

PLATO AND ARISTOTLE ON THE UNHYPOTHETICAL

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1. Introduction

IN the *Republic* Plato contrasts dialectic with mathematics on the grounds that the former but not the latter gives justifications of some kind for its hypotheses, pursuing this process until it reaches 'an unhypothetical principle'. But which principles are unhypothetical, and why, is rather dark. One reason for this is the scarcity of forms of that precious word, 'unhypothetical' (*ἀνυπόθετος*), used only twice by Plato (*Rep.* 510B 7, 511B 6) and just once by Aristotle (*Metaph.* 1005^b14). But that very scarcity also suggests the intriguing possibility that Aristotle has Plato's text in mind when he uses the word, so we might expect to understand Plato better by grasping how Aristotle took him. That is a notoriously defeasible assumption since plenty of modern accounts of Plato want to save him from Aristotle's numerous critiques, and hence imply that the master of them that know frequently missed the point when it came to his own master. But surely we can be more confident that Aristotle will give us access to Plato when it appears not merely that he is dealing with the same topic, but using the same rare vocabulary to boot.

Hence the understandable temptation to turn to *Metaphysics I* for help in identifying Platonic unhypothetical principles. I shall argue that Aristotle is indeed thinking of Plato's text when he uses the word for 'unhypothetical', and further that what is explicitly an unhypothetical principle for Aristotle might well have been one

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I am very grateful to seminar audiences in London, Oxford, and Atlanta, and in particular to those who read the piece and were kind enough to supply written comments, namely: Nicholas Denyer, Gail Fine, M. M. McCabe, David Sedley, and Christopher Shields. I regret that I have been unable to address all of their questions and concerns adequately.

for Plato too. But later I shall claim that their joint use of a much more common word in the same philosophical context is either coincidence or misunderstanding on Aristotle's part, for he must mean something different by it from what Plato means.

2. Plato and Aristotle share a similar conception of the unhypothetical

Let us begin with Aristotle's example of an unhypothetical principle. In chapter 3 of *Metaphysics Γ* he is considering propositions that are true of all things whatsoever *qua* things-that-are: he refers to any such proposition at 1005^b14 as unhypothetical. So the question is whether Aristotle is thinking of the same kind of principle as Plato at the end of *Republic* 6 and, by implication, *Phaedo* 101 E 1, where the hypothetical method is supposed to conclude in the discovery of 'something sufficient'. Initially, it seems that he is. For Aristotle tells us two things about these 'firmest principles of everything' that are surely true of the end-points of enquiry Plato has in mind:

- (1) Unhypothetical principles are such that error about them is impossible [βεβαιοτάτη δ' ἀρχὴ πᾶσων περὶ ἣν διαψευσθῆναι ἀδύνατον] (1005^b11–12). (I shall call this the incorrigibility condition.)
- (2) Unhypothetical principles are necessarily the most intelligible principles [γνωριμωτάτην τε γὰρ ἀναγκαῖον εἶναι τὴν τοιαύτην] (1005^b13). (I shall call this the intelligibility condition.)

Now the incorrigibility condition is surely true of the end-points of Plato's hypothetical method too. That method proceeds roughly as follows (I am here drawing on both *Republic* 6 and the end of the *Phaedo*, necessarily compressing quite a bit). Make a safe hypothesis and then check to see whether its results cohere with one another (ἀλλήλοις συμφωνεῖ, *Phaedo* 101 D 5).¹ If they do not, the hypothesis is false and you had better start again. If they are coherent, put your original hypothesis among the set of results of another 'higher' proposition (presumably a more general one) and

¹ For an account of what this coherence consists in, see D. Bailey, 'Logic and Music in Plato's *Phaedo*', *Phronesis*, 50.2 (2005), 95–115.

see if it coheres in the right way with all of them, and so on. This is supposed to be a method we can continue so long as we might be wrong in supposing our current highest proposition true. Therefore the method comes to a stop only when we reach a proposition that we know we *cannot* be wrong in supposing true.² Only when we see that the highest proposition we have reached has this property will we know that there is no need to try justifying it further by putting it among the set of results for a still higher proposition. For we will realize that there is no such higher proposition, so no such further justification is possible.

From this we can tell that the intelligibility condition is true of Plato's unhypothetical first principle as well. For how is it that we will know when we have reached the highest proposition? What property will it have that allows us to recognize that there is no proposition still higher with which we can give a justification or explanation for it? Surely it will be the fact that it is utterly immediate to us. From our point of view nothing could explain it better than it explains itself. So there is neither need nor possibility of looking for an explanation for it. It is therefore as intelligible as any proposition can be.

But, Aristotle tells us, there is a third feature of (at least some) such principles, which is also characteristic of their unhypothetical nature:

- (3) Unhypothetical principles are necessarily part of the equipment of anyone who grasps any of the things that are [*ἣν γὰρ ἀναγκαῖον ἔχειν τὸν ὀτιοῦν ξυνιέντα τῶν ὄντων, τοῦτο οὐχ ὑπόθεσις*] (1005^b15–16). (I shall call this the priority condition.³)

Logically this condition seems different from the others. The incorrigibility and intelligibility conditions appeared to be both necessary and sufficient for being unhypothetical. But, for Aristotle at least, the wording of the priority condition makes out that satisfying it is *sufficient* for being unhypothetical without even carrying the implicature that such satisfaction is also *necessary* for being un-

² I grant that there might be other interpretations of what it is for a proposition to count as 'something sufficient'. But this seems to me to be the most plausible reading.

³ For the purposes of this paper I am avoiding the difficult issue of whether the relevant concept of priority here is temporal or logical.

hypothetical.⁴ Is there any interesting correspondence in the case of Platonic unhypothetical principles?

An answer to that question will turn on what kind of mental state Aristotle has in mind in his use of the verb for ‘grasp’. Given the context, this state will obviously be some kind of knowing, but of a possibly non-luminous kind.⁵ Take the example of Heraclitus. For Aristotle, Heraclitus will be someone who does indeed grasp some of the things that are, just by virtue of being rational (at least in some moods). In that case, he will know anything one needs to know of necessity in order to know anything at all. In that case, he will know, among other things, the Principle of Non-Contradiction (PNC).⁶ But this knowledge will be non-luminous, at least for Heraclitus: for far from being in a position to know that he knows PNC, he mistakenly believes he has succeeded in denying it. So PNC is something Heraclitus knows without knowing that he does, or even (at least according to him) believing that he does.

Are there examples of such complicated mental attitudes towards the unhypothetical in Plato? Arguably there are, in the *Meno* at least. For one might take the result of the examination of the slave boy to be that, in some sense, he knew the theorem all along, by virtue of his soul’s experiences in the discarnate state, but was not (at least at the start of the experiment) in a position to know that he knew it, or able to express this knowledge.⁷ Now of course what the slave

⁴ I am grateful to Terry Irwin for pointing this out to me.

⁵ I owe this observation to Jimmy Doyle. Following Timothy Williamson, a mental condition C is (roughly) luminous if and only if whenever an individual is in C, that individual is in a position to know that C obtains. See T. Williamson, *Knowledge and its Limits* (Oxford, 2000), ch. 4.

⁶ Given what I have said about the priority condition being merely sufficient for being unhypothetical, it is of course an assumption that PNC satisfies it. But given that PNC is not merely unhypothetical, but *paradigmatically* so, I think it is a plausible assumption to make.

⁷ This interpretation requires a reading of the *Meno* different from that proposed by, among others, Gail Fine, in her ‘Inquiry in the *Meno*’, in G. Fine, *Plato on Knowledge and Forms* (Oxford, 2003), 44–65. According to her arguments, Socrates refutes his construal of Meno’s Paradox of Enquiry by using the Theory of Recollection to show that one of its premisses—the claim that one cannot enquire into that which one does *not* know—is false. According to the interpretation sketched above, Socrates would be disarming the paradox by using the Theory of Recollection to show that a different premiss—the claim that one cannot enquire into what one *does* know—is false. The thought would be that, since the slave clearly can enquire into constructing a square double in area a given square, that must be because he already in some sense knows the answer: his immortal soul saw the truth in a discarnate state and, while the trauma of birth renders impossible his answering

boy knows latently but comes to think about actively by the end of the discussion is not itself something *unhypothetical*, for it is a truth derivable from prior propositions. So can we think of examples in Plato in which there is possibly non-luminous knowledge of *unhypothetical* principles, where it is *also* the case that being known in this way is sufficient but not necessary for being *unhypothetical*? I think we can, although I lack the space to defend the point in detail. Admittedly, the analogy of the Sun, used to illustrate the nature of the Form of the Good, rather suggests that when the Guardians come to know *unhypothetical* principles, their knowledge at least at that moment will be luminous. For surely one cannot look at so intensely illuminated an object as the Sun without being in a position to know that one is looking at the Sun. Even if not all perceptions are luminous, surely that one is, so it would seem that the knowledge this perception is used to illustrate should be luminous too. But equally surely, the Guardians will retain this knowledge even when they are no longer looking at the Sun or the real things it illuminates. They will continue to have this knowledge while descending back to the murky gloom of the Cave when their eyes become 'full of darkness' (*Rep.* 516 E 4–5). Arguably while in such a condition the Guardians, analogously to Meno's slave, will know what they learnt outside the Cave without being in a position to know that they know it (which might amount to their continuing to know the first principles of dialectic even when not doing dialectic, or attending to some object which cannot be treated dialectically, such as the sensible world). So arguably their knowledge of unhy-

Socrates correctly straight away, it does not follow that he is completely lacking in genuine knowledge about the theorem he eventually brings to mind. It might be thought that what Socrates says at 85 c 10–12 causes trouble for this interpretation, but in fact it does not. For of course, from the claim that *if* the slave is asked the same questions in many different ways, *then* he will end up knowing the answers as accurately as anyone, it just does not follow that he does not, at least in some sense, already know those answers. And Socrates' description of what the slave can accomplish if questioned further only a few lines later, at 85 d 4 ('recovering the knowledge from within him for himself'), surely suggests the interpretation on offer here. But it is not clear to me to what extent Fine and I are in disagreement. It strikes me as a perfectly reasonable interpretation of the Recollection Theory to suppose that Socrates is introducing the concept of forgotten knowledge in order to falsify, albeit in different ways, *both* premisses that drive the Paradox of Enquiry, and not just the one Fine takes to be relevant. On the Fine line, forgotten knowledge is something you can enquire into that you *do not* know, just in so far as you have forgotten it. On my line, forgotten knowledge is something you can enquire into that you *do* know, just in so far as it is knowledge. And these two interpretations are quite compatible.

pothetical principles is possibly non-luminous. But can we find in Plato the further thought that the priority condition is (1) sufficient but (2) not necessary for being unhypothetical? Well (1) is easily accomplished. For if we suppose that one comes to know anything in the true sense only when it is recognized either as unhypothetical or as being dialectically inferable from something unhypothetical, then it will follow that anything you need to know in order to know anything will be unhypothetical. (2) is a little trickier to defend, but I think it can be done once we ask ourselves how many propositions are unhypothetical for Plato. It is not clear in the *Republic* (nor in related passages in the *Phaedo*) whether Plato wants to assert $(\forall x)(\exists y)$ (If x is an enquiry, then y is its unhypothetical terminus) or $(\exists y)(\forall x)$ (If x is an enquiry, then y is its unhypothetical terminus). If he means the latter, then very likely he will have a different conception of the unhypothetical from Aristotle. For if there is at least one unhypothetical principle at which all enquiries terminate, it will satisfy the priority condition: and if there is only one such principle, then satisfying the priority condition will be not only sufficient for being unhypothetical, but also necessary. But if he means the former, and there are a plurality of unhypothetical principles distributed over different subject matters, then it may be that, while of course knowledge of them will be necessary for knowledge of the subject matter in question, some need not be known by someone in order for him to know anything at all. For example, one needs to know unhypothetical truths of geometry in order to know geometric theorems properly, but that does not mean one must know unhypothetical truths of geometry in order to know *anything*. If there are a plurality of unhypothetical principles, satisfying the priority condition will be for Plato, as it is for Aristotle, sufficient but not necessary for being unhypothetical.

3. An example?

So there are compelling arguments for thinking that Plato and Aristotle share, at least roughly, the same conception of the unhypothetical. But it might be that these considerations can go only so far in allowing us to characterize Platonic unhypothetical principles along Aristotelian lines. For Plato is quite explicit that something like a principle Aristotle regards as paradigmatically unhypothetical

tical is for him, at least in one context, a *hypothesis*. Aristotle's paradigmatically unhypothetical principle is this:

- (A) (=PNC) For the same thing to hold good and not to hold good simultaneously of the same thing and in the same respect is impossible (given any further specifications that might be added against the dialectical difficulties) [τὸ γὰρ αὐτὸ ἅμα ὑπάρχειν τε καὶ μὴ ὑπάρχειν ἀδύνατον τῷ αὐτῷ καὶ κατὰ τὸ αὐτό· καὶ ὅσα ἄλλα προσδιορισαίμεθ' ἄν, ἔστω προσδιωρισμένα πρὸς τὰς λογικὰς δυσχερείας]. (*Metaph.* 1005^b19–22)

This is surely, at least at first glance, similar to a principle Plato formulates in *Republic* 4:

- (P) It is clear that the same thing will not do or suffer opposites in the same respect in relation to the same thing and at the same time [δῆλον ὅτι ταὐτὸν τάναντία ποιεῖν ἢ πάσχειν κατὰ ταὐτόν γε καὶ πρὸς ταὐτόν οὐκ ἐθελήσει ἅμα]. (*Rep.* 436 B 8–9)

I said just now that (A) is something like (P), but of course there are important differences. (A) uses negation to specify what it says is impossible—that something should hold and also *not* hold of something—while (P) speaks in terms of opposites. That is, the former supposes that contradictories cannot hold of the same thing while the latter supposes that contraries cannot. But even Aristotle is not embarrassed to express his principle in terms of contraries, as he does a few lines later at 1005^b26–7. Meanwhile, the properties with which Plato's Socrates illustrates the consequences of his principle, rest and motion, are arguably themselves contradictories rather than mere contraries.⁸

Perhaps more importantly, (A) is modally stronger than (P). (A) says that such-and-such being the case is *impossible* (ἀδύνατον), while the strongest construal of (P) is that it says that such-and-such *will refuse to be the case* (οὐκ ἐθελήσει). This might make, in the end, a great deal of difference between the two philosophers, for Plato accepts that some things that never were, never are, and never will

⁸ I owe this observation to Christopher Shields. Modern philosophers might feel uncomfortable with the thought that rest and motion are contradictories, for it seems there are plenty of things, abstract objects especially, which just are not the right kinds of thing to be at rest or in motion: for instance numbers or space–time points. But Plato certainly has no qualms about ascribing rest to his favourite abstract objects, the Forms.

be are nevertheless possible.⁹ His language is scarcely stronger a few lines later at 436 E 8–437 A 2 when Socrates restates (P), saying that he *will not be disconcerted* by sophistic tricks on the matter or *persuaded any the more* that something might suffer or do opposites etc. But to say that there is nothing that could convince you that $\neg p$ is significantly weaker than saying that $\neg p$ is impossible. At any rate, the former is a statement about oneself, while the latter is a statement about the truth-conditions of p —namely that they must obtain no matter what.

These differences can be explained away partially by the difference in argumentative contexts. Given Aristotle's broad aim of determining the subject matter of metaphysics in Gamma, he will want the meatiest and strongest general principle he can formulate to be basic. Plato, by contrast, only wants something strong enough to deliver the conclusion that the soul has parts, a claim which may be independently plausible anyhow.¹⁰ In his drive for generality, Aristotle will be interested in *any* properties that determine a complement class, not just properties with opposites, and he will want his principle to be as modally ambitious as possible. Meanwhile Plato will naturally speak of properties with opposites as things which *most obviously* cannot belong to the same thing in the same respect, and will be happy if that claim is just plausible enough for Socrates not to entertain any doubts about it.

But reference to the argumentative contexts is only a partial explanation, since it cannot account for the following difference. For Socrates, (P) is something to be *hypothesized*, as he says at 437 A 6–7: *ὑποθέμενοι ὡς τοῦτου οὕτως ἔχοντος*. Now Aristotle would say that since the incorrigibility, intelligibility, and priority conditions are true of (A) (and hence, let us suppose for the moment, also of (P)) then no one can *really* believe that either (A) or (P) is ever false. As he puts it at *Metaph.* 1005^b23–6, 'it is impossible for anyone to believe that the same thing is and is not, as some consider Heraclitus said—for it is not necessary that the things one says one should

⁹ The *Timaeus* holds (41 A–B) that it is *possible* for the world to perish even though in fact it *never will* perish (a position with which Aristotle took umbrage in *De caelo* 1. 11–12). For a discussion of the debate, see N. Denyer, 'Never Will and Cannot', *Proceedings of the Aristotelian Society*, suppl. 74 (2000), 163–78.

¹⁰ And when he redeploys that fact in an argument in bk. 10, his language is as modally strong as Aristotle's. At 604 B 3–4 he asks whether 'when two opposite impulses occur in a man at the same time about the same thing, we say that *of necessity* there are two things in him'.

also believe'. But if one cannot really believe in a counter-example to (A) or (P)—as Aristotle says Heraclitus cannot, despite what he might say—then surely one cannot really believe that *there might be* any counter-examples to those principles. In other words, one cannot believe that either of them could have the provisional status of *mere* hypotheses, propositions which might be false although we treat them as true for the time being. So by the lights of *Metaphysics* Γ 3, would Aristotle tell Socrates that he cannot really believe what he says to Glaucon when he introduces (P) as a hypothesis?

I think not. We can see that Aristotle and Plato are actually thinking in the same way once we consider the difference between an unhypothetical truth and its formulation in a context. Socrates says that he will treat (P) as a hypothesis so that he and his interlocutors are not compelled 'to prolong matters by going through all such sophistries, confirming for ourselves that they are not true [*πάσας τὰς τοιαύτας ἀμφισβητήσεις ἐπεξιόντες καὶ βεβαιούμενοι ὡς οὐκ ἀληθεῖς οὐσας μηκύνειν*]' (437 A 4–6). (P) is treated as a hypothesis not because it might turn out to be *false* later on, but rather because, *when formulated like that*, the principle invites a number of questions and quibbles, mainly about what the precise respects are in which nothing can be both *F* and the opposite of *F* (Aristotle recognized this too). And when an unhypothetical truth is formulated as the sort of proposition that invites such questions and quibbles, one is entitled to treat the formulation as a hypothesis.

For all that he does not say he will treat (A) as a hypothesis, there is none the less the same acknowledgement that something is missing in his formulation from Aristotle. He specifies a few constraints on the conditions of *F* holding and not holding of the same thing to be impossible (that it be at the same time, and in the same respect), but then leaves off from identifying other relevant considerations in favour of a brief stage direction that such qualifications be taken as read. While Socrates in effect says, 'we shall just suppose that this principle is true and ignore the quibbles for the moment',¹¹ Aristotle appears to be saying, 'we affirm a suitably qualified version of this principle, the details of whose qualification we shall not bother to spell out at the moment'. So both philosophers state their

¹¹ *Soph.* 230 B is an indication that this is the right way of taking what Socrates says in the *Republic*. For here we get a fuller statement, this time from the Eleatic Stranger, of the kind of qualifications that need to be made in making clear and explicit what the Principle of Non-Contradiction says is impossible.

principles with pretty much the same acknowledgement that the explicit formulation omits important points of detail. Thus while it initially seems an important difference that Socrates calls what he says a hypothesis while Aristotle calls his version unhypothetical, they are both aware of the fact that their actual formulations of the principle are sensitive to the context, and hence somehow inadequate. And in the case of Socrates, that his formulation is sufficiently opaque for him to treat what he says as a hypothesis is perfectly compatible with the fact that what it is a formulation of is unhypothetical.

This is as it should be. For surely we want to be able to begin investigations generally by saying 'Suppose p ' for any value of p whatsoever, even 'Suppose that two twos make four' or 'Suppose that I am now inviting you to make a supposition'. If we could not formulate unhypothetical truths in a manner suitable for treatment as a hypothesis, then it would be impossible to carry out any kind of serious investigation into their nature, which is presumably one of the things that the completed science of dialectic will do. It will want, for instance, to know what is the hallmark of propositions that are known to be true once formulated in the right way, and in order to discover this it may be necessary to hypothesize the unhypothetical. To say that unhypothetical principles are immune from being hypothesized would be to misunderstand the force of the negative prefix in 'unhypothetical' for both Plato and Aristotle. In calling a principle unhypothetical, one is not going so far as to rule out the possibility of *expressing* the principle as a hypothesis. One merely says that such a principle, unlike others, can be formulated in a way that is sufficient for knowing it immediately once it is so formulated.

An illustration of the sort of thing I have in mind might help. Mathematicians usually treat basic arithmetical propositions as unhypothetical in the way Aristotle treats (A). But sometimes other mathematicians such as Frege treat the same propositions as hypothetical in so far as they suppose them to be true but try to formulate them more transparently. In doing this, they do not cast the kind of doubt on those principles that would mean they do not actually qualify as unhypothetical. Frege never doubted that $2 + 2 = 4$. But he thought, very reasonably, that you put the truth more transparently (if more technically) when you say that the set of all pairs, when related to itself by the addition relation, is identical to the set of all

quartets. Or again, think of the Cartesian case in which one cannot be wrong in thinking that one exists whenever one is thinking. The formulation *cogito ergo sum*, for all its indubitability, is certainly the sort of thing for which one can demand some sort of explanation. For example, is it known to be true non-inferentially by some kind of immediate intuition? Or is it inferred via the major premiss 'All thinking things exist'? Such questions can still be raised about *that* famous formulation of the Cogito, even though what it expresses is arguably unhypothetical.

This much, then, by way of argument that Aristotle and Plato are speaking of the same thought in these two passages, and hence that PNC or something like it might well be unhypothetical for Plato too, even though Socrates explicitly hypothesizes his version of it. If they are more or less the same principle, and Aristotle describes his formulation of it with his master's word 'unhypothetical', I see no reason to resist the inference that Plato would have regarded the same principle as unhypothetical too.

4. Baltzly on the unhypothetical

Still, this is not much by way of illumination. We want other examples of Platonic unhypothetical principles before we will feel comfortable that we know what they are like. Fortunately at least one philosopher, Dirk Baltzly, has suggested an ingenious way of characterizing what might be meant by 'unhypothetical' *without* drawing directly on *Metaphysics I*, although a consideration of his arguments will ultimately lead us back there.¹² Instead he turns to the dialectic in the second half of the *Parmenides*, arguing that, for Plato, a proposition is unhypothetical if its contradictory could not even be formulated if its truth-conditions actually obtained.¹³ So, according to the first deduction of the second part of the *Parmenides*, the proposition 'The One has some share of being' is unhypothetical (142 A ff.). Parmenides says, 'If something is not, could anything belong *to* this thing that is not, or be *of* it? Therefore no name belongs to it, nor is there an account or any knowledge or

¹² D. Baltzly, "To an unhypothetical first principle" in Plato's *Republic*, *History of Philosophy Quarterly*, 13 (1996), 149–65, and 'Aristotle and Platonic Dialectic in Metaphysics Gamma 4', *Apeiron*, 32 (1999), 171–202.

¹³ Baltzly, "To an unhypothetical first principle" in Plato's *Republic*, 153.

perception or opinion of it.' If it really were true that the One has no being—that the One is not—then this could not be expressed in any form, for there would not be anything for an expression about the One to be about. Since this is so, the contradictory of the claim 'One does not have a share of being' is, Baltzly thinks, unhypothetical.

According to this interpretation Plato also holds that the claim that some of the kinds blend (*Soph.* 251 D 5 ff.) is unhypothetical, because if the truth-conditions of its contradictory arose and, among other things, Being were apart from everything (including itself), then one would not be able to say so, since that would involve predicating something (namely non-blending) of Being, which would involve saying that Being blends with something (namely non-blending). So if being really were apart from everything, one could not truly express this¹⁴ (I shall have more to say about the logic of this argument below).

I am not convinced by Baltzly's characterization, for a number of reasons. Firstly, it seems to me that the passages he speaks of have the style of *proofs*, and I hold that one of the reasons for calling the end-points of Plato's method 'unhypothetical' is that they are propositions which neither need nor admit of proof (even if, as I was just now arguing, we might be able to provide some lesser form of explanation for them by trying alternative formulations). As Aristotle argues when he comes to discuss PNC in *Metaphysics Γ*, it is impossible that *everything* should have a proof (ὅλως μὲν γὰρ ἀπάντων ἀδύνατον ἀπόδειξιν εἶναι, 1006^a8), and in particular his favoured unhypothetical principle ought not to be susceptible to proof since it is an ultimate belief for anyone proving anything (διὸ πάντες οἱ ἀποδεικνύοντες εἰς ταύτην ἀνάγουσιν ἐσχάτην δόξαν, 1005^b32–3).

I think this must be so just as much for Plato too. For according to the end of *Republic* 6, an unhypothetical first principle¹⁵ allows you to move step by step through every hypothesis used in reaching it, in a series of moves from which it is the completely adequate starting-point. But if it behaves like this, then even if it is not like

¹⁴ And if Nicholas Denyer is right (as I think he must be) in thinking of expressions as themselves being kinds, one could not express anything at all, true or false. See N. Denyer, *Language, Thought and Falsehood in Ancient Greek Philosophy* (London, 1991), ch. 9.

¹⁵ In speaking of 'an unhypothetical principle' rather than 'the unhypothetical first principle', I refer the reader back to the remarks in the main text of p. 106.

Aristotle's first principles in other respects, it ought not to be the kind of thing that can be proved—in which case it ought not to be the kind of truth entailed by the sophisticated arguments Baltzly discusses. For the principles he takes to be unhypothetical are entailed, on this story, by Plato's tacit premiss that whatever can be true can be said to be true when it is true. Hence any purported truth that would be falsified if it were expressed is in fact necessarily false, in which case the contradictories of such propositions are necessarily true. In other words we can prove the truth of Baltzly's principles to ourselves on the basis of the truth of another, metalinguistic, premiss.¹⁶ But this ought not to be possible if they were really unhypothetical. For such principles, at least when properly formulated, are supposed to explain themselves better than anything *else* could. They let us know that they are true themselves, without relying on some further principle.

Baltzly has a ready reply to this objection. While one cannot give a *Posterior Analytics*-style proof of unhypothetical principles, Aristotle tells us at 1006^a11–13 that one can at least give an *elenctic* proof of such principles (or at any rate, of his sample principle PNC), provided someone who denies it at least says something (ἔστι δ' ἀποδείξει ἐλεγκτικῶς καὶ περὶ τούτου ὅτι ἀδύνατον, ἂν μόνον τι λέγῃ ὁ ἀμφισβητῶν). Baltzly could then defend his claim that the principles he finds in Plato are unhypothetical because they too are proved in a similar fashion. Those who posit the contradictory of his unhypothetical principles are refuted *out of their own mouths* just like Aristotle's opponent. If what they *said* were in fact true, then they would not have been able to say it. And, for both Plato and Aristotle, Baltzly holds, this is a kind of proof that what they say must be false, but *not* the kind of proof whose premisses would suggest that the proved theorem is too posterior to be unhypothetical.

Now exactly how Aristotle's elenctic proof is supposed to work is a matter of considerable debate, into which I do not intend to enter here. But it is significant, I think, to note a number of disanalogies between the elenctic proof and the ways in which Plato arrives at the propositions Baltzly thinks are unhypothetical, which tend to show that the latter would *not* be unhypothetical by Aristotle's lights, if

¹⁶ Baltzly realizes this: see “To an unhypothetical first principle” in Plato's *Republic*, 153. It is a merit of his account that he can explain why Plato might have held this metalinguistic premiss, given his view that ‘philosophical conversation is an important pathway to truth . . . When the content of a claim is such that, were it true, it couldn't be expressed, this is ample reason to think that it must be false.’

there is supposed to be some non-accidental connection between being unhypothetical and being susceptible to *elenctic* proof, whatever that is precisely.

Firstly, Aristotle's *elenctic* proof seems to rely upon a kind of circularity (which, of course, Aristotle has freely admitted to at 1005^b32–3). *Any* possible proof of PNC will ultimately rely *in some sense* on the truth of that principle because *every* possible proof so relies on it. Now it might be that the reason Aristotle says that PNC admits of an *elenctic* proof rather than proof proper is that one can give a partial explanation of PNC with an argument whose premisses must be in accordance with it. For why else say that you can prove PNC *in any way*, given that those who deny its truth (at least according to Aristotle)¹⁷ are hardly going to be the sort of people who are impressed by proofs *of any kind*, if not by way of saying that such a proof will at least explain something about PNC?¹⁸ One might argue that this fact makes any purported proof of PNC viciously circular. Alternatively one might defend Aristotle's proof as Michael Dummett defends a similar version, as being benignly rather than viciously circular, because PNC is not asserted in the proof, even if its truth is somehow relied upon.¹⁹ But whichever of these opposing views is correct, there is no such circularity, benign or otherwise, to be found in Plato's arguments that the One has some share of being and that some of the kinds

¹⁷ I pass over the fact that Aristotle seems to have held that no one actually *does* deny PNC—that is, no one actually *believes* PNC false, even though there may be some who *say* it is false: 'for it is not necessary that the things one says one should also believe' (*Metaph.* 1005^b23–4). It may well be that the *elenctic* proof establishes that no one really disbelieves PNC, whatever they may say to the contrary: but this is a consequence of the proof rather than a precondition for it. It is not enough, in advance of the proof, to assert that such people cannot *really* believe what they say: for certainly they will reply that they do believe what they say, and will be unimpressed by any gainsaying on Aristotle's part. For even if he is right, and they do not really believe what they say, if PNC is in fact false, as they *think* they suppose, then they will have no reason to suppose they are in the wrong about what they think they believe.

¹⁸ A similar argument might be put against those who hold that Protagoras is meant to refute himself in *Theaet.* 177 c–179 b. According to this argument, that ought not to be what Plato is aiming at, for if refuting yourself is a bad thing because it involves you in saying something necessarily false, why should such a charge bother anyone who has denied the possibility of falsehood in the first place? See S. Waterlow, 'Protagoras and Inconsistency', *Archiv für Geschichte der Philosophie*, 59 (1977), 19–36.

¹⁹ For an argument along these lines establishing the ultimacy of PNC, see M. Wedin, 'Some Logical Problems in *Metaphysics* Gamma', *OSAP* 19 (2000), 113–62 at 115–19.

blend. Parmenides' argument does not depend in any sense on the thought that the One has some share of being. It depends instead on the quite different and completely independent thought that *what is being meaningfully talked about must be there to be talked about*. Again, the argument in the *Sophist* that some of the kinds blend does not depend in any way on the truth of that thought, but on the principle that *what makes predications true (or even possible) is some kind of blending*. Doubtless these claims are supposed to provide explanations of why the principles are true. But such explanations are very different from the (benignly or viciously) circular kind of which Aristotle's elenctic proof is an example. Rather, they seem to be the sort of helpful explanations—prior premisses, if you like—that you get from ordinary, *Posterior Analytics*-style proofs.

Secondly, and more importantly, there seems to be a difference in logical status between the contradictory of Aristotle's unhypothetical principle PNC and the contradictories of what Baltzly thinks are Plato's. The point is best introduced by considering an example from the great medieval logician John Buridan, who wonders whether the proposition 'No proposition is negative' is self-refuting or not.²⁰ It looks on the face of it as if it is. For if its truth-conditions arose, it could not be stated. But, Buridan goes on to argue, even though 'No proposition is negative' is not possibly *true*, it is at any rate *possible*. Provided we construe propositions as tokens of some sort—that is, as obviously contingent beings—it could well be that what the proposition *says* to be the case obtains, that in fact no propositions *are* negative, even though the proposition saying just that obviously would not exist, and hence would not be true, in such circumstances. This consideration seems to me to open up another distinction between PNC and Baltzly's principles. For one could argue that the contradictories of the latter, but not the contradictory of the former, express possibilities without being possibly true. After all, is there anything impossible about the One having no share of being—that is, is there not the possibility of the non-existence of the One, even if its actuality would render impossible any thought or expression about it? Or again, what is wrong with supposing that there might have been nothing at all, which would surely be the result if none of the kinds blended, even though one could not, of course, say or think that there was nothing at all in

²⁰ See G. Hughes (ed.), *John Buridan on Self-Reference: Chapter Eight of Buridan's Sophismata* (Cambridge, 1982), 37–9.

such circumstances, since there would not be anything to say or think it with?

Now it might be that the answer is 'No' in both cases, and that the contradictories of Plato's principles are supposed to be *neither* possibly true *nor* possible, that the One *must* have a share of being, and that at least some of the kinds *must* blend.²¹ But if that is so, such metaphysical commitments are going to require rich arguments with pretty substantial further premisses. And this is not the case, at least for Aristotle, when we come to say that the contradictory of PNC is neither possibly true nor possible. Not only would it be impossible to express the contradictory of PNC if it were true (for any purported formulation under such circumstances would, according to Aristotle, no more express a denial of PNC than an affirmation of it, since everything would be indeterminate). But also what such a formulation would try but fail to express is not even a possibility. Even of a world without any propositions to be thought, written, or said (in so far as Aristotle could entertain such a possibility) he would surely maintain that it is still *never* the case that contradictory properties belong to the same thing at the same time in the same respect etc. The denial of PNC is neither possibly true nor possible. But Aristotle will regard this as a brute fact about the world, admitting of no very deep explanation. If you want an explanation of how or why a property had by a certain thing at a certain time in a certain respect excludes the privation of that property at that time in that respect, then tough luck. That is just the way things are at the most fundamental level, and explanations come to an end. By contrast for Plato, if there is not merely a connection, but a necessary one, between the One and its being, or the kinds and their blending, that looks without further ado like the sort of thing that might admit of explanation. I can only guess at such explanations, as follows, but at least they spring to mind without too much sweat. The One just is, necessarily, because it is a Form, and that is the way Forms have their being (by contrast with sensible things). And at least some of the kinds blend because some are by themselves incomplete, as are some of their linguistic correlates, verbs (*δῆματα*). I am not at all trying to say that these are the *right* explanations for Baltzly's principles, only that they and their ilk are available. And the important point

²¹ The former at least seems likely if the One of the deductions in the second part of the *Parmenides* is a Form.

is that they are *generalizing* explanations. They explain a particular fact (the One's having being necessarily; at least some of the kinds blending) by a more general one (Forms have certain properties, including being, necessarily; and some kinds, whether they blend or not, are somehow incomplete). I can think of no such generalizing explanation for PNC, not even the claim that some things must be determinate. For just as many things as are determinate abide by PNC. That things be determinate, and that they abide by PNC, are for Aristotle two ways of expressing exactly the same condition.²²

This difference in susceptibility to explanation indicates, to me at any rate, that PNC and the principles Baltzly finds in Plato are rather different kinds of claim, admitting of rather different kinds of proof. From the above facts together with the previous suggestion that PNC may well be unhypothetical for Plato, we ought to infer either that those principles are *not* unhypothetical, or that unhypothetical principles can be a pretty heterogeneous bunch.

As things stand at the moment, the former conclusion is preferable. For suppose I am right in arguing that 'The One has no share of being' and 'None of the kinds blend' *might* be propositions which express possibilities without being possibly true. If *all* that is wrong with those propositions (and hence unhypothetical about their contradictories) is that they could not be expressed if they were true, then what is there to stop Plato admitting denials of genuine possibilities as unhypothetical? What is there to stop the apparently contingent claim 'Some proposition is negative' from being unhypothetical?

It is for this reason, I suppose, that Baltzly's second paper on this subject²³ turns to another Platonic passage, *Theaet.* 181c–183c 5, arguing that the contradictory of Heraclitus' claim 'All things change in every way' is unhypothetical on the grounds that if the Heraclitean claim were true then neither it *nor anything else* could be thought, written, or said.²⁴ This case, I think, shows up the

²² For a helpful discussion of this thought, see V. Politis, *Aristotle and the Metaphysics* (London, 2004), ch. 5.

²³ 'Aristotle and Platonic Dialectic in Metaphysics Gamma 4'.

²⁴ These sorts of conditions also interest Baltzly in his first paper on the subject: 'Plato is interested in philosophical views which are such that if the conditions which would make them true obtained, those same conditions would make it the case that neither they, *nor anything else*, could *ever* be expressed in any way' ('"To an unhypothetical first principle" in Plato's *Republic*', 153, emphasis

heterogeneity of the principles Baltzly discussed in his first paper. For if the truth-conditions of 'The One has no share of being' arose, then while you could not express that proposition, since there would be no such thing to say anything about, you could none the less talk, and maybe even talk truly, about plenty of other things besides the One. (Similarly: if the truth-conditions for 'No proposition is negative' arose, then, while that proposition itself could not be expressed, plenty of others still could be, including the logically equivalent, and true under the circumstances, 'Every proposition is positive'). But it seems that the contradictory of 'All things change in every way' has a better claim to be unhypothetical, since if the truth-conditions of Heraclitus' claim arose, then, supposedly, *no propositions whatsoever*, true or false, could be thought, spoken, or written. The same is true of the principle from the *Sophist*, albeit for a rather different reason. If none of the kinds blended (and in particular nothing blended with being, including itself),²⁵ then one could not express that fact or any other—but not this time because the world would be too dizzyingly fluxy for one to think, write, or speak, but because there would be literally *nothing at all*. Heraclitus' problem is that he describes a possible world one could not talk or think about were it actual: an intolerably unstable and incoherent world, but a possible world none the less, in fact one in which one might get to grips with things semantically in the minimalist way in which poor Cratylus is said to have ended up, i.e. by pointing. Indeed, *some* think that there is a good sense in which Heraclitus' world is actual, for it is nothing other than the sensible world as characterized in Plato's middle dialogues. By contrast, the late-learners' problem is that they imagine a world that would in fact be non-existent, or empty. These are clearly two very different ways of *logoi* failing to have any applications. So it ought to be the case that the corresponding principles derived from consideration

added). But if only those conditions determine unhypothetical principles, the claim that the One has a share of being will not be unhypothetical, as I argue in the main text.

²⁵ The late-learners do not recognize blending; and yet they permit themselves identity statements. So arguably the fact of Being's being the same as itself does not involve any kind of blending. But, equally arguably, Being would be the same as itself even if it had no being (for arguments in this style see C. McGinn, *Logical Properties* (Oxford, 2000), ch. 2). Moreover, the wording of the non-blending hypothesis is as strong as my reading tries to express: it is the set-up in which *nothing* has the power to associate with *anything*, not merely anything *else*.

of such situations are rather different. But this might count against treating them *both* as unhypothetical.

5. Destroying hypotheses?

Let us leave these objections for the moment: for it is not my task, at least in this paper, to say what other principles are unhypothetical for Plato, but to cast doubt on the thought that these ones are. But there is one final piece of evidence that the principles Baltzly finds in the dialogues are unhypothetical, a clue which takes us back to *Metaphysics Γ*. Supposedly, what they all have in common is that their contradictories are, arguably, self-refutingly false. Plato thereby establishes their putatively unhypothetical truth by *destroying* their contradictories (or, better, showing how their contradictories destroy themselves). But there is some important connection for both Plato and Aristotle between unhypothetical principles and one of the Greek words for destroying, *ἀναιρεῖν*. Towards the end of *Republic 7* Plato tells us that the mathematicians are only dreaming of being, on account of their not explaining their hypotheses, while the superior method of dialectic does something or other to hypotheses (to be discussed below) in order to secure them (τὰς ὑποθέσεις ἀναιροῦσα, ἐπ' αὐτὴν τὴν ἀρχὴν, ἵνα βεβαιώσῃται, 533 C 8–9 in the text of J. Burnet, 533 C 9–D 1 in that of S. Slings (the punctuation here is that of Slings)). Meanwhile, in *Metaphysics Γ* Aristotle tells us that the person responsible for the force of the elenctic proof of PNC is not its proponent but its opponent, some character like Heraclitus: and the reason for this is that such a person submits to argument in the act of destroying it (*ἀναιρῶν γὰρ λόγον ὑπομένει λόγον*, 1006^a26).

Initially we might expect these two forms of *ἀναιρεῖν* to mean the same, given the identical philosophical contexts—the nature of unhypothetical principles—and the proximity of the magic word for ‘unhypothetical’, *ἀνυπόθετον*. These conditions suggest that Aristotle and Plato must have been thinking along such similar lines that uses of forms of the same verb in different senses for each author would seem to be either surprising coincidence or error on the part of the later author. However, I am going to argue that we ought to take it as coincidence or error.

Firstly, let us run through the one argument of which I am aware

for saying that the expressions mean the same. It is quite clear that in Aristotle's text, *ἀναρπεῖν* must mean 'destroying' or 'eliminating'.²⁶ The point is that the opponent who objects to PNC refutes himself, by 'abiding by speech' (i.e. speaking at all) in the act of trying to destroy it by asserting the contrary of its intelligibility, PNC. The sense of *ἀναρπεῖν* as 'to take up' is not available here. For even if we could get any sense out of such a translation, it would not convey the important point that it is the objector to PNC himself, rather than his opponent Aristotle, who is poignantly responsible for his own refutation, by virtue of making use of what he tries to destroy in the act of trying to destroy it. This is how Sextus Empiricus, for example, used exactly the same word to point out that his argument in favour of global scepticism about non-relative matters of fact destroys itself, much as a fire consumes itself once it has consumed everything else available (*M.* 8. 480–1). So anyone wanting to argue that Aristotle is following Plato in his use of this word ought to impute the same sense to Plato's use of *ἀναρπεῖν* in the passage from the *Republic*. In other words, they have to tell us what it means for a dialectician to *destroy hypotheses*. According to Baltzly, dialectic 'destroys hypotheses' by operating on contradictory hypotheses, one of which is self-refuting, the other of which is unhypothetical. Dialectic destroys the former by exposing its self-refuting nature, and destroys the latter by eradicating its hypothetical character.²⁷

My disagreement with this is as follows. I find it hard to accept that, in *Republic* 7, *ἀναρπεῖν* is not a univocal verb, an expression for one and the same dialectical process, which on Baltzly's story it is not. There is the destruction of showing that a proposition is self-refutingly false, and the destruction of showing that a proposition is secure well beyond the provisional status it was taken to have at the start of an enquiry. These are *very* different kinds of destruction indeed, so much so that it seems too perverse to have the same name for them. But anyhow, even if *ἀναρπεῖν* need not be univocal, it just is not the case that the contradictories of *the mathematicians' hypotheses* are *ever* in consideration, either in the *Republic* or anywhere else in Plato. And it is on the topic of the mathematicians' hypotheses in *Republic* 7 that dialectic emerges as the more esteemed science. It is

²⁶ The latter is favoured by C. Kirwan (trans.), *Aristotle's Metaphysics Books Γ, Δ, Ε* (Oxford, 1971), 9.

²⁷ Baltzly, "To an unhypothetical first principle" in Plato's *Republic*, 153; 'Aristotle and Platonic Dialectic in *Metaphysics* Gamma 4', 195.

what the mathematicians say for the sake of reaching their conclusions that is the object of the participle ἀναρροῦσα. But there is no call for such propositions as ‘There are no such things as triangles’ or ‘There are no odd or even numbers’ (or even ‘A straight line is not a line which lies evenly with the points on itself’)²⁸ to be destroyed by being exposed as self-refuting (even if such an unlikely thing could be done). For unlike the theses of Heraclitus, Parmenides, and the late-learners, no one (so far as I know) even professes to entertain such odd claims. Dialectic does not secure the propositions that are merely hypothetical in the mathematicians’ mouths by treating their contradictories as hypotheses and then destroying them. Such a game would hardly be worth the candle, because their contradictories are at best based on misunderstandings, at worst *plainly* false (and not e.g. false because of some metalinguistic claim that what can be true can be stated when it is true). If we think of characters who did actually contradict some of what the mathematicians said (although we hear nothing of them in the dialogues)—I am thinking here of the Protagoras of *Metaph.* 998^a37–9, who ‘refutes’ the geometers by saying that the circle touches a ruler not at a point²⁹—then the right tactic for making mathematics secure is surely not to argue that such people *have refuted themselves*, trying to say something that could not in fact be said if it were true, but only that they have misunderstood the mathematicians (which is something both Plato and Aristotle would say of Protagoras: the former, that he does not realize that the mathematicians hypothesize for the sake of the super-sensible world, the latter, that he is ignorant of the *qua*-operator).³⁰

Instead, I take it that when Plato speaks of the superiority of dialectic to mathematics, he has the same sort of problem with the

²⁸ This would be the contradictory of Euclid’s fourth definition, ‘A straight line is a line which lies evenly with the points on itself’.

²⁹ I avoid the question of whether or not the claim that the line touches a circle at a point would count as a hypothesis for Plato’s mathematicians, or as a consequence of prior hypotheses.

³⁰ In Baltzly’s defence, one might argue that Parmenides’ claim that there is just *one* thing is inconsistent with the mathematicians’ hypothesis that there are numbers i.e. *pluralities* of units; and further that one might destroy Parmenides’ monist hypothesis by showing it to be self-refuting by e.g. arguing that if his hypothesis were true, then (a) it would have to exist in order to *be* true and (b) what it speaks of, the One, would have to exist to *make* it true, in which case (c) there are at least two things. But such a route would take us far from the texts and require deeply prejudicial interpretations both of Parmenides and of Plato’s understanding of him.

mathematicians' starting-points as Frege had with the definitions of later mathematicians. In the introduction to the *Grundlagen*, we read the following complaint, in which one might get the sense of Plato's problem if one understood 'hypothesis' for 'definition' throughout:

Most mathematicians rest content, in enquiries of this kind [sc. enquiries into the definitions of mathematical concepts], when they have satisfied their immediate needs. If a definition shows itself tractable when used in proofs, if no contradictions are anywhere encountered, and if connexions are revealed between matters apparently remote from one another, this leading to an advance in order and regularity, it is usual to regard the definition as sufficiently established, and few questions are asked as to its logical justification. This procedure has at least the advantage that it makes it difficult to miss the mark altogether. Even I agree that definitions must show their worth by their fruitfulness: it must be possible to use them for constructing proofs. Yet it must still be borne in mind that the rigour of the proof remains an illusion, even though no link be missing in the chain of our deductions, so long as the definitions are justified only as an afterthought, by our failing to come across any contradiction. By these methods we shall, at bottom, never have achieved more than an empirical certainty, and we must really face the possibility that we may still in the end encounter a contradiction which brings the whole edifice down in ruins.³¹

Barring only the talk of 'an empirical certainty', Frege's complaint here seems to me to be very Platonic. For in so far as Plato's mathematicians have not justified their hypotheses and thereby do not *know* them, to that extent their conclusions might, albeit contrary to all expectation, turn out to be mistaken. Moreover, Frege seems to hold that the best that can be expected of proofs conducted from unexamined principles is that 'no link be missing in the chain of deductions', which would correspond well with one way of taking *Rep.* 510 D 2, where the mathematicians are described as proceeding to a conclusion coherently (*διεξιόντες τελευτῶσιν ὁμολογουμένως*). The last word here can be taken as meaning that the mathematicians pursue their conclusion by means of coherent inferences, and that this much alone can be said in their favour.³² But as we know from a famous passage in the *Cratylus* (436 B 12–C 7), where the illustration is a mathematical one, this is no guarantee that any such

³¹ Gottlob Frege, *Die Grundlagen der Arithmetik*, trans. J. L. Austin (Oxford, 1950), p. ix.

³² This line appears to be taken by, among others, M. M. McCabe, *Plato's Individuals* (Princeton, 1994), 73.

inferences are *true*. Such a guarantee could come only from this together with *knowledge* of the starting-points, which is precisely what Plato's mathematicians do not bother to acquire. For Plato, it seems that mathematics as practised in his day *might* track the truth no less than dialectic, but its practitioners do not know this because they do not strive for the intelligibility characteristic of the better science. They do not know, nor seek to know, *why* what they think they know is true, if in the end it is.³³

But—and here we return to what might be meant by ‘destroying hypotheses’—anyone who makes such points as I hold Plato and Frege both make on this score is concerned to bolster the starting-points of mathematics in some way other than by arguing that their contradictories are false, or even necessarily false. For Plato, no less than for Frege, the contradictories of mathematical starting-points just are not germane to the discussion at all. And any operation performed on those starting-points so as to remedy a deficiency in our understanding of them will only very queerly be said to involve some sort of ‘destruction’. Consider a similar case. If you produce a valid argument by which you can infer *q* from *p*, then there is a sense in which you have destroyed *q*'s inconsequentiality with respect to *p*. Well, you can *talk* like that if you like; and it might even be that if you were prone to Plato's mystical moods in such intellectually refined contexts, you *would* actually want to talk like that. But if you cared for being understood as readily as possible, it is an oddly indirect and perverse way to put things. And for all his appealing mysticism we should not attribute such perversity to Plato unless we can help it.

Fortunately, Plato's texts generally carry some weight against translating *ἀναιροῦσα* as ‘destroying’ anyhow. For while Aristotle usually uses *ἀναιροῦσα* in its ‘destructive’ sense, which was certainly the dominant usage in his day, Plato hardly ever does, if at all. Forms of the verb occur most frequently in the *Laws*, active ones at 642 E 1, 870 D 3, and 914 A 3, middle ones at 914 B 6, 921 A 8,

³³ Hence Plato's repeated talk of the connection between mathematics and dreaming. At *Rep.* 533 B 9–C 1 the mathematicians dream of that which is (*τὸ ὄν*). The slave boy in the *Meno* has acquired beliefs about the geometrical theorem Socrates demonstrates ‘as if in a dream’ (*Meno* 85 c 9–10). I understand the haziness of their dreaming to indicate a lack of understanding rather than certainty. When the slave is advised, at 98 A, to tie down his beliefs with the *αἰτίας λογισμῶν*, the analogy with securing the statues of Daedalus (presumably by attaching them to something heavier than themselves) suggests the epistemological securing involved in relating beliefs to other more certain beliefs, which begets *understanding* of those posterior beliefs.

and 921 B 3. None of these forms, with a trivial exception I shall come to later, can mean ‘destroy’. The active forms (at least the first and third) have the same sense as the occurrence at *Ap.* 21 A 6, referring to a god’s action in ordaining or pronouncing on some matter (*ἀνείλεν*, ‘replied’, is the verb predicated of the Pythia when she tells Chaerephon that no one is wiser than Socrates). Of the middle forms, the first straightforwardly means ‘take up for oneself’ (the passage is discussing what to do with the man who holds to the principle that finders are keepers), while the other two again mean ‘take up’, referring to a contractor who has taken up a piece of work and charges a fee for it. Likewise, the occurrences of the verb in the *Phaedrus* at 233 C 2–3 and 243 C 5, both in the middle, have nothing to do with destruction but again connote a kind of taking up. Here it is the taking up of violent hostility (*ἔχθρα*)—English has the clichéd expression ‘to take up the cudgels’—which the non-lover will not be brought to by teething-troubles in relationships according to the first passage, and which the second passage says is typical of the behaviour of lovers, at least according to the sort of speeches Socrates deplors in the recantation of his first speech. Obviously the point is not that such lovers *destroy* enmity. Rather, they take it up for themselves in their aggrieved passion. Furthermore, the uses of the verb in later sections of the *Republic* both involve taking up: the passive form at 614 B 4–5 refers to the taking up of dead bodies after a battle (cf. *Menex.* 243 C 6), and the middle form at 617 E 7 means ‘take up for oneself’ as at *Laws* 914 B 6. In fact, the only place I have been able to find in Plato where one might plausibly translate a form of *ἀναρπεῖν* as ‘to destroy’, besides our disputed *Republic* passage, is at *Laws* 870 D 3, where we are told that fears bred of cowardice and iniquity can bring men to murder: for instance, when such men *ἀναιροῦσι θανάτοις* those who might divulge their secrets. Here you could translate *ἀναιροῦσι* as ‘they destroy’ if you like. For such men, in removing their potential betrayers ‘with death’, obviously destroy them. But the presence of *θανάτοις* allows you even here to avoid that option and translate the whole expression as ‘they take them away [i.e. despatch them] with death’.

Now even though Plato does not seem to use an available sense of a word in any other context, he might still be using it with that sense in our *Republic* 7 passage. But the plurality of kinds of ‘taking up’ that the verb means in active, middle, and passive forms—from

the taking up of the wallet on the wayside, and the taking up of the cudgels in a lovers' tiff, to the taking up of an odd job for money—all this suggests that if we can tell any story at all about how dialectic might 'take up' hypotheses for its own ends, then we will be justified in translating *ἀναιροῦσα* as I am urging. Fortunately there is such a story. The idea would be that, just as you would take an object into direct sunlight if you wanted to have the best possible look at it, so likewise dialectic takes up and presents the mathematicians' hypotheses to the unhypothetical principle (*ἐπ' αὐτὴν τὴν ἀρχήν*) with a view to explaining them in the light of that principle. This kind of 'taking up' will presumably involve arguing that any such hypothesis will bear the *συμφωνεῖν* relation from the *Phaedo* to the principle (which amounts to giving a justification or explanation for the hypothesis), so once it has been taken up into the hands of dialectic it lacks the unexplained, provisional status it had in the mathematicians' mouths. This is what it means to *ἀναρεῖν* hypotheses, and it is surprising no one has suggested it before, especially given the claim in 533 D 2 (D 2–3 in the new OCT) that dialectic *draws upwards* (*ἀνάγει ἄνω*) the eye of the soul.³⁴ Nothing destructive is going on, and rightly so—dialectic is a method of reinforcing the starting-points of mathematics with a deeper understanding of them, rather than trying to expose the shaky foundations of the essential element in the Guardians' education. Such reinforcement involves grasping hypotheses and appropriately connecting them with the unhypothetical.³⁵ So it seems as if it is either from coincidence or misunderstanding that Aristotle should use the same word with a quite different sense when speaking about the same topic.³⁶

I have argued that both philosophers share the same conception of the unhypothetical; that what is avowedly unhypothetical

³⁴ I am grateful to Bob Sharples for drawing my attention to this.

³⁵ My interpretation requires a repunctuation of the text, deleting the comma after *ἀναιροῦσα*, which is present in both editions of the OCT. (Slings's addition of a comma after *ἀρχήν* is quite compatible with my reading.)

³⁶ This disjunction is not meant to be exhaustive. There is at least one other possibility, suggested to me by Verity Harte, which I lack the imagination and space to discuss in any detail. It could be that Aristotle knew perfectly well what Plato was trying to say using *ἀναιροῦσα* in this context, but is for some reason twitting him by using the same word in a different sense. In that case the intertextual relation would not be one of coincidence or misunderstanding, but one of polemic. It might be relevant to this interpretation that Aristotle here uses the verb *ὑπομένειν* for a logical or dialectical relation, which Plato only ever does once, at *H.Ma.* 298 D 4 (and even that is debatable).

for Aristotle might also have been so for Plato; and that the intertextual relations on this topic are strong enough to cast doubt on some shrewd attempts to identify unhypothetical principles in Plato. But when it comes to the verb *ἀναίρειν*, I think those relations are constituted by either accident or mistake.

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