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Reading the $\pi \epsilon \rho \tau \rho \sigma \pi \eta$: Theaetetus 170c-171c¹

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Abstract

Two readings of the much-discussed $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ argument of *Theaetetus* 170c-171c have dominated the literature. One I call "the relativity reading". On this reading, the argument fails by *ignoratio elenchi* because it "carelessly" omits "the qualifications 'true *for so-and-so*' which [Protagoras'] theory insists on" (Bostock 1988: 90). The other reading I call "the many-worlds interpretation". On this view, Plato's argument succeeds in showing that "Protagoras' position becomes utterly self-contradictory" because "he claims that everyone lives in his own relativistic world, yet at the same time he is forced by that very claim to admit that no one does" (Burnyeat 1976b: 48). I discuss and criticise both readings, and present a third, according to which the point of the argument is, very roughly, that Protagoras is committed to *equating* truth and truth-for, and so, further, to their *intersubstitutability*. This further commitment proves fatal to his argument.

1. Sextus and the περιτροπή

Suppose I believe that "All beliefs are true", but also admit that "There is a belief that 'Not all beliefs are true". If all beliefs are true, the belief that "Not all beliefs are true" must be true too. But if that belief is true, then by disquotation, not all beliefs are true. So I refute myself by contradicting myself.²

Sextus Empiricus thinks that this is how Plato argues against Protagoras. He christens the argument, or perhaps the argument-form, the $\pi\epsilon\rho\tau\rho\sigma\pi\eta$ – the "table-turning" or "recoil" argument, as it has variously been called:³

³ "Table-turning" is the name used in Cornford 1935: 79; the name "recoil" is suggested by Blackburn 2005, Chapter 2, Section 1.

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 $^{^2}$ Self-refutation and self-contradiction are different things, as we shall see: cf. Mackie 1964. Their relationship is at most that of genus to species: contradicting myself is only one way of refuting myself. "At most", because if dialetheism is true then sometimes contradicting myself will not be refuting myself at all.

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One should not say that every appearance ($\phi\alpha\nu\tau\alpha\sigma'(\alpha)$ is true, because of the self-refutation ($\pi\epsilon\rho\mu\tau\rho\sigma\pi'\eta$), as Democritus and Plato taught us in their arguments against Protagoras. For if every appearance is true, then – in accordance with one appearance – it will be true that not every appearance is true. And thus the claim that every appearance is true will turn out false.⁴

This looks like a sound argument. However, most scholars think that Sextus is wrong to say that it refutes the Protagoras of the *Theaetetus*,⁵ and many scholars think that Sextus is wrong to attribute it to Plato.⁶

Why doesn't the argument that Sextus gives refute Protagoras? The commonest diagnosis, which in the past I have defended myself,⁷ is ignoratio elenchi. Protagoras never claims that "Every appearance is true"; he claims only that "Every appearance is true for the person to whom it appears". (So at Theaetetus 170a2 we don't have "What seems to each person, is"; we have "What seems to each person, is to the person to whom it seems.") The $\pi\epsilon\rho\iota\tau\rho\sigma\pi\dot{\eta}$ does not disprove this thesis; indeed it does not even address it. There is no inconsistency between "It is true for Protagoras that every appearance is true for the person to whom it appears" and "It is true for someone else that not every appearance is true for the person to whom it appears". There isn't even an inconsistency between "It is true for Protagoras that every appearance is true for the person to whom it appears" and "It is true for someone else that not every appearance is true period or simpliciter (absolutely true)". Sextus' argument works against the claim that every appearance is non-relatively true; but Protagoras' claim is only that every appearance is relatively true. So if Sextus' argument is understood in the most obvious way, as aiming to refute Protagoras by showing that he contradicts himself, it misses its target.

⁴ Sextus Empiricus, *adversus Mathematicos* 7.389-90. The translation is my own, as are all the other translations in the paper, unless noted.

⁵ This is the only Protagoras I am concerned with here. Very likely, if we get the *Theaetetus*' Protagoras straight, then we learn something important about the historical Protagoras. But for present purposes, that is by the way.

⁶ About Democritus it is harder to tell. Confusingly, one of Democritus' greatest followers, Epicurus, also held some form of the view that every appearance is true. Sextus knew this (see for example *adversus Mathematicos* 7.203) and was perhaps influenced in his formulation of Protagoras' views by his knowledge of his philosophical opponent Epicurus'. However, I can't pursue these issues here: see Everson 1990 or Taylor 1980.

⁷ Chappell 1995: 334, Chappell 2005: 113-115; cf. Bostock 1988: 90, Burnyeat 1976b: 41, McDowell 1973: 171.

2. The relativity reading of the περιτροπή

Is Sextus' argument the same as Plato's in *Theaetetus* 170c-171c? The commentators are less united over this. One group, headed in the recent literature by David Bostock, and before him by John McDowell (1973: 169-171), think that it is, and therefore that Plato fails to show that Protagoras contradicts himself. The $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ argument's conclusion only follows "if we carelessly omit the qualifications 'true *for so-and-so*' which [Protagoras'] theory insists on" (Bostock 1988: 90). Plato attacks a theory about truth without qualification; but what Protagoras offered was a theory about truth with relativising qualifiers. (I will call this the *relativity reading* of the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$.)

However, as Bostock and others (including me) have gone on to add, although Plato fails to convict Protagoras of self-contradiction, he does prove a different charge against Protagoras: self-defeat. Protagoras' position is not inconsistent, but it is pragmatically self-undermining. To assert p to others is to give them reason to believe p; to report p as my opinion is give them no reason at all to believe p. "If what [Protagoras] says is right then he has no claim on our attention" (Bostock 1988: 95, n. 19); "If Protagoras is right, then in the nature of the case we can be given no reason to accept Protagorean relativism . . . The deepest difficulty with a Protagorean relativist is not to refute his argument [but] to see what he says as an *argument* at all" (Chappell 2005: 114).

Another group of commentators, including Myles Burnyeat, Nicholas Denyer, and David Sedley, sees the argument differently. (For reasons that will appear, I shall give their readings of the argument the collective name "the many-worlds interpretation".) The many-worlds interpreters have their doubts about the relativity interpreters' reading of the $\pi\epsilon\rho\iota\tau\rho\sigman\eta$. I now think – recanting – that these doubts about the relativity reading are justified.⁸

The many-worlds interpreters are right to point out the unlikelihood that, if Plato wanted to make a good point about self-defeat against

⁸ My own doubts about the relativity reading first surfaced in print in a question at Chappell 2005: 99. McDowell suggests that the memory objection and the coveredeye objection to Protagoras (164c-165d) are both to be taken as not seriously intended by Plato, because both depend on a fallacious dropping of the qualifiers. But if that is right, then, I asked, "why does Plato present an argument against Protagoras – the $\pi\epsilon\rho\iota\tau\rho\sigman\dot{\eta}$ – apparently meant with full seriousness, that apparently involves the same sophistical dropping of qualifications?". I found I was unable to answer this question, either to help out McDowell's version of the relativity reading, or to help out my own.

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Protagoras, he would choose to do so by making a dubious point about self-contradiction. It's not as if Plato doesn't know how to make out the self-defeat argument without mixing it up with the self-contradiction argument. There are clear statements of the point about self-defeat at Cratylus 386c ("If wisdom and folly exist, then it is wholly impossible that Protagoras should be speaking the truth") and at Euthydemus 287a-b ("if no one ever makes mistakes ... then what in God's name are you two teachers of?"). In the Theaetetus itself, the point about self-defeat is already made at 161d8-e1: "If 'every person is the measure of his own wisdom', how can it be right to say that Protagoras is so wise that he can teach others for huge fees?" The same point is expanded on at 170a6-b6 -"Humans themselves believe that wisdom and ignorance are to be found among them" - and the point of this repetition is clear enough: it indicates Plato's dissatisfaction with Protagoras' response to the original objection (167d-e). This response was to replace the wiser/less wise distinction with the better/worse distinction (a distinction which will be scrutinised for its own sake in 171c-172b). If the $\pi \epsilon \rho \tau \rho \sigma \pi \eta$ argument at 170c-171c is really meant just to make the same claim about self-defeat as 161d-e and 170a-b, then Plato is repeating himself a second time, and this time without any clear motive. Moreover, by presenting what is really a point about self-defeat as if it were a point about self-contradiction, he seems to be muddying the waters unnecessarily.

Again, while the Principle of Charity is certainly an undependable hermeneutic tool – a little carelessness is not surprising even in a great philosopher – still it is hard to understand how Plato could have been as careless as the theory of relativity needs him to be. The relativity reading has it that Plato slips into presenting a bad argument by "carelessly omitting the qualifiers" for me or for you, etc. That might be credible in vacuo; but it surely isn't in context. We are asked to believe that Plato blunders in this way even though the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ is presented after eight Stephanus pages' worth (160e-168c) of close study of arguments like the covered eye objection (165a-d), the objection from memory (163c-164c), and the argument from adverbs (165d-e), all of which Plato evidently takes to be fallacious precisely because – as McDowell 1977: 63 notes – these arguments are careless about qualifiers in various ways.⁹ And we are asked to

⁹ Or is it that the περιτροπή argument too is meant as another example of how carelessness about qualifiers can vitiate an argument (so, in different ways, Lee 1973, Runciman 1962)? Surely not. The cues in the dialogue that prompt us to take the περιτροπή as fully serious are, to my mind, very clear. There is an obvious change

believe it in a context where the eight Stephanus pages prior to those (152b-160e) developed an epistemology and metaphysics of flux which has at its very beginning the distinction between the wind's being cold to you and its not being cold to me (152b) – and which has at its very end Socrates' attribution to Protagoras of the claim that "anyone who names something as existing, ought to speak of it as existing for someone, or existing as someone's, or existing relative to someone" (Theaetetus 160b9-10). "As Plato shows himself to be perfectly aware of the importance of the qualifiers elsewhere in the dialogue, it is hard to believe that their omission [in the $\pi\epsilon\rho\iota\tau\rho\sigman\eta$] is a simple error" (Emilsson 1994: 136).

3. The many-worlds interpretation of the περιτροπή

The relativity reading of the $\pi\epsilon\rho\iota\tau\rho\sigma\eta'$ will not do. Let us see if the manyworlds interpretation fares any better. The definitive¹⁰ statement of the many-worlds view is Burnyeat 1976b. Like other scholars, Burnyeat distinguishes between the thesis that "every appearance is true", and the thesis that "every judgement is true *for* (in relation to) the person whose judgement it is" (1976b: 39; cp. Burnyeat 1976a). Burnyeat labels these views "subjectivism" and "relativism" respectively, and argues, again like other commentators, that the authentically Protagorean doctrine is relativism, not subjectivism: "that is what the doctrine that man is the measure of all things originally stood for, not the crude subjectivism that Sextus refutes" (1976b: 39).

So what is Protagoras' relativism? It is here that the novelty of Burnyeat's reading becomes apparent (Burnyeat 1976b: 47):

of tone, and also a change of interlocutor, after 168c2. The clearest evidence of all is that Protagoras *answers* all Socrates' previous objections in his speech at 165e-168c. But he never answers the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ (168c-171c), the objection that benefit cannot be a relative notion (171c-172b) which leads into the Digression, and the objection from expertise and the future (177b-179b). It is natural to infer that Plato thinks that all three arguments, including the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$, are to be taken seriously. (As does Theodorus (179b6-9), despite his initial doubts (171c7).)

¹⁰ Definitive, but by no means the first (Taylor 1926: 326): "Reality itself is individual in the sense that I live in a private world known only to me, you in another private world known only to you... Thus if I say the wind is unpleasantly hot and you that it is disagreeably chilly, we both speak the truth, for each of us is speaking of a 'real' wind, but of a 'real' wind which belongs to that private world to which he, and only he, has access ... [Protagoras] denies the reality of the 'common environment'."

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Protagoras' theory is ... a theory of truth, and a theory of truth must link judgements to something else – the world, as philosophers often put it, although for a relativist the world has to be relativised to each individual. To speak of how things appear to someone is to describe his state of mind, but to say that things are for him as they appear is to point beyond his state of mind to the way things actually are, not indeed in the world *tout court* (for Protagoras there is no such thing), but in the world as it is for him, in his world.

Burnyeat's suggestion is that Protagoras' slogan, "What seems to each person, is to that person to whom it seems", should be understood as a doctrine about the "thought world of a subject": "true for x" means "true in x's world". Hence if Protagoras accepts that his doctrine is not true for me, this means that he accepts that his doctrine is not true in my world. But if his doctrine is not true in my world, then it is not true. For his doctrine is supposed to be true in anyone's world (Burnyeat 1976b: 48):

No one lives in a world in which his mere belief in a proposition is either a sufficient or a necessary condition for its truth (in that world). But that everyone lives in such a world is precisely what the Measure doctrine asserts. [Thus] Protagoras' position becomes utterly self-contradictory: he claims that everyone lives in his own relativistic world, yet at the same time he is forced by that very claim to admit that no one does.

On Burnyeat's reading, it turns out both that Protagoras' argument is an interesting one, and also that Plato's objection in the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ is cogent against Protagoras' actual position. Likewise with the closely similar readings of the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ offered by Denyer 1991: 97-100 and Sedley 2004: 57-59: "even if some beliefs can [be true for one person without being true for every other person], the belief that man is the measure could not be among them" (Denyer 1991: 100); "even in Protagoras' own world there are false beliefs, in direct contradiction of his own Measure Doctrine" (Sedley 2004: 59).

Why – we might ask at this point – doesn't the many-worlds interpretation go the same way as the relativity reading? "Is Plato being fair" (as Denyer 1991: 100 asks) "when he has Protagoras accept the other side's beliefs as true, instead of being merely true for the other side?" Here is Denyer's answer to his own question: "Yes, Plato is being fair. Protagoras cannot here concede only that the opinion of those who disagree with him is true for them. He must go further, and speaking for himself say that their opinion is true." Why must Protagoras "go further" here? Perhaps the last quotation from Burnyeat shows the reason most clearly. On the many-worlds reading, Protagoras is making a claim *about anybody's private world*: the claim that "There is no false belief in anybody's private

world". The trouble is that many people's private worlds contain the belief that "There are false beliefs in some people's private worlds". If this belief is true, then Protagoras contradicts himself (because some worlds contain false beliefs); but if this belief is false, then Protagoras still contradicts himself (because whichever world contains *this* belief contains a false belief). So, either way, Protagoras contradicts himself.

Very elegant. However, as Bostock (1988: 91) points out, there is a problem: on this reading, Protagoras "does *not* in fact treat the notion of truth as a relative notion, in any important way". More fully: although the many-worlds interpretation admits relativity *within* private worlds, what it has to say about private worlds – all of them – is in no way a relativist claim. If it is a truth at all that "There is no false belief in anyone's private world" – stated just like that, as Burnyeat thinks Protagoras states it – then it is, presumably, a universal and objective truth. So, if we are to use Burnyeat's language of "worlds", it is natural to ask in which world we might find these universal and objective truths about how things are in the private worlds. Not in any private world, evidently. But – look again at Burnyeat 1976b: 47, as quoted above – not in "the world *tout court*", either. "For Protagoras there is no such thing", since "for a relativist the world has to be relativised to each individual."

The many-worlds reading depends centrally upon the availability to Protagoras of objective thoughts about the contents of individuals' thought worlds: for example, and in particular, the thought that every thought in each such world is a true thought. The difficulty is that Protagoras is the last person to be in a position to have such thoughts. For as Burnyeat rightly points out, Protagoras denies the existence of any world beyond, not relativised to, the worlds of individuals. As we might say, there is nowhere for him to have these thoughts.

Good evidence that the many-worlds interpretation really does face this problem is provided by the many-worlds school themselves, in their insistence that the qualifiers are not repeatable for Protagoras – that is, that statements of the form "It is true for x that p is true for y" are disallowed. This obviously raises the question that I have just posed: "Where does Protagoras manage to have his objective thoughts about relativity?" To this the many-worlds interpreters cannot answer, as the relativity interpreters can, "In his own thought world". For to say this is to assent to the claim that "For all p and all y, it is true for Protagoras that p is true for y", which obviously involves the repeatable qualifiers that the many-worlds reading forbids.

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There is also the question "Why shouldn't we repeat the qualifiers?" To this question, one clear answer comes from Burnyeat. Here is his argument against the possibility of (indefinite) reiteration of qualifiers such as "It is true for Protagoras that ..." (Burnyeat 1976b: 59):

[Protagoras'] position is supposed to be that x is F or p is true for a just in case it appears to a or a judges that x is F or p is true; and this is not an arbitrary connection that can be abandoned without our losing grip on the notion of relative truth. Protagoras, as Socrates keeps saying, is a clever fellow, but he is not so clever that there is no limit to the complexity of the propositions he can understand and so judge to be true. Therefore, the relativistic prefix "It is true for Protagoras that...", unlike the absolute prefix ["It is true that..."], admits of only limited reiteration. At some point, though we may not be able to say just where, Protagoras must stop and take a stand. And once committed, if only in principle, to an absolute truth, he can no longer maintain that all truth is relative.

The case that Burnyeat makes here against repeating the qualifiers seems problematic. Some of the problems are not essential to the main argument. One unnecessary problem is this: Burnyeat argues that the relativistic qualifiers cannot be indefinitely repeatable on the grounds that, if they were, then Protagoras would not be able to grasp most of the resultant propositions. If that followed, then *pari passu* the absolute qualifier "It is true that . . ." could not be indefinitely repeatable either; but it obviously is. More generally, there is no good reason why the question which propositions *there can be* should have anything to do with the question which propositions *Protagoras can grasp.*¹¹

Again, contrast Burnyeat's denial that the qualifiers are repeatable *indefinitely* with Denyer's and Sedley's denial that they are repeatable *at all*. The latter claim seems easier to defend. Once it is admitted, as Burnyeat does admit, that the qualifiers can be repeated at all, it becomes harder to see why there *must* be a point somewhere – "though we may not be able to say just where" – beyond which they can't be repeated any more.

This brings us to the main and essential difficulty with Burnyeat's argument. This is that it seems to beg the question. Why can't Protagoras

[&]quot;""But perhaps 'It is true for Protagoras ...' applies only to propositions that Protagoras *actually* judges, so that the limits of the iterability of this qualifier are precisely the limits of Protagoras' psychology. It then becomes obvious why 'It is true for Protagoras ...' is not infinitely iterable." Perhaps that is right. But if it is, we are still in the dark as to why, as Burnyeat claims, we will get the absolute qualifier "It is true that ..." turning up at the end of any actual iteration of "It is true for Protagoras that ..."

repeat the qualifiers indefinitely? Because, says Burnyeat, if he does this he will fail to make adequate allowance for the fact that a "commitment to truth absolute" "is bound up with the very act of assertion" (Burnyeat 1976b: 59^{12}): "to assert is to assert that $p \dots$ and if p, then p is true (full stop). This principle, which relativism attempts to circumvent, must be acknowledged by any speaker."

Even if Protagoras' relativism does prevent him from making any assertions properly so called, Protagoras might just bite this bullet, and admit that on his theory assertion, or what realists about truth call assertion, is strictly speaking impossible. If we admit this, will we find that "our grasp on what the position even means begins to wobble"?¹³ Only, I suspect, if our conceptions of meaning and assertion are themselves realist ones. The principle that Burnyeat asserts can apparently be "circumvented", that is, modified so as to admit (some form of) relativism, in a wide variety of ways. For instance, we could borrow a trick from Crispin Wright and amend the principle to read "if p, then p is superassertible" – where "superassertible" means, as it presumably always does, "superassertible for some asserter or other".¹⁴ In the end, Burnyeat's response simply reaffirms that there is no serious alternative to realism about truth. But it was Protagoras' very first move to reject realism, and suggest that we look for an alternative. In Maria Baghramian's words: if "Plato was implicitly presupposing the very conception of truth that was being attacked by Protagoras in the 'man is the measure' doctrine", then "Plato has begged the question against Protagoras" (Baghramian 2004: 33). Thus a more general - strategic - problem emerges here for Burnyeat and the other many-worlds interpreters. The many-worlds interpreters go to great lengths to deny that Protagoras repeats the qualifiers (or, in Burnyeat's version, that he repeats them indefinitely). Why? Apparently, because if Protagoras does do this, then Protagoras fails to make any genuine assertions. But why must we work so hard to prevent it turning out that Protagoras

¹² Cf. Denyer 1991: 100: "It would be absurd for me to say 'If something is only my opinion, then it is not true; mind you, that is only my opinion".

¹³ I am quoting Putnam (1981: 123), who defends a refusal to move to "total relativism" that in some ways parallels the many-worlds view's refusal to countenance multiple qualifiers.

¹⁴ The classic discussion is Wright 1993. As participants in the contemporary realism/anti-realism debate are well aware, this difference between superassertibility and truth is a crucial one, since it implies that superassertibility is a relative concept in a way that truth is not at all. I will come back to this, tangentially, right at the end of the paper.

makes no genuine assertions? That, after all, is precisely the upshot of the relativity reading.

The state of the debate is now this: the many-worlds interpretation says that "Protagoras mustn't repeat the qualifiers, because if he does he'll be wide open to the charge of failure to make any genuine assertions"; whereas the relativity theory says that "Protagoras *does* repeat the qualifiers, and therefore *is* wide open to the charge of failure to make any genuine assertions". You need not be a rocket scientist to reach the conclusion that this is not the most fruitful dialectical stand-off in the history of philosophy. This should be enough to determine a decision to try and move on from the opposition between what I've called the many-worlds and relativity readings, and find some third way of seeing the $\pi\epsilon\rho\tau\rho\sigman'$ that gets beyond the problems that beset them both. I shall do this in Section 3.

First, having already argued to determine this decision, let me add one more argument to over-determine it. I haven't yet discussed David Sedley's answer to the question "Why shouldn't we repeat the qualifiers?" Here it is (Sedley 2004: 58):

According to the Measure Doctrine, every truth is relativised to some judging subject, whether an individual or a group. But no truth is, or could be, hierarchically relativised to *two or more* subjects. That is, there are no truths of the form 'For X, such and such is the case for Y'. The qualifier 'for X' means 'in X's world', and although Y may have a place in Z's world, Y's world does not. The single-relativisation assumption is never stated, but it seems to be unfailingly observed, and once we appreciate that to relativise a truth is to locate it in someone's world it should be clear why this would simply make no sense.

I take it that Sedley's main argument here is the interesting thought that to repeat the qualifiers will be to put one person's world inside some other person's world. So when we say, for example, "For X, p is true for Y", we are putting Y's world inside X's, and when we say "For Y, p is true for X", we are putting X's world inside Y's. The exponent of repeatable qualifiers must allow us to say both these things. But if we do say both of them, then X's world will be a part (presumably a proper part) of Y's world, while Y's world is a part (again, presumably a proper part) of X's world. That is logically impossible: no two things can be proper parts of each other. So repeating the qualifiers is out because it implies this logical impossibility.

This is the best argument I know against repeating the qualifiers; but it still isn't successful. Certainly we will violate the logical principle that no two things can be proper parts of each other if we try to locate the

whole of X's world within Y's world, while simultaneously locating the whole of Y's world within X's world. But we can have repeatable qualifiers without going this far. All we need to do is locate some part of X's world within Y's world, while simultaneously locating some part of Y's world within X's world. In that case, there can, without any paradox, be some p for which it is true to say that "For X, p is the case for Y", or "For Y, p is the case for X". In such cases – indeed in any case where it is not the whole of worlds that we are trying to place inside each other – repeating the qualifiers implies no logical impossibility at all.

"But if some part of X's world is located within Y's world, there is no good sense in which it is still a part of X's world." Not true: the part in question can be relativised first time to X's world, and second time to Y's world. Multiple relativisation can explain how something can, in different ways, be part of two or more different worlds at once; single relativisation can't.

That this is a big advantage of multiple relativisation becomes obvious when we consider a further – and completely disastrous – consequence of the single-relativisation assumption. This is that the single-relativisation assumption implies that second-order belief is impossible. Proof: Protagoras equates "x believes that p" with "p is true for x".¹⁵ So consider the case of a second-order belief: "x believes that p", where p = "ybelieves that q". By one round of substitution, Protagoras must rewrite this instance of "x believes that p" as "p is true for x"; by a second round of substitution, he must rewrite it as "'y believes that q' is true for x"; by a third round, he must rewrite it as "'q is true for y' is true for x". But the single-relativisation assumption is the assumption that Protagoras believes that any proposition of the form "'q is true for y' is true for x"

¹⁵ Emilsson 1994: 142 remarks that the many-worlds interpreters might query this, citing Burnyeat's rejection of the suggestion made by Passmore (1961: 67) that "is true for x" means the same as "seems true to x" or "is believed by x". Burnyeat 1976b: 47 writes: "Protagoras must mean more. Otherwise why should he press us to adopt his relativised idiom and trumpet the equivalence of 'It is true for x that p' and 'It seems to x that p' as a substantive and important discovery about our beliefs?"

To this I reply, first, that it is not self-evident that the "more" that "Protagoras must mean" must be the "more" that the many-worlds reading has in mind. It might equally be what the relativity theorists say it is – the "important discovery about our beliefs" that all truth is truth-for. And second, Burnyeat himself agrees that, for Protagoras, "is true for x" and "is believed by x" are at least co-extensional. So even if Burnyeat is right that these phrases do not have the same meaning, my argument stands that the many-worlds interpretation cannot allow higher-order propositional attitudes.

is ill-formed. Therefore the single-relativisation assumption, when taken together with Protagoras' other views, obliges him to believe that any proposition stating a second-order belief is ill-formed. Indeed, it forces him into a blanket ban, not only on beliefs of any order higher than first, but on any propositional attitudes whatever of higher order than first. Protagoras would have to report any second-order propositional attitude as an appearance to one person about an appearance to another person; but this means that any such report would have the form "q appears to y' appears to x". As we have just seen, the single-relativisation assumption bans this form of proposition.

Does Burnyeat deal better with this problem than Denyer and Sedley, because he allows some reiteration of the qualifiers, and only forbids their indefinite reiteration? Not really; it is only a little less problematic to claim that for example, all third- or fourth-order propositional attitudes are logically ill-formed than to say this about all higher-order propositional attitudes without exception. However long the postponement of the point beyond which further reiteration of the qualifiers is forbidden, the problem remains a sharp one so long as we keep in mind the distinction, noted above, between the propositions *that there can be* and the propositions *that someone* (or anyone) *can grasp*.

It is disastrous for Protagoras to be committed, as he is on the manyworlds interpretation, to the absurdity of banning higher-order propositional attitudes. If Protagoras was really committed to this absurdity, then we might expect Plato to notice the commitment, and criticise Protagoras for it. Plato shows no sign at all of doing that. This suggests an argument *e silentio* against the many-worlds reading, which should be put in the balance against the many-worlds school's own argument *e silentio*, that the qualifiers are never repeated in the text of the *Theaetetus* (Sedley 2004: 58, as quoted above).¹⁶ To my mind at least, it outweighs it.

That concludes my argument against other readings of the $\pi\epsilon\rho\iota\tau\rho\sigma\pi\dot{\eta}$. It is time for me to offer my own reading.

¹⁶ The text of the *Theaetetus* may not contain any repeated qualifiers, but it does contain second-order propositional attitudes, e.g. 198b4-6: "The person who holds these different knowledges, by taking them into possession in that aviary of his: we say he *knows*". But perhaps the many-worlds theorists would dismiss this evidence as irrelevant, since it does not come from a *Protagorean* context.

4. A third reading of the περιτροπή

I begin by endorsing a suggestion of Burnyeat's: the key to interpreting the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ is how we interpret the theory of flux. In this sense, there is no important distinction between the views advanced by the characters whom the *Theaetetus* calls "Protagoras" and "Heracleitus"; for "what [the] relativistic world will be like if Protagoras' theory of truth is taken seriously, the dialogue explains in terms of the Heraclitean doctrine of flux" (Burnyeat 1976b: 47). The relation between the doctrine of flux and Protagoras' man-measure relativism is, I suggest, very close indeed: the two theories take the same basic idea, and work out its application to *substance* and *truth* respectively.

What is the basic idea in question? It is a view about contradictions and how to deal with them. Plato's own example of an apparent contradiction (*Theaetetus* 152b) is the one between "The wind is cold" (your view) and "The wind is not cold" (my view). I will use this example to spell out Protagoras' basic idea about how to treat contradictions, and show how it contrasts with Plato's treatment of them (which I'll remind the reader of first).

To an apparent contradiction like the cold-wind case, three possible responses are immediately obvious:¹⁷

- a. We could say that the apparent contradiction is only apparent. The views are both views of the same wind, and they really do contradict each other; however, they are not both correct views. Therefore, we need not admit that contradictions are possible.
- b. We could say that the apparent contradiction is only apparent. Both views "of the wind" are correct, but it is not the same wind that they are views of. Since these correct views do not really contradict each other, we need not admit that contradictions are possible.
- c. We could say that the apparent contradiction is real. Both views of the wind are correct, and it is the same wind that they are views of. Since these correct views really do contradict each other, we must admit that contradictions are possible.

Option (c) obliges us to admit that contradictions are possible (that is, can be true). As almost all commentators would agree, this makes it unattractive to Plato himself. Suppose we find ourselves considering a domain

¹⁷ A broader and deeper defence of the admittedly controversial view presented here of Plato's epistemology cannot be given in this paper, but see Chappell (2005).

where judgements of the form "is and is not" are tempting – as they are, Plato would concede, in cases like the cold-wind case. Then the moral to draw, Plato would say, is not that contradictions can sometimes be true, as for example in this domain. The moral to draw is rather that this is a domain where *truth* is not even possible. To get at truth, we need to move to some other domain, in which truths will become directly accessible, and the reasons why contradictions *appeared* to be true in the former domain will come into view.

The names of these two domains are perception (equated in the *Republic* with $\delta\delta\xi\alpha$) and knowledge. Bare perceptual data often seem to present us with contradictions – for example, perspectival variations about the size of the sun (Heracleitus DK 12B3: "[The sun is] as broad as a man's foot"; cp. Descartes, *Discourse* Part 4 (CSM 1: 131)), or the shape of a tower (Sextus, *Outlines of Pyrrhonism* 1.118); or, indeed, the kind of perspectival disagreements over what is beautiful, just, or holy mentioned at *Republic* 479a. The way to deal with these contradictions, says Plato, is not to accept them, but to transcend them. It is to look for the context of objective understanding in which we can get beyond the apparent contradictions to the truths that explain why they appeared in the first place (*Republic* 479a-d):

... the many opinions which the common people take for granted, about 'beautiful' and all the others – these opinions are all at sea, rolling around in somewhere between What Is Not and What purely Is.... Those who gaze on the many 'beautifuls', but do not see The Beautiful Itself, and are unable to follow anyone else if they try to lead them towards it; and those who contemplate many cases of justice, but not The Just Itself, and are the same with all the other Forms – we shall say that they have belief about all these things. Yet for all these things that they have belief about, they have *knowledge* of not a single one of them [Whereas] those who gaze on the things themselves, Beauty and Justice, which are always alike and unchanging ... Won't we say that they have knowledge of these things, not belief?

Thus Plato, familiarly, rests his whole case for his own philosophy on the impossibility of true contradictions. Rather less familiarly, Protagoras does the same (*Theaetetus* 152b2-8):¹⁸

¹⁸ Fine 2003: 189: "Protagoras *wants* to preserve PNC [the principle of noncontradiction]; he would be worried if it could be shown that he is committed to violating it... Protagoras could just say: 'Of course [the Measure doctrine] violates PNC, given that people hold conflicting beliefs. But what do I care?' It's precisely because he *does* care that Plato troubles to offer him Heracleitus' support." Another supporter of the view that Protagoras does care about avoiding violations of PNC is Gottlieb 1994.

Socrates. Doesn't this sometimes happen? When "the same" wind blows, one of us gets cold and the other does not; or both get cold, but I get extremely cold and you only slightly.

Theaetetus. Yes, lots of times.

Socrates. In such a case, shall we say that the wind in itself is either cold or not cold? Or shall we accept Protagoras' analysis: that the wind is cold to the one who feels cold, but not cold to the one who does not feel cold? Theaetetus. Apparently so.

The first of the only two alternatives offered here is (a) "that the wind in itself is either cold or not cold" – despite the appearance that it is both. This of course is Plato's own preference; the rhetorical question that introduces it is left hanging in a (no doubt) significant silence. The other alternative on offer is (b) "that the wind is cold *to the one who feels cold*, but not cold *to the one who does not feel cold*"; and we are told explicitly that this is "Protagoras' analysis".¹⁹ There is a third alternative, even though this is not on offer here: (c) that the wind is *both cold and not cold*. This alternative, the view (as I put it above) that contradictions can be true, is not mentioned here for a simple reason: that both Plato and Protagoras take it to be absurd.

This point that Protagoras and Plato agree that there can be no true contradictions²⁰ is important for at least two reasons. First, it is vital to understanding Plato's argumentative strategy against Protagoras in the *Theaetetus*. The strategy is to drive Protagoras, as far as possible, from alternative (b) to alternative (c), and thus into a position that Protagoras himself regards as untenable.

Second, there have been talented interpreters of Plato and Protagoras who have been inclined to think that Protagoras does affirm contradictions. For example, Cornford (1935: 33-4) suggests that the point that Protagoras draws from the cold-wind argument is that *both* "the wind is warm" and "the wind is cold" are true: "Warm' and 'cold' are two properties which can co-exist in the same physical object. I perceive the one, you perceive

¹⁹ As my translation in Chappell 2005 has it. Literally the Greek is: "Or shall we be persuaded by Protagoras that".

 $^{^{20}}$ If I am right at Chappell 2005: 60, Protagoras and Plato also agree on *why* disagreements like the one about the cold wind tend to imply contradictions. The reason is that "If we had grounds for saying that either was true, then we would have equally good grounds for saying that both are true". That point about the equal evidential status of all subjective appearances is a familiar motif in the history of scepticism – and in contemporary students' most typical objections to moral realism.

the other". Cornford apparently (and rather dubiously) infers that this means that a contradiction is generated: "It is probable that Protagoras held... that the wind is both warm and cold". Against this suggestion, we should note that much of the detail of the Protagorean/Heracleitean position in Theaetetus 151-184 is generated by Protagoras' desire to avoid contradiction by inserting qualifiers into statements that would otherwise lead to contradictions. So, most importantly, with the cold wind. The crucial move that Protagoras proposes, and on which the remainder of his theory depends, is the move from the formula "cold simpliciter and warm simpliciter" to "cold for you and warm for me". The whole point of this move is that the second formula, unlike the first, enables us to speak without contradicting ourselves. (For more evidence of this Protagorean practice of inserting qualifiers to avoid contradictions, see for example 154a4-9, 156d-157c, 157e-160d, 165c2-d1, 166b1-7, 166c2-7.) If Cornford thinks that Protagoras is not concerned to avoid contradicting himself, he has a huge task of reinterpretation ahead of him.

Another scholar who argues that Protagoras means to deny the law of non-contradiction is Kerferd (1949). A third is Waterlow (1977). Both Kerferd and Waterlow face the same objection as Cornford – that if their reading of Protagoras as tolerating (or perhaps embracing) contradictions is correct, then it is very hard to see our exegetical way through *Theaetetus* 151-184.²¹

More recently Graham Priest (2004) has suggested that, at any rate, "Aristotle appears to have taken Heraclitus, Protagoras and other Presocratics to be dialetheists, even trivialists";²² "their views", Priest reports, "triggered his attack in *Metaphysics*, Book Gamma." I dispute this. I don't think that the relevant passage in *Metaphysics* Gamma *does* show Aristotle treating Protagoras and the others as deniers of the law of non-contradiction. (Hence, for example, 1005b25 says "... [to affirm contradictions], just as *some think* Heracleitus does", not "... just as Heracleitus *does*".)

Professor Priest's remarks may have been influenced by the views of Waterlow (1977: 26): "We know from Aristotle that there were philosophers, 'the followers of Protagoras' among them, who denied or at any rate sincerely claimed to deny the law of non-contradiction." But does

²¹ There is more to say about Waterlow's interpretation of the $\pi\epsilon\rho_1\tau\rho_0\pi\dot{\eta}$; see Section 4.

 $^{^{22}}$ Dialetheism is the view that some contradictions are true; trivialism is the view that all contradictions are true. For more on these matters see Priest (2004).

Aristotle actually say this? It seems to me that the nearest he comes to it is at 1005b35, which says only "there are some" who deny that law, with no attempt to identify them; and at 1009a6, which reads "But from this view there also comes Protagoras' $\lambda \delta \gamma \circ \varsigma$, and it is equally necessary for both [sides of a contradiction] to be [true] or not." There is no reason to assume that Aristotle's point here is that Protagoras *asserted* this $\lambda \delta \gamma \circ \varsigma$ of the denial of the law of non-contradiction as part of his intended position – as opposed to *ending up* denying the law of non-contradiction, as a corollary of his position that he did not intend at all. Aristotle's point against Protagoras (and the others) is not that Protagoras *explicitly affirms* contradictions. Instead, it is that Protagoras' position is bound to *push him towards* affirming contradictions. In other words, Aristotle is using the same strategy against Protagoras as I say Plato uses: he is seeking to drive Protagoras from what I called alternative (b) to alternative (c).

So Plato and Protagoras both want to reject alternative (c). Protagoras' idea – this is alternative (b) – is that we can avoid contradictions such as the one in the cold-wind case by relativising the claims that seem to generate them to particular perceivers. Plato retorts that Protagoras cannot do this without slipping from alternative (b), relativism, to alternative (c), self-contradiction. Let us now look more closely at how Plato develops this thesis – a thesis which, I shall argue, he nearly, but not quite, succeeds in proving.

Let us recall once more Burnyeat's fruitful suggestion that a good reading of the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ will also be a good reading of the theory of flux. In the theory of flux, Protagoras offers an analysis of what common sense would call substance, as *appearance-to*. This analysis leads us to the conclusion that there are no stable and objective *things*; there are only the coincidences between "motions" that produce appearances to particular individuals (*Theaetetus* 160b4-c2):

Whether the active element and I *are* or *come to be*, we are or come to be *for each other*... necessity binds our essences to each other, even though it does not bind our essences to anything else – not even my essence to me, or the active element's essence to the active element ... anyone who names something as existing, ought to speak of it as existing *for someone*, or existing *as someone's*, or existing *relative to someone*; and likewise if he names it as becoming. But he must not say that it either is or comes to be in and of itself; and no one else should let him say that. This is the meaning of the theory that we have been exploring.

This analysis of substance is what we would call a *reductive* analysis of substance. Its conclusion is that there is *nothing more* to substance than

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appearance-to; appearance-to is *all anyone could properly mean* by talking, or attempting to talk, about substance, or a metaphysics of objects and properties. Properly philosophical discourse will avoid talk of things existing in their own right. Indeed it will avoid all language "that implies any measure of stillness" (157b5); even though, in practice, "custom and ignorance" (157b2) often lead us to talk in such ways. "For" – as Socrates' Protagoras bitingly observes – "when the multitude twist ordinary language in whatever way occurs to them, they create all sorts of illusory philosophical puzzles for each other" (168c1-2). I have already suggested that there are good reasons for understanding Protagoras' analysis of truth in as close a parallel as possible to his analysis of substance. So should we say that Protagoras is also offering a reductive analysis of truth, as truth-for? My proposal is that that is exactly what we should do.²³ To see why, begin with the *Theaetetus*' first statement of Protagoras' view:

152a2 Socrates... Protagoras, or so I've heard, held that man was the measure of all things: of those that are, that they are; of the things that are not, that they are not. No doubt you've read about this? Theaetetus. Yes, often.
Socrates. Now isn't this roughly what he says: that "Particular things are to me just as they appear to me, and are to you just as they appear to you"?
152a10 Theaetetus. Yes, he does say that.

In these well-known words, Plato invites us to interpret Protagoras' slogan that "man is the measure" by filling it out into the doctrine that *appearance to* (or truth for)²⁴ man is the measure *of truth*; that what it is for something p to be true, is simply for p to appear to (or be true for) someone. This is already, in outline, a reductive analysis of truth as appearance-to or truth-for; we already have the point made here that

²³ Gail Fine thinks that I was already saying something like this in Chappell (1995), where my view, as she reports it, was that "'true' *means* 'true-for-a-person'" (Fine 2003: 187, n. 10). Fine seems right about that: after all, Chappell 1995: 337 does assert that if Protagoras tells us that "Protagorean relativism is true", then "by his own account, this *means* only that Protagorean relativism is true for him" (first emphasis added). But my 1995 article did not do much to develop this view that Protagoras' thesis is about the meaning (specifically, the reference) of the predicate "true". This paper does develop it, by way of the notion of a reductive analysis.

²⁴ In what follows I shall use these terms interchangeably, on Protagoras' own authority: 151e-152b. The sense in which Protagoras thinks that truth is appearance-to is, of course, slightly different from the sense in which he thinks substance is also appearance-to.

appearance-to is *all there is* to truth. I observed above that the notion of appearance-to is central to the discussion of the cold-wind case, and the reductive analysis of substance that grows out of it in 151-160. The same notion is re-emphasised when Socrates comes back to the question of truth, and so to Protagoras' slogan, in the lead-up to the presentation of the $\pi\epsilon\rho_1\tau\rho_0\pi\dot{\eta}$:

170a2-4:	Socrates. "What seems to each person, is to that person to whom it seems."
	Doesn't Protagoras say that?
	Theodorus. ²⁵ Yes, he does.
171a4:	Theodorus Yes that is necessary at least if it is or is not according to

171a4: *Theodorus*. Yes, that is necessary, at least if it is or is not according to each person's opinion.

The point here is the same as before: appearance-to is nothing less than truth, and truth is nothing more than appearance-to. Protagoras' book, as its title shows us, was a theory about truth; and the theory of truth that it offers is a reductive analysis of that concept, as truth-for.²⁶

This is the basis for my suggestion that Protagoras' analyses of substance and of truth are both what we would call *reductive* analyses. "What *we* would call": I don't claim that *Plato* has any term corresponding to my term "reductive analysis". But I don't need to claim that. Even if Plato does not have the term, he certainly has the concept of a reductive analysis. For instance, a series of reductive analyses of justice are attacked in *Republic* Book 1. Perhaps the most famous of these is the first proposal, Polemarchus' suggestion – following Simonides – that justice is no more than "repaying his debts to each person" (*Republic* 331e3). The proposal fails because the concept of justice has normative properties that the concept of repaying debts does not share; and where x and y do not have all

²⁵ Long (2004: 36-37) finds it significant that the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ is presented with Theodorus as interlocutor, not Theaetetus: "The reason for this return to an objective sense of truth is the fact that *Theodorus* is the interlocutor here. A sober mathematician would be the last person we should expect to take exception to the use of unrelativised terms... The voice of Theodorus is thus... indispensable to the refutation of Protagoras." This seems to me an indecisive argument. We can with equally good textual support suggest that Theodorus is introduced to *ironise* Plato's anti-Protagorean arguments (cf. Lee 1972), or that his introduction has no big philosophical significance at all – it is just a matter of variation for the sake of good literary style.

²⁶ Perhaps the reductive nature of Protagoras's analysis is hinted at by his book's alternative title, καταβάλλοντες ("Overthrowers": see DK 74B1, and Sextus *adv*. *Math.* 7.60).

their properties in common, Leibniz's Law – accepted at least implicitly by Plato avant la lettre – tells us that x and y cannot be identical. Or again, there is Euthyphro's proposal (Euthyphro 7a1) that holiness is no more than "what is dear to the gods". The proposal fails because the concept of holiness has normative properties that the concept of "what is dear to the gods" does not share, for example, the property of being obligatory for mortals; and where x and y do not have all their properties in common, x and y cannot be identical. A third example comes from the Theaetetus itself. Theaetetus suggests at 151e3 that "knowledge is nothing other than perception". This proposal fails for the same reason as the others: knowledge cannot be "nothing other than perception" because the concept of knowledge has normative (and other) properties that the concept of perception does not share; and where x and y do not have all their properties in common, x and y cannot be identical. And so on through a wide range of other, very familiar, Socratic arguments (for example, Protagoras 355b);²⁷ in fact Socrates spends most of his time discussing and rejecting, one after another, the reductive analyses that most appealed to his contemporaries. His strategy of argument against proposed reductive analyses is generally the same. In each case he aims to show that the analysandum and the analysans do not share all their properties in common, because he is well aware that "identicals" that are not indiscernible are not identicals at all.

Reductive analyses are a familiar and important part of contemporary philosophy. A good reductive analysis, we like to think, will be an identity statement, or schema for constructing identity statements; but it will also link two layers of putative reality which, on the face of it, have quite different characteristic properties. The tension between these two desiderata is obvious and familiar. Take one well-known example from contemporary philosophy of mind. A reductive analysis of mind such as Armstrong 1968's is supposed to be able to deliver the conclusion that

²⁷ Thanks to David Sedley for this example. It is an especially good example, because something like the characteristic modern concern with the intersubstitutability of terms is so clear in this passage: "That all this [sc. the idea of being overcome by pleasures] is absurd will become obvious, if we do not simultaneously use a multiplicity of terms – 'pleasant' and 'painful', 'good' and 'bad'. Rather, since there have turned out to be only two things here, let us address them by two names: first referring to them as good and bad, then as pleasant and painful'' (*Protagoras* 355b).

Another example: we might fairly say that the covered-eye objection (*Theaetetus* 165a-d) is all about what happens if we treat "perceives" and "knows" as intersubstitutable terms.

minds are brains – "are" of identity.²⁸ Yet it seems obvious that brains have characteristics (weight, colour, semi-liquidity) that no mind has; and conversely minds have characteristics (creativity, numeracy, a sense of humour) that no brain has. So it seems the reductive analyst of mind must deny either what seems obvious, or the indiscernibility of identicals. Otherwise, he will have to admit that his reduction fails, and that brains and minds are not identical after all.²⁹

This, I suggest, is the form of the challenge that Plato's presentation of the π εριτροπή sets for Protagoras – a challenge which, quite possibly, could equally well apply *mutatis mutandis* to any reductive analysis that involves an identity claim. The challenge is a dilemma. Either Protagoras' reductive analysis succeeds in establishing an identity between truth and appearance-to/ truth-for, or it does not. If it does not, then it fails in its own terms: the whole point of Protagoras' arguments is to establish just this identity between truth and truth-for. If, on the other hand, Protagoras' reductive analysis *does* succeed in establishing this identity, then there can be no difference in the logical properties of truth and truth-for. Whatever you may say for the one, you may say for the other - and in particular, there can be no objection to rewriting any claim of the form "p is true for X" as "p is true". So if Protagoras chooses this horn of the dilemma (and the assumption that he consistently does will explain why Plato pays the other horn so little attention), Protagoras himself is making the fatal equation that the relativity reading calls carelessness about the qualifiers. Perhaps that is one reason why Plato spends so much time in 160-168 discussing arguments that are careless in just this way.

Moreover, Protagoras obviously cannot avoid this fatal equation by insisting on reinserting the qualifiers. To do that is to insist that truth and truthfor have different properties. By Leibniz's law, to insist on this is to concede that truth and truth-for are different things. In other words, it is to concede that Protagoras' reductive analysis fails. This is why it is no good for Protagoreans (or relativity theorists) to cry foul when Socrates

²⁸ Armstrong 1970: 67: "man is nothing but a physico-chemical mechanism"; 73: "we can identify these mental states with purely physical states"; 75: "the mental states are in fact nothing but physical states".

 $^{^{29}}$ Perhaps brains (or, more plausibly perhaps, central nervous systems) only *con*stitute minds; or perhaps some other relationship – close, but not as close as identity – holds between brains and minds. Perhaps: but then the question will inevitably be what this relationship is, and how the reductive analyst's use of it can dispel the problems that arise on the supposition of mind-brain identity. More about this in Section 4.

argues (170d3-171a5) that when my opinion is true to me but false to ten thousand, then my opinion is ten thousand times more false (*simpliciter*) than true (*simpliciter*). The dropping of the qualifiers that happens here is licensed by Protagoras' own theory. Indeed it is hard to make sense of Socrates' argument at this point without the assumption that it is Protagoras who drops these qualifiers.

(The introduction of degrees of truth into this argument is a different interpretive problem. The Protagoras of the *Theaetetus* does nothing to show us how to aggregate from individual truths to collective truths. But it may well be that the Protagoras of history had a view about how to do this – a consensus theory of truth? – that Plato is here mocking: cf. Chappell 2005: 111-112.)

Nor can Protagoreans (or relativity theorists) complain fairly about the crucial move made by the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ itself, from "true for Protagoras' opponents" to "true for Protagoras himself" (171a5-c4). If truth-for is, as Protagoras thinks, a possible reductive analysis of truth *simpliciter*, there should be nothing logically wrong with the move from "true for Protagoras' opponents", *via* "true *simpliciter*", to "true for Protagoras himself". The quite obvious fact that there *is* something logically wrong with this move is not – as the relativity and many-worlds readings both suppose – a point against Plato. Rather it is Plato's main point against Protagoras. It shows that truth-for does *not* have the same logical properties as truth, and so cannot plausibly be thought to provide a reductive analysis of truth. A parallel argument might perhaps show that appearance-to does not have the same logical properties as substance, and so cannot plausibly be thought to provide a reductive analysis of substance; for such an argument, we might look to *Theaetetus* 179c-183c.

On my interpretation, the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ responds to Protagoras' reductive analysis of truth as truth-for by confronting Protagoras with a dilemma that any reductive analysis might face. If the reductive analysis does not purport to secure the identity of the *analysandum* and the *analysans*, then it fails automatically; but if it does purport to secure this identity, then it faces an insoluble problem about how the properties of the *analysandum* can possibly be the properties of the *analysans*. In the case of the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$, the supposition that the properties of the *analysandum* – truth – transfer across to the *analysans* – truth-for – leads Protagoras into the contradictory position of accepting that his philosophical opponents' views may justly be described, not just as true for them, but as true *simpliciter*. This, Plato takes it, refutes Protagoras by pushing him from what I called alternative (b) – relativism – into alternative (c) – self-contradiction: an

alternative that Protagoras finds no more tolerable than Plato. Hence Plato's argument against Protagoras is not, as is assumed by the relativity and many-worlds readings, fatally damaged if it is shown to involve carelessness, or rather permissiveness, with the qualifiers. Such permissiveness is indeed in evidence in *Theaetetus* 170d-171c. But it is Protagoras, not Plato, who is permissive, and the aim of Plato's argument is to use this permissiveness against Protagoras. Perhaps Sextus' way of characterising the $\pi\epsilon\rho_1\tau\rho_0\pi\dot{\eta}$, as discussed above, has something to be said for it after all.

In section 4, I conclude by briefly considering two objections to my reading of the $\pi\epsilon\rho\iota\tau\rho\sigma\pi\dot{\eta}$.

5. Two objections

The first objection is about the dilemma for reductive analyses that I say the $\pi\epsilon\rho\iota\tau\rho\sigma\pi\dot{\eta}$ sets up. The dilemma is, it will be said, all too reminiscent of Moore's "paradox of analysis", which is well known to be a decidedly dubious paradox.³⁰ In particular, it seems over-demanding to require that any successful reductive analysis should preserve *identity* between *analysandum* and *analysans*. Maybe a good reductive analysis will have a less ambitious target: not identity, but replacement.

Once more, compare the philosophy of mind, where – it is often said – all we need to do to achieve a successful reductive analysis is to show how to *replace* the concepts of folk psychology with those of science (Rorty 1979, Ch. 2; Churchland 1991: 611). Once that is done, folk-psychological concepts such as belief will no longer be needed, because we will have a scientific replacement for each of these concepts. Of course the scientific replacements won't be *identical* with the folk-psychological concepts. But then what would be the point of swapping the one vocabulary for the other if they were? The scientific concepts will be approximate, and only approximate, correspondents to the folk-psychological concepts. The

³⁰ See Moore 1942: 663: "If you are to 'give an analysis' of a given *concept*, which is the *analysandum*, you must mention, as your *analysans*, a *concept* such that (a) nobody can know that the *analysandum* applies to an object without knowing that the *analysans* applies to it, (b) nobody can verify that the *analysandum* applies without verifying that the *analysans* applies, (c) any expression which expresses the *analysandum* must be synonymous with any expression which expresses the *analysans*." These conditions, which Moore uses to motivate his version of the paradox of analysis, are clearly implausibly strong. However, the paradox of analysis is not necessarily dependent on Moore's statement of it.

similarity between them will generally be close enough for us to speak of *translation* from the terms of one vocabulary to the other (although where it is not so close, that won't matter either – we'll just discard the folk psychology). Still, the whole point of the move to the new scientific vocabulary is that the two vocabularies are precisely *not* equivalent. What makes it worthwhile to eliminate folk psychology is that the scientific vocabulary is more accurate and more in tune with our overall theoretical picture. What, then, if Protagoras too is not an identity theorist, but an eliminativist? What if he is not concerned to give us an account of *what truth really is* (as truth-for), but to do away with the whole concept of truth, and *replace* it with truth-for?

Some philosopher might have had this aim. But it does not seem to be what Protagoras was doing. His argument does seem to aim at establishing something about the nature of *truth* – namely that it is identical with truth-for - and not at simply getting rid of the notion of truth. He does not forbid us to use the word "true"; rather, he tells us what we mean when we use it. Admittedly, the same can't be said in the case of substance, where Protagoras does seem to want to replace the vocabulary of objects and properties with an entirely different vocabulary. Compare the list of things that we are not to say at *Theaetetus* 160b-c, as quoted above. The Protagoras of the Theaetetus appears to be an eliminativist about substance, but an identity theorist about truth; despite the asymmetry that this introduces, he may well have had his reasons for this combination of views. (Here is one possible reason: it is hard enough, as Plato goes on to note (179c-183c), to eliminate substance in favour of appearance-to without reducing yourself to wordless incoherence; perhaps it is even harder to eliminate *truth* without producing incoherence. It can plausibly be argued that the concept of truth is bound to be more focal to our thinking than the concept of substance.)

Even if Protagoras is an eliminativist about truth rather than an identity theorist, the $\pi\epsilon\rho\iota\tau\rho\sigma\pi\dot{\eta}$ still has some bite against him. If Protagoras is not saying "Truth *is* truth-for", but rather saying "Truth *should be replaced by* truth-for", that naturally prompts the question "Why should we make this replacement?" In the case of eliminativism about folk psychology, there is a well-known body of arguments which seem to motivate the relevant replacements. In the case of eliminativism about truth, it is much less easy to see what the motivating arguments might be. (The argument obviously can't be that eliminativism about truth is *true*).³¹ Much

³¹ Though it could be that eliminativism about truth is [whatever predicate will replace "true" in an eliminativistically adequate vocabulary]. Cf. a familiar protest

is lost by eliminating the notion of truth. It is not at all obvious what is gained to offset these losses, and make it *worthwhile* to be an eliminativist about truth.

Presumably the central consideration in favour of eliminativism about truth is something like this: "Given the metaphysics of flux, truth-for is the most that (what the uninformed call) truth can ever really amount to; given the metaphysics of flux, truth-for is all we could possibly mean by trying to talk about truth". This shows why the περιτροπή still bites against Protagoras even if he is an eliminativist. For Plato's retort to the eliminativist Protagoras is obvious. It is that Protagoras' claim that "truth-for is the most that truth can ever really amount to" may be true for him, but it is not true for others, because others are not eliminativists about truth. Hence Protagoras' claim has no support to make us prefer it to other claims that contradict it. So Protagoras has given us no argument for eliminativism about truth. In short, to read Protagoras as an eliminativist about truth is to vindicate the relativity reading of the $\pi\epsilon\rho_1\tau\rho_0\pi\dot{\eta}$, with its conclusion that "if what [Protagoras] says is right then he has no claim on our attention" (Bostock 1988: 95, n. 19). (In which case, if the relativity theory is mistaken, as I have argued, then it is also mistaken to read Protagoras as an eliminativist about truth.)

The second objection to my reading of the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ brings us back to Waterlow's interpretation. Waterlow (1977: 24-25) poses a very good question: "why Plato might have thought it worthwhile to prove Protagoras inconsistent". To this my answer so far has simply been that Plato and Protagoras agree that inconsistency is a bad thing. But to see how Waterlow deploys the question, consider how Protagoras handles the objection discussed at 157c-160e (the Dreamer objection, as I call it at Chappell 2005: 79). The objection is that we often dream the strangest things – for example, that we are gods, or have wings and are flying (158b2). The obvious thing to say about these dreaming experiences is that they are *false*, delusive. But apparently a Protagorean has no way to say that, since dreaming experiences are one kind of appearance, and the Protagorean's view is that all appearances are *true*.

The Protagorean's answer to this objection, according to Socrates (158e-159c), is that the objection rests on a false presupposition, encapsulated

against eliminativism about belief ("It's incoherent to *believe* that there are no beliefs!") and the usual, and I think correct, eliminativist answer to this protest ("But it isn't incoherent to have, towards the non-existence of beliefs, whatever will replace belief in an eliminativistically adequate vocabulary").

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in the words "we often dream...". The subject of the dreaming experiences is different from the subject of the waking experiences: indeed, these two subjects are individuated as different *just because* they have different experiences (159b8). The dreamer's experience "that I can fly", and the waking person's experience "that I cannot fly", are therefore not in contradiction with each other; they are simply different people's experiences. Contrast 166b4-7, where Protagoras points out that his answer to the covered-eye objection (165a-d) is simply that one and the same person *can* both know and not know something. This is possible, he thinks, because the conventional way of identifying persons as one and the same is faulty. Selves are individuated, if at all, by their perceptions. So there can be no *a priori* ban on the occurrence of two contradictory perceptions in what *convention* calls the same person. Such an occurrence only shows that convention is wrong.

More generally it seems impossible, on Protagoras' principles, that a person should *ever* have contradictory beliefs (Waterlow 1977: 26-27): "the Theaetetan Protagoras is a Heraclitean [who] professes to hold that a subject is never the same from one instant to another. He can argue, therefore, that even if it seems that he, Protagoras, is guilty of inconsistency, the expression 'he, Protagoras' denotes a fiction... We ought to regard each side of what appears to be a contradiction as a separate belief belonging to a different subject." So Waterlow is led to conclude that the $\pi\epsilon\rho_1\tau\rho_0\pi\dot{\eta}$ is not intended to refute Protagoras by proving him guilty of self-contradiction at all.

Waterlow's interpretation is subtle and interesting. By this point, it should be clear how her interpretation can deal with the question I posed for Waterlow and Cornford above: the question how they are to expound the argument of *Theaetetus* 151-160, where a whole metaphysics and epistemology seem to be based upon the initial proposal to deal with *apparent* contradictions like the one in the cold-wind case by rewriting them to show that they are not *real* contradictions. On closer examination, Waterlow's view (though perhaps not Cornford's) implies that Protagoras does reject contradictions after all. Notice how the difference between the dreaming and waking selves was generated in the last paragraph but one. These two selves are said to be different *hecause their perceptions are different* (and so³² contradictory). For Protagoras, this is, really, how a self is

³² We might question this inference, but Protagoras has arguments for it: e.g. see, once more, *Theaetetus* 159b8.

individuated – by individuating its perceptions. Thus Protagoras deals with the Dreamer objection, not by allowing contradictions to be true for any person, but by denying that any "person" for whom a contradiction is true is really a *person* at all – precisely *because* a contradiction is true for that "person". So even for Waterlow's Protagoras, there will not in fact be any cases where "what is inconsistently believed is true" (Waterlow 1977: 25); for what is "inconsistently" believed will never be believed by the same person, and so will not be truly inconsistent.

Therefore, if Waterlow is right, Plato's $\pi\epsilon\rho\iota\tau\rho\sigma\eta'$ must fail to convict Protagoras of self-contradiction; so must any argument at all, no matter how "ingenious" (κομψότατος, 171a4) or "tricksy" (άλισκόμενος, 179b4). Protagoras can evade the contradiction to which the $\pi\epsilon\rho\iota\tau\rho\sigma\eta'$ leads simply by dividing himself. "If there is a Protagoras to whom it appears that man is the measure of all things" (he can say) "and also a Protagoras to whom it appears that man is *not* the measure of all things, then *just for that reason* these Protagorases cannot be one and the same. There *is* no Protagoras who contradicts himself." And so the $\pi\epsilon\rho\iota\tau\rho\sigma\eta'$ fails to prove the charge of self-contradiction after all: although the reason why it fails is much more interesting, and much less basic, than the relativity reading supposed.³³

From this failure of the περιτροπή to convict Protagoras of self-contradiction, Waterlow infers that the $\pi \epsilon \rho_1 \tau \rho_0 \pi \eta$ is not supposed to prove selfcontradiction but something else, namely a sort of self-defeat: "an opponent confronting Protagoras' position confronts, so to speak, a dialectical nothing, offering no resistance" (Waterlow 1977: 36). However, it is also possible that the $\pi \epsilon \rho \tau \rho \sigma \pi \eta$ is intended to pose a dilemma between self-contradiction and self-division; and I see reasons for preferring this slightly different reading to Waterlow's. The nub of this second dilemma is the thought that, if the idea of self-contradiction is unpalatable to Protagoras, so should be the idea of evading contradictions by appealing to self-division. For if we are allowed to use the tactic of self-division to evade every contradiction, then we end up ruling virtually nothing out. In every case that is normally taken to be an instance of the form "p and not-p", Protagoras will be ready with a paraphrase to show that the real form involved in the case is actually "*p* for *x* and not-*p* for *y*". So of every supposed contradiction, Protagoras will deny that it is a *real* contradiction.

³³ Of course, in the *Theaetetus*, Protagoras never actually deploys this self-dividing tactic against the $\pi\epsilon\rho_1\tau\rho\sigma\pi\dot{\eta}$: after 168c he is given no chance to respond to any of Socrates' arguments. My point is only that he *could* respond this way.

This really is, in Aristotle's words, "an undisciplined theory, which prevents us from delimiting anything in our understandings". It would seem absolutely right to complain that the use of self-division to evade all contradiction evinces a kind of mental indiscipline or laziness that prevents clear thought about anything at all; it would equally be a kind of moral indiscipline to use self-division, if we could, to evade character-defining moral choices.³⁴

Continual resort to self-division also makes Protagoras himself highly elusive: where is he, and what does he really believe? Doesn't he make off at a run from us (171d4) every time we think we have found him? Perhaps Theodorus' complaint (171c7) that, in the $\pi\epsilon\rho_1\tau\rho_0\pi\dot{\eta}$, "we are *hunting down* ($\kappa\alpha\tau\alpha\theta\dot{\epsilon}o\mu\epsilon\nu$) Protagoras too ruthlessly", is not without its point. Perhaps, too, it is not entirely by accident that Theodorus' admiring word for Socrates' arguments at 179b4 is $\dot{\alpha}\lambda_1\sigma\kappa\dot{\rho}\mu\epsilon\nuo\varsigma$. Those arguments would capture Protagoras – if any argument could.

Self-division, if consistently pursued as a policy of escaping contradictions, so shackles our ability to make distinctions, and makes us ourselves so systematically elusive, that we may conclude with Waterlow that the consistent self-divider becomes a "dialectical nothing". Or we may adopt Allan Silverman's way of making the connection between the $\pi\epsilon\rho\iota\tau\rho\sigma\pi\dot{\eta}$ and the anti-Heracleitean argument of 181b-183c, which is to quote Frege quoting Horace:

"Est modus in rebus, sunt certi denique fines!... If everything were in continual flux, and nothing maintained itself fixed for all time, there would no longer be any possibility of getting to know anything about the world and everything would be plunged into confusion." Frege's sentiment was shared by Plato. What is wanted is stability of content, the determinate boundaries of properties that cannot change... the demise of the Heracleitean doctrine of total instability is the result of his inability to express his doctrine ... the theory is untenable because it cannot coherently be put forward as an account of the world... because the words or concepts which are needed to express it have no meaning.³⁵

Continual self-division results in a positively Heracleitean lack of stability – and in an inability to say anything definite which is no less Heracleitean.³⁶ In the terms of Mackie 1964's well-known distinction, this point against Protagoras may not count as an *absolute* self-refutation (that

³⁴ For a discussion of self-division and ethical choice, see Chappell (2003).

³⁵ Silverman 2000: 151. The Frege citation (within the quotation-marks) is Frege 1980: vii. Frege's Horace quotation is Horace, *Sermones*, 1.1.101.

³⁶ McCabe 2000: 49-50 makes a similar point: Protagoreanism "incorporates a vacuous

is, a proof of self-contradiction), but it surely does count as an *operational* self-refutation (that is, a proof of self-defeat by an argumentative move which precludes the arguer from presenting his own argument). The very last move in the dialectic of the $\pi\epsilon\rho\mu\tau\rho\sigma\pi\dot{\eta}$ – the final closing-off of the unpalatable alternative of self-division, as also self-refuting, even if not straightforwardly self-contradictory – is a move that Plato does not make until he presents his very last argument against the whole body of doctrines that he develops from the proposal that knowledge is perception.

So we may conclude that the dilemma that the $\pi\epsilon\rho\iota\tau\rho\sigma\eta$ sets for Protagoras is a cogent one, and the result that I have argued Plato aims at all along – that Protagoras should be driven from relativism into selfcontradiction – is nearly, but not quite, achieved. Protagoras is at any rate driven into a dilemmatic choice between contradiction, and continual selfdivision to avoid contradiction; and by the end of 183c, we can see that both alternatives are forms of self-refutation.

The final moral that we should draw from Plato's presentation of the περιτροπή is, I take it, a point about the basic form of reasons for belief. What the argument ultimately shows, according to Plato, is the self-refutation - in one way or another - of even a clearly and consistently developed relativism about truth. For any p, my basic reason for believing pcannot be that p is true for me (because, for example, I have a perception that p); rather, my only basic reason for believing p will have to be that p is true simpliciter - true for anyone, no matter what their perceptions. This moral, I suggest, is confirmed by the argument about the future (Theaetetus 177b-179b). What the future will in fact be is not a matter of how it seems to me that it will be, and to attempt to run a Protagorean relativism about predictions is to move from talking about claims of the form "p will happen" to claims of the form "it appears to me that p will happen" - that is, to talking about claims that are not genuinely predictions at all, but (like all other Protagorean claims) mere descriptions of my own experience.

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account of who he is and a vacuous account of what it is to believe", and "undermines any systematic account of who we are"; the argument leaves Protagoras "in bits".

Bibliography

Armstrong, D. 1968, A Materialist Theory of the Mind. London: Routledge.

- —— 1970, "The nature of mind", in Borst, C.V., ed., *The Mind-Brain Identity Theory*. London: Macmillan.
- Baghramian, M. 2004, Relativism. London: Routledge.
- Blackburn, S. 2005, Truth: a guide for the perplexed. London: Penguin Books.
- Bostock, D. 1988, Plato's Theaetetus. Oxford: Clarendon.
- Burnyeat, M. 1976a, "Protagoras and self-refutation in later Greek philosophy", *Philosophical Review* 85, 44-69.
 - 1976b, "Protagoras and self-refutation in Plato's *Theaetetus*", *Philosophical Review* 85, 172-195. Reprinted in Stephen Everson, ed., *Companions to Ancient Thought 1: Epistemology* (Cambridge UP, 1990), 39-59, and cited from there.
- Chappell, T.D.J. 1995, "Does Protagoras refute himself?", Classical Quarterly 45, 333-338.
- 2003, "Persons in time: metaphysics and ethics". In *Time and Ethics*, ed. Heather Dyke (Amsterdam: Kluwer, 2003), 189-207.
- 2005, Reading Plato's Theaetetus: a translation and commentary. Sankt Augustin, Germany (Academia Verlag) and Indianapolis, USA (Hackett Publishing).
- Churchland, Paul 1991, "Eliminative materialism and the propositional attitudes", *Journal* of *Philosophy* 78, 67-90. Reprinted in David Rosenthal, ed., *The Nature of Mind* (New York: Oxford UP 1991), 601-612, and cited from there.
- Cornford, Francis Macdonald 1935, Plato's Theory of Knowledge. London: Routledge.
- Descartes, *Discourse on the Method*. In CSM = Cottingham, J., Stoothoff, R., and Murdoch, D., *The Philosophical Writings of Descartes*, Vol. 1. Cambridge UP, 1985.
- Denyer, N. 1991, Language, Thought and Falsehood in Ancient Greek Philosophy. London: Routledge.
- Emilsson, E.K. 1994, "Plato's self-refutation argument in *Theaetetus* 171a-c revisited", *Phronesis* 39, 136-149.
- Everson, S. 1990, "Epicurus on the truth of the senses", in S. Everson, ed., Companions to Ancient Thought 1: Epistemology (Cambridge: Cambridge University Press), 161-183.
- Fine, G. 2003, Plato on Knowledge and Forms: Selected Essays. Oxford: Clarendon.
- Frege 1980: Gottlöb Frege, Foundations of Arithmetic. Tr. J.L. Austin. Evanston: Illinois, 1980.
- Gottlieb, P. 1994, "The Principle of Non-Contradiction and Protagoras: the strategy of Aristotle's *Metaphysics* IV, 4", *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 8, 135-50.
- Kerferd, G. 1949, "Plato's account of Protagoras's relativism", *Durham University Journal* 9, 20-26.
- Lee, E. 1973, "Hoist with his own petard: Ironic and Comic elements in Plato's Critique of Protagoras", pp. 255-256 in Lee, Rorty, Mourelatos, edd., *Exegesis and Argument* (Phronesis Supplement, Assen: Van Gorcum, 1973).
- Long, A. 2004, "Refutation and Relativism in *Theaetetus* 161-171", *Phronesis* 49, 24-40.
- McCabe, M.M. 2000, Plato and his predecessors, Cambridge University Press.
- McDowell, J. 1973, Plato's Theaetetus. Oxford: The Clarendon Plato Series.

- Mackie, J.L. 1964, "Self-refutation: a formal analysis", *Philosophical Quarterly* 14, 193-204.
- Moore, G.E. 1942, "Reply to my critics", in P. Schilpp, ed., *The Philosophy of G.E. Moore* (Evanston, Illinois).
- Passmore, J. 1961, Philosophical Reasoning. London: Duckworth.
- Priest, G. 2004, entry on "Dialetheism" in the *Stanford Encyclopedia of Philosophy* (on line).

Putnam, H. 1981, Reason, Truth and History. Cambridge: Cambridge UP.

- Rorty, R. 1979, Philosophy and the Mirror of Nature. Princeton University Press.
- Runciman, W. 1962, *Plato's Later Epistemology*, Cambridge: Cambridge University Press.
- Sedley, D. 2004, The Midwife of Platonism: Text and Subtext in Plato's Theaetetus. Oxford: Oxford University Press.

Silverman, A. 2000, "Flux and Language in the *Theaetetus*", Oxford Studies in Ancient Philosophy 22, 109-152.

Taylor, A.E. 1926, Plato: the Man and his Work. London: Methuen.

- Taylor, C.C.W. 1980, "All perceptions are true", in M. Schofield, M. Burnyeat, and J. Barnes, edd., *Doubt and Dogmatism* (Oxford, Clarendon 1980), 105-124.
- Waterlow, S. 1977, "Protagoras and inconsistency: Theaetetus 171a6-c7", Archiv für Geschichte der Philosophie, 19-36.

Wright, C. 1993, Truth and Objectivity. Cambridge, MA: Harvard University Press.