things inasmuch as they get their derived names; and these themselves, we are saying, will never admit each other's coming-to-be.

b2 γὰρ ἐλέγετο ἐκ τοῦ ἐναντίου πράγματος τὸ ἐναντίον πράγμα γίνεσθαι, νῦν δέ, ὅτι αὐτὸ τὸ ἐναντίον ἐαυτῷ ἐναντίον οὐκ ἂν ποτε γένοιτο, οὔτε τὸ ἐν ἡμῖν οὔτε τὸ ἐν τῇ φύσει. τότε γὰρ, ὡ φίλε, περὶ τῶν ἐχόντων τὰ ἐναντία ἐλέγερον, ἐπαγοράζοντες αὐτὰ τῇ ἐκείνων ἐκωνυρία, νῦν δὲ περὶ ἐκείνων αὐτῶν ὧν ἐνότων ἔχει τὴν ἐκωνυρίαν τὰ ὀνομαζόμενα αὐτὰ δ' ἐκείνα οὐκ ἂν ποτέ φανερόν εἶναι γένεσιν ἀλλήλων ἀρεσθαι.

5 c

When he says that the F can't be non-F, "neither that in us nor that in nature" (b5), he is not speaking of two things, the F in us, the forma-copy, immanent form, or character, and the F in the sky, the Form, the F itself, for he goes on (b7-8), "now we are speaking about the things themselves which, when they are in" things here below account for predications about them.

I conclude that Socrates says nothing about any immanent forms.

But, for immanence, that is not the end of the story.

3.2.2 The extended theory.

In 103cd, he asks us to concede the existence of the hot and the cold, and to distinguish them from fire and snow, respectively. He then tells us that, despite the difference between fire and the hot, it is in one respect like the hot: at the approach of heat's opposite, it must withdraw or perish (103d5-e1).

He thinks that there are many cases like this, in which

not only is the form itself entitled to the same name for all time, but also something else that is not that, but always, whenever it is, has the shape of that (e2-6: μὴ μόνον αὐτὸ τὸ εἶδος ἀκίονεσθαι τοῦ αὐτοῦ ὀνόματος εἰς τὸν αἰετὸν χρόνον, ἀλλὰ καὶ ἄλλο τι ὃ ἔστι γὰρ οὐκ ἐκεῖνο, ἔχει δὲ τὴν ἐκείνου γοργήν αἰετῶ, ὅτανπερ ἢ; cf. 104c7-9).

He gives three sets of examples. First, we have fire and snow, which always carry hot and cold with them. Second, there are the numbers 1, 3, 5, etc., which always carry the form of the odd, and the numbers 2, 4, 6, etc., which always carry the form of the even (103e5-104ab5, 105c1-3, d5-e6, e8-105e1, 105a5-b1; see also the somewhat curious cases in 105b1-3). And last there will be the soul, which always carries with it the form of life (105c9 and ff.).

He determines or defines (ὀρίσασθαι 104c11, ὀρίσασθαι e7, ὀρίση 105a2) these things as ones

which, whatever (thing) they occupy,⁵⁷ they force (that thing)

57 ἢ subject for ἀναγκάζει, οὔτε object of κατέχει: so O'Brien,

to have not only its own (i.e., the occupier's) ⁵⁸ idea, but also always (the idea) of some contrary (104d1-3: ἢ ὅτι ἂν κατὰσχῆ ἢ γόνον ἀναγκάζει γὰρ αὐτοῦ ἰδέαν αὐτὸ ἴσχειν, ἀλλὰ καὶ ἐναντίου (αὐτῆ) ἀεὶ τινος).

E.g.: what the idea of three occupies it forces to become odd (104d5-7); what fire occupies it forces to become hot; what the soul occupies it forces to be alive.

But that seems, says Socrates (105b5-8), that there's another safe answer besides the one that says something is F because it bears some unspecified relation to the form for F, namely (105b8-c7):

For if you ask me what it is that, when it comes-to-be in a body, that body is hot, I shall not state to you that I safe but unlearned reply, that it is heat, but one more clever, based on what's just been said, that it is fire; nor, if you ask what it is that, when it comes-to-be in a body, that body will be sick, should I say that it is sickness, but fever; nor, if you ask what it is that, when it comes-to-be in a number, the number is odd, should I say oddness, but unit, and other things similarly.

εἰ γὰρ ἔρωτό γε ὃ ἂν τί ἐν τῷ σώματι ἐγγένηται θερρὸν ἔσται, οὐ τὴν ἀσφαλῆ σοὶ ἐρῶ ἀποκρισὶν ἐκέλευν, τὴν ἀραθῆ, ὅτι ὃ ἂν θερρότης, ἀλλὰ κομψότεραν ἐκ τῶν γού, ὅτι ὃ ἂν κούρ, οὐδέ ἂν ἐρη ὃ ἂν σώματι τί ἐγγένηται κοσῆσει, οὐκ ἐρῶ ὅτι

ὃ ἂν νόσος, ἀλλ' ὃ ἂν πυρετός· οὐδ' ὃ ἂν ἀριθμὸς τί 5 ἐγγένηται περιττός ἔσται, οὐκ ἐρῶ ὃ ἂν περιττότης, ἀλλ' ὃ ἂν μονάς, καὶ ἄλλα οὕτως.

The mechanism is this: there are certain intermediate entities, that always have one of a pair of opposite properties. These intermediates, when they come to be present in something, carry their properties with them, and their presence explains why the host entity in which they are present has those properties.

This is the theory suggested by the *Lysis*, having come out of its closet as unabashed immanentist metaphysics.

It is not that forms are immanent in things: the intermediates are, and the intermediates need not be forms.

The earlier safe explanation for x's being F was that x bears an unknown relation, 'participation', to the form for F. Now we are to say instead, sometimes, that x has in it y, and y partakes of the form F. The entities imported by the intermediates are, and are referred to as, forms (103e5 [quoted above], 104b9, d9-10).

In some cases, so are the intermediates: three, five, and so on are called forms (104d5-6). But no such thing is said about snow and fire. ⁶⁰ And the soul is treated, as a non-form throughout the *Phaedo* (see esp. 79de). ⁶¹ The present argument is simple: the soul is an intermediate which imports the form life and so cannot admit the opposite, death; so it is deathless; so it is imperishable. Nothing here demands that the soul be a form. ⁶²

⁶⁰ Here I follow Burnet *PPhd* 119 ad d1.

Vlastos says "I take it for certain that Plato assumes that they are" ("Postscript" [1956] 93 n. 14 = Allen [1965] 290 n. 2). He offers no argument for this, but merely refers to 102b1-2, which is not relevant.

Keyt, "Fallacies" (1963) 168 n. 2 offers three considerations: (1) the tallness in us either withdraws or perishes, and so do fire and snow; (2) 103e5-6 speaks of the intermediate importing its own form, so there must be a form for fire; (3) Socrates' examples include fire, snow, disease, two, and three, so, since the last are ideas, the others ought to be. (So also O'Brien ["Final Argument I", 220-221] thinks that by 104e7-105b3 fire is "thought of to some extent as a form", because it is there listed with three and two (or rather, with ἡ τριὰς and ἡ δυάς, which O'Brien thinks are to be distinguished from τὰ τρία and τὰ δύο: see *ibid.* 212, 218-219).)

(1) and (3) are of the same type; anyone who, like myself, finds it plausible to think that some of the intermediates might be forms and others not will be unmoored. As for (2), plainly to speak of an intermediate as importing its own form is not to imply that it is that form (contrast Archer-Hind, quoted in n. 58 above).

⁶¹ Again, see Burnet, *PPhd* 123 ad d3.

⁶² Hackforth (*PPhd* 163, 165) thought the soul had to be a form in this argument, but an 'immanent form'; he is half-followed in this by Keyt, who says "Plato treats the soul as if it were an

"Last Argument" 214 (in the translation; on p. 215 he curiously says "We translate ἢ as subject of κατὰσχῆ and ὅτι as object"), et al. Differently Gallop, *PPhd* 235f. n. 70: ἢ object of κατὰσχῆ, ὅτι subject, giving "which whatever occupies them forces (them) to have. . .". Perhaps what Socrates says in 104d5-7 by way of clarifying his remark slightly favors this, but see O'Brien 216. I cannot agree with Gallop that "such hinges on the grammar and text at 104d1-3": the theory is perfectly clear from the examples, whatever we do with this sentence.

⁵⁸ Taking αὐτό to refer to ἢ. So Burnet, *PPhd* 119 ad d2: "There is nothing abnormal in the shift from plural (ἢ) to singular in a case like this. After an indefinite plural some such subject as 'any one of them' is often to be supplied. . ."; he cites 70e5 (ἕσσις. . . αὐτό), *Lg* ii 667b5-6 (ἀσπίς ἕσσις. . . αὐτοῦ) as parallel. So also O'Brien *loc. cit.* Archer-Hind (*PPhd* 112 ad 11) objects: "To say nothing of the grammar, this makes sheer nonsense, representing the idea as the idea of itself." But Socrates has not said that the occupier has to be an idea, and, anyway, I fail to see the nonsense. He takes it to refer to ὅτι, as do, to judge from their translations, Bluck (*PPhd* 123) and Hackforth (*PPhd* 151). Against this, see O'Brien.

⁵⁹ αὐτῆ *sect.* Stallbaum (p. 201), Ross (*PTI* 132), Hackforth (*PPhd* 194 ad 104d3), Gallop (*PPhd* 234 n. 71).

Consider the examples once more.

a. The presence of fire in something explains why it is hot. On the face of it, the host entity and the intermediate are both physical.

b. The presence of three or five in some number explains why it is odd. Neither host nor intermediate is physical; the intermediate is a form.

c. The presence of soul in a body explains why that body is alive. Here the host entity is physical, the intermediate not, but still, not a form.

In the first case, we are close to Eudoxianism. We are not all the way there: what the intermediates import are still forms that are radically distinct from the intermediate entities and the host entities.

3.2.3 Stocktaking.

Suppose you were a working member of the Academy, and what you were working on was the question what to do with the theory of forms in the face of objections that focus on the relation between forms and ordinary things. You would reconsider the ways in which that relationship had been explained. And in the course of that reconsideration, you would run into some passages which sound in one way or another Eudoxian, or at least immanentist. And you might well ask: can the troublesome relationship be explained by taking this 'immanentist' way of speaking seriously?

My suggestion is that both Eudoxus and Aristotle did just that, that Eudoxus came up with one version and Aristotle with another, that Aristotle did not think Eudoxus' was right, and that that is what he is saying in 1a24-25.

4. Eudoxus and Aristotle

There are two texts that tell us about Eudoxus' theory of forms.

4.1 Aristotle, *Metaphysics* A 9. 991a12-20

Aristotle has just complained that the forms, since they don't cause change, (*τὰ εἶδη*) can have no effect on the behavior of perceptible things (A 9. 991a8-11 = M 5. 1079b12-15). He continues as follows (991a12-20):⁶³

But then, they make no contribution in connection with the

immanent form" ("Fallacies" 169). Schiller, "Phd 104-105" (1967), correctly rejects the idea that anything in the final argument requires thinking of the soul as a form, or even thinking of it as if it were a form, but retains the apparatus of 'immanent forms'.

⁶³ On the difference between this and M 5. 1079b15-24, see below p. 25.

knowledge of other things, either (for they are not the substance of these; for then they would be in them⁶⁴), nor toward their being, since they are not present in their⁶⁴ participants; for if then they might perhaps be considered causes in the way that white is, being mixed into the white (thing), but this account, which first Anaxagoras and later Eudoxus and certain others⁶⁵ used to state, is very easily overthrown (for it is easy to collect many impossibilities against such a view); nor again are the other (things)⁶⁵ composed of forms in any of the customary ways of speaking. ἀλλὰ μὴν οὔτε πρὸς τὴν ἐπιστήμην οὐδὲν βοηθεῖ τὴν τῶν ἁλ-
λων (οὐδὲ γὰρ οὐδὲ ἐκείνα τούτων ἐν ταῖσι γὰρ ἂν ἦν), οὔτε
εἰς τὸ εἶναι, μὴ ἐνουάρχοντα γὰρ τοῖς μετέχουσιν· οὗτω γὰρ
α15 γὰρ ἂν ἴσως αἴτια ἀπέειπεν εἶναι ὡς τὸ λευκὸν μεμιχρῆναν
τῷ λευκῷ, ἀλλ' οὗτος μὲν ὁ λόγος λίαν εὐκίνητος, ὃν Ἀνα-
ξαγόρας μὲν πρῶτος· Εὐδόκος δ' ὕστερον καὶ ἄλλοι τινὲς
ἔλεγον (ῥᾶντοι γὰρ συναγαγεῖν πολλὰ καὶ ἀδύνατα πρὸς
τὴν τοιαύτην δόξαν)· ἀλλὰ μὴν οὐδ' ἐκ τῶν εἰδῶν ἐστὶ τῶν
α20 κατ' οὐθὲνα τρόπον τῶν εἰωθῶτων λέγεσθαι.

The forms fail on three counts: they do not bring about the motion (a11), the knowledge (a12-13),⁶⁶ or the being (a13-14) of mundane objects. These are different sides of the same prism. For Aristotle, to know something is to know its substance or essence, and its substance or essence is its being, and knowing this involves knowing what causes its being. And when it comes to perceptible things, their being depends on their being subject to motion (see *Met.* Z 11. 1036b28-30). The claim that the forms don't cause the motion of the things that aren't forms is, then, tantamount to the claim that they don't cause them to be, and that, in turn, means that there's no knowing them. So Aristotle would think that a way around any of these difficulties was a way around all of them.

He suggests, indirectly, a way around the problem about knowledge (a13): if the form for, say, white were the substance⁶⁷ of the various things here below that are white, knowledge of the form would be, or give you, knowledge of the white things. But then, he says, the form for white would be in the white things (for the inference, see 991b1-3: the substance of something can't

⁶⁴ a13 ἐν ταῖσι γὰρ ἂν ἦν, a14 ἐνουάρχοντα: cf. ἐν. . . ὑπάρχον *Cat.* 1a24-25; see also the texts above with the fn. number 21.

⁶⁵ We know nothing about who these might be. Leszl (*Il 'De ideis'* 336), strangely, says that they are probably not Academics, or Aristotle would have said so.

⁶⁶ See here Plato, *Parmenides* 133a-134a. Ross says: "This argument is met by Plato in *Parm.* 134D" (*AM* i 198 ad 12, 13), but even if it is the same argument (which is not clear to me), it is not met there.

⁶⁷ I am assuming that Aristotle here uses 'substance' in a way that does not confine it to the first category.

be separate (ἐπι(ς) from it).⁶⁸ And, at least in high Platonism, the forms are not like that.

So his suggested way around the problem is: situate the forms in their participants.

And, just as we expected, this is at the same time a way around the problem about being: the fact that the forms are not in their participants stands in the way of their contributing anything to the being of those participants (a13-14; cf. 992a26-29).

Aristotle is a committed immanentist. But now he mentions an immanentist position he rejects: you might think, he says, that once we have the form for white situated in the white thing, it makes the white thing white by being mixed into it, like a pigment.⁶⁹ And he ascribes this view to Anaxagoras and Eudoxus.

So Eudoxus is presented as having a global solution to the problems Aristotle has been raising for forms, which is very like Aristotle's own, but which is for some reason inadequate.

It has been argued that Eudoxus had nothing to do with theories of forms. It is true that Aristotle mentions Anaxagoras as stating the same view: Anaxagoras was not trying to respond to difficulties for the theory of forms, so the view is not inherently a response to such difficulties. But this is of no significance whatever. Anaxagoras' theory of ingredients has, we saw, a structural similarity to views of Plato's, and an onlooker at the Academy would be bound to wonder whether a revival and revision of Anaxagoreanism would help to clarify the problematic relation which even Plato refers to as 'participation'. And that is precisely the way it is presented in Aristotle. So even in

⁶⁸ See here Z 6. 1031b6-7, b20-22 (so Cherniss, *ACPAI* 377). But this goes from the obscure to the yet more obscure.

⁶⁹ At least, so I understand him. There was some justice in Becker's finding a15-16, ὡς τὸ λευκὸν περιττόμενον τῷ λευκῷ, difficult to understand ("Eudoxos-Studien V" [1936] 389-391), even if there is no justifying his emending it to "ὡς τὸ λευκὸν περιττόμενον τῷ λευκῷ (scil. αὐτὸν ἐαίη)" (391); the emended text would mean: "as the white is a cause for the mixed white", where the first white is 'pure' white. Becker is attacked by Cherniss, with his usual vigor, in *ACPAI* 532-534; the only part of this attack I feel comfortable with is that concerned with the text, pp. 532f.

⁷⁰ Leszl, II 'De Ideis' ch. XXI, pp. 331-349. I am not impressed by Leszl's attempt to show that a hedonist could not have a theory of forms (337-339) or by his attempt to show that Eudoxus was too young to have had anything to do with the Academy (339f.). And he conceives the theory of forms as monolithic: he speaks of the 'typical doctrines of this school', that is, the Academy (337), and means: high Platonism.

⁷¹ Cherniss asserts, without argument: "The identification of Eudoxus' notion and the theory of Anaxagoras is due to Aristotle himself" (*ACPAI* 534). But the structural similarity is

the absence of the passage in Alexander's commentary to which we shall shortly turn, it seems clear that Eudoxus was trying out this line.

But that commentary clinches the case: there were objections lodged against the view in Aristotle's *Ἐπιπέδων*, and these treat the theory as a theory of forms. (This does not mean that one should accept Alexander's commentary as a report of the content of *On Ideas*; see below.)

There is another misguided consideration that operates here. The Theory of Forms, that is, the high Platonic theory, sits so badly with the idea that a form might be a physical thing that Eudoxus' enterprise looks like throwing out the baby with the bath water. And, indeed, it would be, if the object were saving the High Platonic Theory of Forms. But who wanted to do that? Not Speusippus, who rejected the theory and yet became the next head of the Academy. Not Aristotle, who has a theory of forms that stands in opposition to the high Platonic theory. Not even (at least, so I think) the later Plato, who had a theory that abandoned certain key tenets of the high Platonic theory; so did Xenocrates, perhaps the bastion of orthodoxy.

The important thing, for all but Speusippus, was the concept of a form: whatever it is that makes a thing F and is definable. The question was: what do forms have to be like? There is a partial answer to that question in the *Phaedo* and *Republic*; clearly no one at the time thought that those mighty dialogues contained the final word.

We have it from both Plato and Aristotle that it was open to argument what the relationship between forms and their participants was (see above p. 16), and different determinations of that relationship will give drastically different theories. Eudoxus presents us with a determination of that relationship as physical immanence. That will make a large difference to the kind of thing a form is.

So I shall speak of Eudoxus' theory of forms. There is, however, reason for dissatisfaction with the theory as it is usually presented: the contradictions between the theory of physical immanence and the High Platonic Theory are made to survive within Eudoxus' theory, in order to account for certain objections Aristotle may have raised against it. But I think the usual presentation is wrong, and that our texts can be accounted for differently.

The tradition tells us very little about this theory: even

there, and it would be surprising if Aristotle was the first to have seen it. Here, too, I am on Becker's side (see above, n. 69).

⁷² Contrast Cherniss, *REA* (1945) 85 (Plato "probably felt. . . that he had. . . expressed his meaning as clearly as words, spoken or written, can ever mirror the eternal truth") with Plato, *Phdr* 277d ("if Lysias or anyone else ever wrote or writes. . . thinking that there is any great clarity of firmness in it; that is a disgrace for the writer"). I am not subscribing to the view that there were secret doctrines in the Academy.

less than it does about the metaphysics of Speusippus and Xenocrates. It is customary to suppose that this, and our failure to hear of works of Eudoxus, in which the theory was exposed are indications that Aristotle's report is not based on a written text so much as what he had heard in the halls of the Academy. That sounds likely.

It is also sometimes said,⁷⁴ as if it were the same point, that the position was not a fully developed theory but something Eudoxus tried on for size by way of handling problems about the participation-relation. It is not the same point. That an ancient Greek did not write a book about something is hardly an indication that he had no detailed theorizing to offer. The fact that Aristotle apparently never published a book on the material discussed in *Met.* ZH8 shows that. But still, even if it is not the same point, it seems to me likely to be right. I should like to add the following.

There is one difference between the version of Aristotle's report in A and its doublet in M: the latter speaks, in 1079b20-22, of the account that "first Anaxagoras and later Eudoxus, in the course of discussing difficulties (*ἀσποεῖν*), and certain others used to state". It will not do to lean too hard on a word, and *ἀσποεῖν* is a vague one. The translation I have given is as strong as I can make it. Weaker ones would make Eudoxus even less committed to the view: he stated it 'to make trouble', e.g.

73 E.g., von Fritz, "Ideenlehre" 19; Lasserre *Fragments* 149.

74 Philippson, "Akademische Verhandlungen" (1925) 2; von Fritz, *loc. cit.*; Karpp, *Untersuchungen* 5; von Fritz, rev. of Karpp (1935) 413 *ad fin.* On the other hand, in Becker, "Eudoxos-Studien V" (1936) it is a full-scale theory of color. So it is in Gaiser, "Platons Farbenlehre" (1965) 198. According to Lasserre *Fragments* 270, Gaiser's arguments only make this a possibility.

75 An idea of Karpp's (*Untersuchungen* 34 n.12), but often forgotten or muddled (see next n.).

76 Cherniss notes the difference (ACPA1 525), but, as far as I can tell, makes nothing of it. Lasserre, *Die Fragmente des Eudoxos* (1966) prints 991a14-19 as D 1, p. 12; he does not note the discrepancy (indeed, he says "= 1079b18-23"). Guthrie, *HGP* v 453, comments on *ἀσποεῖν* but acts as if it is to be found in A (see also p. 452).

77 Syrianus' report on M speaks of "the problems raised by Eudoxus about such things" (in *Met.* 117.3-4: τὰ Εὐδόξου περὶ τῶν τοιοῦτων ἠσποεῖν), but this is of no independent evidential value.

78 Ross (*AM* i 198 *ad* 9) gives 'to raise a difficulty', 'to work through the difficulties', and 'to establish by discussion of the difficulties' as possible paraphrases for different occur-

But the fact that the view was not propounded in a treatise in fourteen books, and was perhaps only one that Eudoxus raised in the course of dialectical discussion, is not a reason for not taking it seriously. Dialectical discussion was philosophical discussion for those people. And Aristotle took the view seriously enough to say that it was wrong.

What did he think was wrong with it? He does not say here. For this, we must turn to Alexander.

4.2 Alexander in *Met.* 97.27-98.24

Alexander, in commenting on this passage, expands a little. He explains what he takes to be Anaxagoras' view (in *Met.* 97.14-17), and continues (97.17-19):

Also Eudoxus, among Plato's associates, thought that each <thing> existed by a mixture of the ideas in the <things> that have their being relative to them, and certain others, as he <that is, Aristotle> was saying (καὶ Εὐδόξος τῶν ἑταίρων πίσει τὰς ἰδέων ἐν τοῖς πρὸς αὐτὰς τὸ εἶναι ἔχουσαν ἡμίον ἕκαστον εἶναι, καὶ ἄλλοι δὲ τινες, ὡς ἔλεγε).

This comment need not be based on anything more than the text being commented on, but when, a little later, he lists objections to which Aristotle might be referring, he makes it plain that he has something more to go on, for at the end of his list he says (98.21f.):

... and <there are> the rest of the absurdities that he showed this view to contain when he examined it in the second <book> of *On Ideas* (καὶ ὅσα ἄλλα ἐν τῷ δευτέρῳ περὶ ἰδέων τῆς δόξαν ταύτην ἐκείνων ἐδείξεν ἄτοκα ἔχουσαν).

Here is an annotated translation of the objections Alexander gives (97.27-98.24):

And <to show> that other things <do> not, as Eudoxus and certain others thought, <exist> by mixture of the ideas <in them>, he says it is easy to collect many impossible consequences of this view. They would be (such as these:

If the ideas are mixed with the other things,
98 (1) first, they would be bodies, for mixture is of bodies.

rences of *ἀσποεῖν*. The question is whether Eudoxus would fall under the first or the third of these senses; Ross himself classifies the occurrence in 1079b21 under the first head (*loc. cit.*; he has no comment on it *ad loc.*). But this is hard to see: the idea that a form is a physical ingredient is not by itself an objection against anything.

79 Cf. *Top.* Z 12. 149b1-2. 149a38-b3:

Again, <see if> that of which <your opponent> has rendered an account is among the things that are, while what

(2) Again, they would have contrariety toward each other; for mixture is in accordance with contrariety.⁸⁰

(3) Again, they will be mixed either as a whole in each of the things in which they are mixed or as a part.

(a) But if as a whole, what is one in number will be in many <things>; for the idea is one in number;

(b1) but if as a part, that which partakes of a part of the man-itself, not that which partakes of the whole of the man-itself, will be a man.⁸⁴

(b2) Again, they will be divisible and partible, although they are impassible.⁸⁵

(b3) And next they will be homoeomers, if all the things

<falls> under the account is among the things that are not, e.g. if the white is defined as color mixed with fire; for it is impossible for the bodiless to be mixed with a body, so that color mixed with fire will not be; but white is.

(The Greek for b1-2: ἀδύνατον γὰρ τὸ ἀσώματον σώματι μεμειχθῆναι.)

With (1)-(2) cf. Met. A 8.989b1-2, De gen. et corr. A 10. 327b20-22, and Met. N 5. 1092a24-26 (see below, p. 33).

Aristotle himself is prepared to relax the strictures: in De caelo A 9. 277b33-34 he says ἕτερόν ἐστιν αὐτῆ καὶ αὐτῆ ἢ πορῆ καὶ μεμιγμένῃ μετὰ τῆς ὕλης, and at 278a14-15 καὶ τὸ γέν ὡς εἶδος καὶ πορῆ, τὸ δ' ὡς τῆ ὕλη μεμιγμένον. Cherniss (ACP1 535) cites these passages; Düring cites the first one (Aristoteles 253 n. 54) without, apparently, understanding its significance.

⁸⁰ Cf. De gen. et corr. A 10. 328a31-32; this in turn is based on A 7. 323b28-29, 29-32a9, 32a11-12. See also Alexander, De mixt. 229.9-12, which contains phrases from A 7.

⁸¹ 98.2-9 is a dilemma with several absurdities tacked on to the second horn. See Cherniss, ACP1 530; Berti, La filosofia (1962) 236; Leszl, II 'De ideis' 50. But Cherniss retains the enumeration of the arguments assumed by von Fritz ("Ideenlehre" [1926/27] 8 et passim) and Karpp (Untersuchungen [1933] 30, etc.), in which (3b1) and (3b2) are the 4th and 5th objections. I have preferred to follow Berti and Leszl. There is one substantive point that turns on this question: see below, text at n. 101.

⁸² Cf. Met. B 6. 1003a7-12, Z 14. 1039a33-b2; Pl. Pra. 131ab.

⁸³ Reading γέρους, von Fritz' emendation for γέρος ("Ideenlehre" 15), with Ross, Harlfinger (in Leszl, II 'De ideis') et al.

⁸⁴ Cf. Pl. Pra. 131c, 131d; Met. A 9. 992a6-7.

⁸⁵ This is another consequence of (3b) rather than a new argument: as von Fritz remarks ("Ideenlehre" 15), one expects εἶναι οὐκ rather than just εἶναι.

⁸⁶ Cf. (for ἀσώματις) Top. Z 10. 148a20.

that have any part of one are like each other;⁸⁷ but how can the forms be homoeomers? For the part of a man can't be a man, as the part of gold is gold.⁸⁸

¹⁰ ⁹⁰ (4) Again, as he himself says also⁸⁹ a little farther on, in each thing there will be not one idea mixed but many; for if there is one idea of animal and another of man, and man is both animal and man, he would partake of both ideas. And man-itself, an idea, inasmuch as it is also animal, would itself partake of the animal; but then the ideas would no longer be simple, but composed of many <things>, and some of them would be first and others second. But if it is not animal, how could it fail to be absurd that a man is not an animal?⁹¹

(5) And again, if they are mixed into the things that are relative to them (πρός αὐτά), how would they still be paradigms, as they say? For paradigms are not thus causes of the likeness of their images to them, by being mixed into them.⁹²

²⁰ (6) And again, they would be co-destroyed with the things in which they are, when these are destroyed. But they would not exist as separable, in their own rights (καθ' αὐτάς), but <would exist> in the things that participate in them.⁹³

(7) And in addition to these, they would no longer be immovable;⁹⁴

⁸⁷ Cf. De gen. et corr. A 10. 328a10-12.

⁸⁸ Düring (Aristoteles 253 n. 55) counts this as two objections.

⁸⁹ This is ambiguous, as is the Greek, between "as he also says later" and "as he says later also" (see Cherniss ACP1 527 and next n.).

⁹⁰ 98.9-10 ὡς καὶ αὐτὸς ὀλίγον πρότερον λέγει. Met. A 9. 991a27-b1 = M 5. 1079b31-35. These words caused Karpp (Untersuchungen [1933] 29-30) to think that, up to this point, Alexander was providing objections of his own.

⁹¹ Düring (Aristoteles 253 n. 55) counts (4) as three objections, and refers for all to Top. Z 6. 143b23, which is not relevant.

⁹² Karpp also (see n. 90 above) rejected this as a formulation of Alexander's (Untersuchungen 33-34).

⁹³ Karpp (Untersuchungen 30), Cherniss (ACP1 526), Düring (Aristoteles 253 n. 55) and Lasserre (Fragmente 13) count this as two objections. The lack of a connective makes it harder to read as one objection, but not, I think, impossible. I am here in agreement with Leszl, II 'De ideis' 50.

⁹⁴ Cf. Top. B 7. 113a24-32 (below); Z 10. 148a14-22; Met. B 2. 998a14-15. 113a24-32:

Or <see> if something has been said of something such

and there are as many other absurdities as he showed this view to involve in examining it in the second book of On Ideas. For this is why he said "for it is easy to collect many impossible things against this view": they are collected there.

We must first deal with the question: how much of this can we take as Alexander reporting objections of Aristotle from the lost Ἐπιπέδων?

Scholars have resorted to some strange devices to reassure themselves here. Von Fritz⁹⁷ undertook a comparison between Alexander's immediately preceding objections against Anaxagoras and those of Aristotle in Phys. A 4 in order to test Alexander's reliability as a reporter. Let us consider this.

Aristotle in that chapter gives eight objections against Anaxagoras (187b7-188a18). Alexander gives two objections. One of them is that Anaxagoras does away with coming-to-be (in Met. 97.25-26). This is not an objection of Aristotle's, but part of Aristotle's statement of Anaxagoras's position (Phys. 187a28-29, 34-35). The other of Alexander's objections (97.22-25) is that, since the components of a mixture must be separable, Anaxagoras makes white, an accident or effect of a substance, separable from it; but that's (on Aristotelian grounds) impossible. There is nothing in Phys. A 4 that this points straight at. But Aristotle's sixth objection (188a5-13; discussed below, pp. 37-39) is to the effect that Anaxagoras doesn't understand why the components of

that when it is so necessarily (contrary things belong; e.g. if he has said that the ideas are in us (τὰς ἰδέας ἐν ἡμῖν . . . εἶναι) for it will follow that they move and rest, and again are perceptible and intelligible. For the ideas are thought to rest and to be intelligible by those who posit ideas; but being in us it is impossible for them to be unmoved; for when we move, necessarily (also all the things that are in us move along. And it is clear that they are perceptible, if they are in us; for by means of the perception that pertains to sight we know the form in each thing.

⁹⁵ Cherniss (ACPA1 526) quotes 98.21-24 and states "This of itself would indicate that he drew his whole list from that work of Aristotle's"; surely that is to place too much weight on the words. But it is apparently this that inspires Lasarre's outrageous exaggeration to the effect that Karpp's view that the first seven objections (the first five in my enumeration) are Alexander's own and not A's "widerspricht offen der Überlieferung" (Fragmente 150). Even the more moderate view (Karpp's: Untersuchungen 30) that the words indicate that the immediately preceding objection(s) come from the Ἐπιπέδων is wrong. Speaking of "these and all the other apples in the basket" does not presuppose either that these apples are in the basket, or that they are not in the basket. And we shall see that this is true of Alexander's use of ἴδαι as well: see below, p. 30.

⁹⁶ "Ideenlehre" 2-6.

his mixture aren't separable: it isn't because of the argument we considered above (based on the claim that you can, eventually, get anything out of anything), but because the effects of a substance are not separable. This and Alexander's point are related, but different.

Plainly, if Aristotle's Physics had not survived, we would not have had the faintest idea what happened in the fourth chapter of its first book.

Yet von Fritz managed to persuade himself, and, apparently, Cherniss, that Alexander had got Phys. A 4 essentially right. He simply failed to notice that what Alexander was paraphrasing was, not Physics A 4, but a passage three columns earlier in the Metaphysics (A 8. 989a34-b4), in which Aristotle does state the second of Alexander's objections (as I have listed them), although Alexander manages to run two objections into one (see 989b1-2, b2-3, with in Met. 97.22-25).

So, pace von Fritz and Cherniss, Alexander is making no attempt to paraphrase from the Physics. And yet he does close his objections to Anaxagoras with the words "and there are as many other things as he (that is, Aristotle) has stated in the first book of the Physics against this view" (97.26-27).

Our passage closes with the words "and there are as many other absurdities as he showed this view to involve in examining it in the second book of On Ideas". The received opinion (see n. 95 above) is that these words indicate that Alexander's list of objections against Eudoxus are drawn from On Ideas. The case of the reference to the Physics shows that this is completely false. There is no assurance that any of the objections come from On Ideas.

And the words with which Alexander opens the objection I have listed as (4) are ominous: "Again, as he himself says a little farther on" (98.9-10; (ἐνταῦθα, ὡς καὶ αὐτὸς ὀλίγον ὑποεῖπεν ἄλλοτε): the reference is forward in the Metaphysics to a passage (see n. 90 above) in which Aristotle gives something like objection (4) as one objection against Platonizing positions in general. If we had only that passage, there would not be the slightest reason to think that the objection it registers could be applied to the position Aristotle ascribes to Eudoxus.

There is a general point to be made here: adducing Aristotelian parallels such as those given in the notes above for objections on Alexander's list will not silence Karpping critics (see n. 90 above). For the parallels do nothing whatever to guarantee that Aristotle himself thought that these objections were applicable against Eudoxus's position, and a fortiori do nothing to guarantee that he applied those objections against that position in the lost work On Ideas.

And there is a specific point to be made as well. The ominous words just adverted to are, granted, not a proof that 'he himself' has not been speaking all along. But they are echoed two

⁹⁷ ACPA1 530.

⁹⁸ To Cherniss, ACPA1 526-527.

pages later.⁹⁹ Alexander is listing the ways in which, as he sees it, the Platonists tried to make participation work. He says (100.27-34):

For, investigating in what way the partaking of the forms (might work), either they say it is such that in each of the particulars the idea is present, e.g. in each of the particular men (there is) the man-itself, or (they say that) in each (there is a) part of the idea, or (the form is a paradigm for its participants. Of which the first two ways of partaking are impossible, as we showed a little way back, and he himself said when he mentioned Eudoxus that "it is easy to collect many impossible things against such a view".

(100.30-34: ὅτι οἱ πρῶτοι δύο τρόποι τῆς μετοχῆς ἀδύνατοι, ὡς ἠρεῖτε γε ἐδείξαμεν πρὸς ὀλίγου, καὶ αὐτὸς εἶπεν Εὐδόξου πηλοποιεῖσθαι ὅτι "ῥ' ἂν ὅσον συναρθεῖν πολλὰ καὶ ἀδύνατα πρὸς τὴν τοιαύτην δόξαν".)

The proof that "the first two ways of partaking are impossible" is the long dilemma I have numbered (3) (98.2-9). Alexander here refers to this argument when he says "as we showed", and goes on to a new objection to say "and he himself said", and cite the Metaphysics. The first "he himself said" was ominous. This one, with its contrasted "we showed", seems to me funereal. Argument (3) is a construction of Alexander's.

So Alexander did not, when he came to the reference to Eudoxus, dutifully go to the stacks, pull down the roll containing On Ideas II, scroll his way laboriously to the objections against Eudoxus, and transcribe them into his commentary, any more than he went to the Physics when he encountered the reference to Anaxagoras.

We cannot use Alexander unconfirmed, and it is not enough to confirm him to find an Aristotelian parallel. But if we can find the right kind of parallel, we may have something we can use. For Alexander is working, as always, with Aristotelian materials, and has read, as we have not, On Ideas, and does say that there are objections against Eudoxianism in that work. What does that leave us with?

Almost precisely the list that Kerpp pronounced genuine,¹⁰⁰ I think, although not precisely for his reasons. He believed that the words "as he himself says a little farther on" meant that all the objections up to and including my (4) came from Alexander. This is too sweeping: those words only cast doubt on (4) itself. The words that recall them a page later carry (3) into the same limbo.¹⁰¹

The others require individual consideration. I take them up in order of increasing interest.

⁹⁹ I think this may have been first pointed out to me, years ago, by G.E.L. Owen.

¹⁰⁰ The only difference is that the last two objections he counts as three.

¹⁰¹ This is the substantive point mentioned in n. 81 above.

Objection (2) is an obscure one. As it is standardly read,¹⁰² it tells us that, since mixture is between contraries, if the ideas are mixed with mundane objects they must be contrary to them. The premises here, that mixture is between contraries, is one of the more arcane points¹⁰³ in Aristotle's doctrine of mixture proper (μίξις), or 'chemical combination', as it is sometimes called, as opposed to blending (σπῆσις).¹⁰⁴ It is apparently mentioned just once in all of Aristotle.¹⁰⁵ But it figures much more largely, as Kerpp notes, in Alexander's theory of mixture.¹⁰⁶ So there is no particularly good reason to suppose that Aristotle used this argument against Eudoxus, in On Ideas or anywhere else.

There is reason to be suspicious of (5). The criticism of the ideas as paradigms, in Aristotle's Metaphysics, occurs immediately after the criticism of Eudoxus (991a20-22):

But to say that (the forms) are paradigms and that the other things partake of them is to speak emptily and to speak in poetic metaphors (τὸ δὲ λέγειν παραδείγματα αὐτὰ εἶναι καὶ μετέχειν αὐτῶν ἴδιον κενολογεῖν ἐστὶ καὶ μεταφορὰς λέγειν ποιητικὰς).

The contrast introduced by the 'but' (δέ) at the beginning of this is with the position announced as that of Anaxagoras and Eudoxus (the γέν in 991a14).¹⁰⁷ That is, the way the grammar makes it go, Aristotle is saying that, on the one hand, there is the position that regards the form as a physical ingredient in its participants, and on the other, there is the claim that it is a paradigm; there are lots of objections to the first, and the second is senseless. He seems to think of the ingredient picture

¹⁰² Von Fritz, "Ideenlehre" 9-10, followed by Cherniss ACPAI 525; Lasserre Fragmente 150; Lezi, Il 'De Ideis' 341-342; Ianardi Parente, Studi 135. But von Fritz looks to Phys. A 5-6 to explain how mixture requires contrariety, which is wrong, and does not seem to realize that the passage that has to be looked at is in De gen. et corr. A 10 (see n. 80 above).

¹⁰³ But it is there, contra Ianardi Parente, Studi 135 n. 191.

¹⁰⁴ See Joachim, "Aristotle's Conception of Chemical Combination" (1904) (for the contrariety condition, see 79-80); Partington, HC (1970) (who seems not to mention the contrariety condition); Bolzan, "Chemical Combination" (1976) (see 136); Bogaard, "Heaps or Wholes" (1979) (see 19).

¹⁰⁵ See n. 80. At any rate, this is the only passage I know of, and only it and the presumed fragment from the Νεπὶ ἰδεῶν are mentioned in Bz Ind. 469b41-42.

¹⁰⁶ See Νεπὶ κινήσεως καὶ ἀκίνησεως 229.9-11 and the subsequent discussion to the end of ch. XIII.

¹⁰⁷ γέν in a16 is picked up by ἀδᾶ a19, and there is another γέν/ἀ pair at the middle of it all, a17.

as an alternative to the paradigma picture. If Alexander is remembering something from On Ideas here, it is all too likely to be on a par with his 'remembering' that Aristotle criticized Anaxagoras for ruling out coming-to-be: Aristotle might merely have said that Eudoxus suggested that the relation of form to instance was not that of a paradigma to its image, but physical ingreience. Anyway, it would be strange if one of the objections he has to the physical ingredient picture is that it rules out the talk of paradigms.

(1) tells us that, on this view, the forms would be bodies, since mixture is only between bodies. There is material in Aristotle (see n. 79) that shows he thought the argument sound. And in an obscure passage in Met. N 5, he may be employing it against some Platonists. There the question is "in what way number is composed of its principles" (1092a23-24); the principles are the One and the Indefinite Dyad. Aristotle says (1092a24-26):

Is it by mixture? But not everything is mixable, and what comes-to-be is different, and then one will not be separable or of a different nature, but they want (it to be) (κότερον μίξτ; ἀλλ' οὐτε πᾶν μίξτόν. τό τε ζυγόμενον ἕτερον, οὐκ ἔσται τε χωριστόν τό ἐν οὐδ' ἕτερον φύσι; οἱ δέ βούλονται).

As this passage is standardly understood,¹⁰⁸ the first objection is to the effect that only bodies are capable of mixing with each other, so the One and the Indefinite Dyad can't mix.¹⁰⁹

Suppose this is right, and Aristotle was prepared to use the claim that mixture is only between bodies against Platonists. It does not follow¹¹⁰ that he used it against Eudoxus. First off, the positions attacked are quite different. The Platonists under scrutiny in N 5 are not saying that the number 5 (say) is one and also indefinitely dyadic due to the presence of the One and the Indefinite Dyad as ingredients in them. And what is more important, these Platonists would presumably have quailed at the idea that the One and the Indefinite Dyad were bodies. But if Eudoxus was trying out the idea that the forms were physical ingredients in things, the comment that physical ingredients are themselves physical is less an objection to the idea than a clarification of it.

This latter is a feature of many of Alexander's objections, and it demands attention. Many of the objections look like reductions ad absurdum. But for a reduction to absurdity to come off, the alleged absurdity must be either admittedly or arguably a real absurdity. Cherniss apparently supposed the former: that Eudoxus would have admitted that it was absurd that forms should be bodies, or divisible, or whatever. This is, at least in part,

¹⁰⁸ Ross, AM ii 490 ad 24, followed by Cherniss ACPAI 530.

¹⁰⁹ The second is to the effect that when a mixture has taken place, the result is new, and the ingredients are no longer there in actuality, but only in potentiality (Ross loc. cit.). This may be relevant later.

¹¹⁰ As Cherniss (loc. cit.) thinks.

because Cherniss thinks that these things just are absurdities. But the effect is to saddle Eudoxus with a position that is simply contradictory. And this Cherniss admits.¹¹¹

My own inclination is to think that, if Eudoxus is suggesting that the forms are physical ingredients of things, it cannot be to him obviously absurd to suppose that they are themselves physical. The spectre this raises is that we may be left with nothing: could not Eudoxus simply have accepted all of the supposed absurdities as part of his position?

This free-wheeling attitude ignores the other way a reductio can be made to work: if the alleged absurdity is something that is arguably an absurdity, and in particular something that we know Aristotle would have argued to be an absurdity, we may be able to keep going.

We are close to this situation with objection (1). Eudoxus' theory is the extended theory of the Phaedo, with the intermediates of that theory taking over the role of the forms: that is, on that theory fire imported the hot into the host body; on this one, the hot is just a physical constituent of the host body. But that makes for a difficulty. The theory is a theory of predication, albeit a restricted theory, only accounting, as it stands, for physical predications. The extended theory of the Phaedo used an intermediate entity, fire, that was itself hot; this was used to explain why a certain glowing piece of wood (say) was hot: there's fire in it. When it comes to the question why fire is hot, the Phaedo theory told us that that was due to the unexplained relation labeled 'participation' between fire and the form, The Hot. On the theory we are handing Eudoxus, the reason the stove is hot is that it has something in it that is itself hot, but this is not an intermediate: it is the form, The Hot. But then we are allowing that this ingredient, The Hot, is a body, a physical ingredient. But then there is a physical predication that the theory must leave unexplained: the one that predicates hot of this ingredient body. One might well feel that a theory that ascribes the fact that a body is hot to the presence in it of another hot body is either empty or headed for a regress.

There is here an echo of some of the difficulties that Academics raised against the High Platonic Theory. But we can hardly read all of this into (1), so I shall persist in scrapping (1).

That leaves us with (6) and (7). Is there any reason to think that Aristotle might have used them against Eudoxus?

In (7), we are told that Eudoxianism makes the ideas no longer immovable (ἀκίνητα). We might think: well, why not? If we're prepared to allow that the form might be physical, why shouldn't we allow it to be movable?

But: forms, if they are anything, are objects of definition. The account Aristotle gives us¹¹² of Plato's development of the theory of ideas or forms has him separating the forms from ordi-

¹¹¹ See ACPAI 532.

¹¹² In Met. A 6. 987a29-b14, M4. 1078b12-32 (a doublet of the first passage), M 9. 1086a24-b4.

many things on precisely this ground: ordinary things are constantly changing, but definitions have to nail down something stable. And the stability of forms is something Aristotle requires of his own theory of forms: when the wood gets hot

the motion is plainly in the wood, not in the form (that is, the hot), for the form... neither moves nor is moved (*Phys* E 1: 224b4-5: ἡ δὲ κίνησις ἀλλοῦ ὅτι ἐν τῷ ἔργῳ, οὐκ ἐν τῷ εἶδει: οὔτε γὰρ κινεῖ οὔτε κινεῖται τὸ εἶδος).

And when it gets white

it is not the white that comes-to-be but the wood comes-to-be white (*Met.* B 5. 1044b23-24: οὐ γὰρ τὸ λευκὸν γίγνεται: ἀλλὰ τὸ εὔλογον λευκόν);

in this example white is given as an example for "forms and shapes" (τὰ εἶδη καὶ αἱ μορφαὶ b22-23).

So here the parallel in *Topics* B 7 (see n. 94 above) can be taken seriously: Aristotle did think that a physical ingredient in something was subject to motion when the thing itself was. And this is a response to Eudoxianism, if not to Eudoxus himself.

It raises an obvious question about pots calling kettles black: doesn't it apply to Aristotle's own theory, according to which certain attributes are in their possessors? I shall not stop over this for long, since I have nothing to add to an answer Owen proposed: Aristotle can distinguish between something's moving in its own right and its moving per accidens: his attributes don't move in their own rights, "and if they are said to move per accidens this is in a sense still weaker than that in which any physical part of the moving body does so". Owen cites *Phys.* A 4. 211a17-23: there Aristotle says that whiteness and knowledge (ἡ λευκότης καὶ ἡ ἐπιστήμη a22), by contrast with the nail in the ship, are always moved accidentally: "this is how they change place, because what they are present in changes place" (a22-23: ταῦτα γὰρ οὕτω μεταβάλλουσι, ὅτι ἐν ᾧ ὑπάρχουσι μεταβάλλεται).

That brings us to (6). This reads (98.19-20):

Again, (the ideas) would be co-destroyed with the things in which they are, when these are destroyed. But they would not exist as separable, by virtue of themselves, but (would exist) in the things that participate in them. (ἔτι τε καὶ συνεφθάρησαν ἂν τοῖς ἐν οἷς εἰσι φθειρομένοις. ἀλλ' οὐδὲ χωρισταὶ ἂν εἶεν αὐτὰ καθ' αὐτάς, ἀλλ' ἐν τοῖς μετέχουσιν αὐτῶν.)

113 Cf. *Met.* K 7. 1067b9-11.

114 See Owen, "Dialectic" (1968) 110-111.

115 Then why doesn't Aristotle allow Eudoxus this distinction? Owen 111: because it's Aristotle's. I am not professing to be satisfied with this.

And it appears to tell us the following.

The premiss to be reduced to absurdity is Eudoxianism:

(E) The form F is mixed into things that are F.

We need two ancillary premisses:

(P1) What is mixed into things is co-destroyed with them.

(P2) What is co-destroyed with certain things is not separable from them.

And then, from (P1) and (E), it follows that

(C1) The form F is destroyed when the F's are.

And from this and (P2)

(C2) The form F is not separable from F's.

If this analysis were correct, we should have to reject objection (5) as well as most of the others.

(P2) tells us that, if you have x and y, and there is no way of getting rid of y that does not carry x along with it, then x is not separable from y. The author of objection (6), I take it, thought that 'true by definition' (of 'separable'). This could be Aristotelian, although the term 'co-destroyed' is unusual (I shall return to this).

But (P1) is not, in general or in Aristotle, true: a thing can be destroyed by being broken down into its components, and then they survive it. We find Aristotle saying (*Met.* B 4. 1000b25-26):

All things are destroyed into the things of which they are composed (πάντα γὰρ φθίβονται εἰς ταῦτ' ἐξ ὧν εἰσιν).

And the objection to Eudoxus here, understood as above, would simply contradict Aristotle's objection to Anaxagoras elsewhere. As Alexander records the latter objection, it is to the effect that the ingredients of a mixture are 'separate and capable of being in their own rights' (τῶν γὰρ κεχωρισμένων καὶ καθ' αὐτὸ ὑφίστασθαι δυνατόν ἢ πλεόν 97.23-24). This is a formulation that improves on its original (*Met.* A 8. 989a34-b4). But it also brings the contradiction out quite clearly.

Second, why should Eudoxus have thought (C2) an absurdity? If Eudoxus was prepared to give up as much of the High Platonic Theory as he has already, why shouldn't he give up the famous separateness of the forms as well, and go over to the Aristotelian camp, at least on this score?

And then we might find in the unusual term 'co-destroyed' fuel for our doubts. The word is absent from Bonitz' *Index*. It is used by the Stoics in connection with their conception of mixture, and it plays a central role in Alexander's attack on that conception. For example, he says (*De mixt.* 221.20-25):

But if, according to what is said by them (the Stoics), it is necessary that the things blended be inseparable from each other (for (they say) that the total blend cannot come-to-be apart from co-destruction, and they say that things co-destroyed are inseparable), but we see them separated in some cases, it is clear that the blending cannot come-to-be in the way it is said to by them (εἰ δὲ κατὰ τὴν τὰ λεγόμενα ὑπ' αὐτῶν ἀχώριστα ἀλλήλων ἀναμεικτὸν εἶναι τὰ κεκραμένα (οὐ γὰρ δὴ ὅλον τε τῆς δι' ὅλων κρᾶσις γενέσθαι χωρὶς συσφάρασεως, ἀχώριστα δὲ φανερὸν εἶναι τὰ συσφραγμένα), ὁρῶμεν δὲ ἐν ἐπίων χωριζόμενα, ἄλλοτε ὡς οὕτω

ἂν ἡ κρᾶσις γένοιτο κατὰ τὸν ὑπ' αὐτῶν εἰρηγέρον τρόπον).

This case against (6) is my own. I propose to destroy it anyway.

Start at the last point, which is a red herring. The term 'co-destroyed' is not used by the Stoics, or by Alexander discussing them, in the way objection (6) uses it. The ingredients in a Stoic 'total mixture' are 'co-destroyed' into the mixture. In objection (6), the question is whether the ingredients in a mixture are co-destroyed with the mixture, that is, when the mixture is.

And the word is in Aristotle. In Top. 2 13 he discusses various things to look for when you are trying to defeat an opponent's definition, where the definition is one that treats its object as having parts. In 150a33-36 he says:

Again, <see> if the parts are co-destroyed with the whole; for, on the contrary, it ought to turn out that when the parts are destroyed the whole is destroyed, but when the whole is destroyed it is not necessary that the parts be destroyed (ἄλλιν εἰ τῷ ὅλῳ συρραβεῖται τὰ μέρη ἀνάγκη γὰρ δὴ συρραβεῖν, τῶν μέρων φθαρέντων φθαρέσθαι τὸ ὅλον, τοῦ δ' ὅλου φθαρέντος οὐκ ἀναγκαῖον καὶ τὰ μέρη ἐφθάρθαι).

From this we can see Aristotle's response to a Eudoxian who proposes simply to bite the bullet and concede that the forms, thought of as physical parts of things, are not separable. He would argue that they must be separable: not because we are discussing Platonic forms, which must be separate, but because we are talking about physical mixtures, and parts or ingredients of such a mixture are separable from it. This is his complaint against Anaxagoras in Met. A 8: if Anaxagoras were right (989b3-4),

the affects and accidents of substances would be separable (for there is mixture of just those things of which there is separation) [τὰ πάθη καὶ τὰ συρραβήματα χωρίζονται ἀπὸ τῶν οὐσιῶν (τῶν γὰρ αὐτῶν μίξις ἐστὶ καὶ χωρισμός)]

But all of this makes it obvious that we cannot have (P1). To see what we must replace it with, let us take a closer look at Aristotle's attack on Anaxagoras in Physics A 4. 188a5-13:

a5 That <they> will never be disjoined¹¹⁷ is not said with reason, but it is said truly; for the affects are inseparable¹¹⁸; so if colors and states are mixed, if they

116 See, e.g., Todd, Alexander on Stoic Physics (1976) 50.

117 See Anaxagoras 5986 at DK 35.25, 16-17, 5988, and B12 at DK ii 39.2-4 (the latter two are cited by Simplicius in his commentary at this point, in Phys. 175.11-14; all are quoted above, p. 4).

118 ἀχώριστα.

are disjoined, there will be something white and healthy that is not something else or <said> of a subject. So that <Anaxagoras'> mind is absurd, attempting things that are impossible, if it wants to disjoin <them>¹¹⁹, and it is impossible to do this, both in quantity and in quality: in quantity because there is no least magnitude, and in quality because attributes are inseparable¹¹⁸.

a5 τὸ δὲ μᾶλλον ἀδιακριθῆσθαι οὐκ εἰδότες γὰρ λέγεται, ὁρθῶς δὲ λέγεται τὰ γὰρ πάθη ἀχώριστα εἰ οὐν μέγιστα τὰ χρώματα καὶ αἱ ἕτερες, εἴν διακριθῶσιν, ἔσται τι λευκὸν καὶ ὑγιεῖνον οὐχ ἕτερόν τι ὃν οὐδὲ καθ' ἑαυτοῦ. ὥστε ἀτοπὸς τὰ ἀδύνατα ζητῶν ὁ νοῦς, εἴπερ γούλειται μὲν διακρίναι, ταῦτα δὲ ποιῆσαι ἀδύνατον καὶ κατὰ τὸ ποσὸν καὶ κατὰ τὸ ποιόν, κατὰ γὰρ τὸ ποσὸν ὅτι οὐκ ἔστιν ἐλάχιστον μέγεθος, κατὰ δὲ τὸ ποιόν ὅτι ἀχώριστα τὰ πάθη.

This is a complex objection; I shall not try to explain all of it.

Part of it is this. On the face of it, things that are mixed together need not be mixed together. Anaxagoras has given us an argument to show that the ingredients can't be extracted pure: if they were, then you would have some pure white, and then you couldn't get any blood out of it; but you can get anything from anything, sooner or later. But this does not, in fact, explain why you can't extract the white. The theory provides nothing that explains what stops you from getting the white out.

But there is more. Anaxagoras' idea that white and healthy are ingredients of a thing does not mean that there is something, say blood, that is healthy and is an ingredient in the mixture, and something else, say the thing's surface that is white, and so on. These ingredients are identified as white and healthy, and there is no further question as to what it is that is white or healthy.

To Aristotle, this is an impossibility: something white is always something specifiable--snow, a stick--that is colored white. Anaxagoras thinks that the white is inseparable from his

119 See here Anaxagoras fr. 13 (= DK ii 39.13-17):

And when mind began to move <things>, <it> was unjoined from everything that was being moved, and whatever mind moved was disjoined; while things were being moved and disjoined, the rotation was making <them> disjoin much more.

καὶ ἐπεὶ ἤρξατο ὁ νοῦς κινεῖν, ἀπὸ τοῦ κινουμένου παντός ἀνεκρίνετο, καὶ ὅσον ἐκίνησεν ὁ νοῦς, πάντων τούτων διέκριθη κινουμένων δὲ καὶ διακρινομένων ἢ περὶ πόρην πολλῶν μάλλον ἐποῖε διακρίνεσθαι.

The second clause might also be translated "there was an unjoining from all that was moved", where the subject is not mind. K&R eds. 1-2 (373 t 504) have the latter, as does Schofield in Essay 154 n. 45. But in KR & Schofield (364 t 477) it is translated as above. Cleve, PhAnax 43, has "on the part [ἀπὸ] of the whole moved [district] severance took place" (repeated on p. 55).

mixture: he is right that it is inseparable, but it is so because of this impossibility, not because of the alleged impossibility of there being anything from which any of the ingredients is absent. If it were a mixture, the elements would, in fact, be separable.

This charge transfers to Eudoxus. Aristotle would be asking Eudoxus: just what is this physical ingredient whose presence in something makes it white? In the extended theory of the *Phaedo*, it was fire whose presence in something made it hot. But in your theory, the only answer to the question 'what makes white things white?' is: 'it's white' But, as I explained in *On length and shortness of life* (Long. 3. 465b12-14):

for while it is possible for the hot or the straight to be in the whole (of something), but it is impossible that all it is is hot, or straight or white; for then its properties would be separable (πᾶσι γὰρ γὰρ εἶναι τὸ θερμὸν ἢ τὸ εὐθύ ἐνδέχεται, πᾶν δ' εἶναι ἀδύνατον ἢ θερμὸν ἢ εὐθὺ ἢ λευκὸν εἶναι γὰρ τὰ μᾶθῃ κερχωρισμένα).

Or, as I put it in the *Posterior Analytica* (A 22. 83a30-32):

Things that don't signify a substance have to be predicated of a subject, and there's nothing white that isn't something else that is white: the forms can be dismissed, for they're nonsense (ὅσα δὲ μὴ οὐσίαν σημαίνει, δεῖ κατὰ τινος ὑποκειμένου κατηγορεῖσθαι, καὶ μὴ εἶναι τι λευκὸν ὃ οὐχ ἕτερον τι ὄν λευκὸν εἶναι. τὰ γὰρ εἶδη χαίρουν τερείσματά τε γὰρ εἰσι. . .).

And that's just as much true of your theory of forms as of the original.

Then the premises we need for objection (6) is not (P1): it is not the fact that white is an ingredient in the mixtures that are white things that makes it co-destroyed with; and hence inseparable from, the white things, but the fact that it is white. When you erase the white things, you can't do it in such a way that the white is left behind. So what we need is this:

(P1*) The F that is (allegedly) mixed in Fa is co-destroyed with them.

This now means that there is no way of getting rid of the white things or the hot things that leaves behind entities that are just white, or just hot. And then, by the definition of 'separable', we get:

(C1*) The F is not separable from Fs.

But now, if the F were literally mixed with Fs, we could employ the following by now well-known fact about mixtures:

(P2*) An ingredient in a mixture is separable from it.

And that would, with (E), give us

(C2*) The F is separable from Fs.

And that is a contradiction. So Eudoxus is wrong.

But he has not uttered outright contradictions like "the forms are immoveable, impassible, bodiless, physical ingredients of things that exist in separation from those things". He has simply fallen in the path of one of Aristotle's favorite anti-Platonic tanks; his position retains a feature of the High Platonic theory that Aristotle quite reasonably thinks absurd. And so, if I am right, Aristotle takes care, in *Categories* 2, to distinguish his

own immanentism from that of Eudoxus.

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