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Conflicting Appearances: *Theaetetus* 153 D–154 B

I

Ancient and modern philosophers alike have been fascinated by the so-called problem of conflicting appearances. The problem is simply this. There are, or at least seem to be, conflicting appearances: the wind seems cold to me, but not to you; the honey seems sweet to me, but not to you; abortion seems right to me, but not to you. What should we infer? Numerous answers have been proposed. In this essay, I consider the answer Plato attributes to Protagoras in *Theaetetus* 153 D–154 B. The passage has been analysed in detail by Myles Burnyeat, in his fascinating and stimulating paper 'Conflicting Appearances';[1] and I shall accordingly spend some time exploring his account, as well as proposing my own.

Burnyeat ascribes to Protagoras a position he calls perceptual relativism. Now, as Burnyeat would readily agree, in deciding about the content of Protagoreanism, we need to be guided by the context in which it is embedded; and I shall argue that perceptual relativism does not fit the context. Plato argues that Protagoras is best supported by, and is in turn committed to, a Heracleitean doctrine of flux. Perceptual relativism, however, is not best supported by, nor is it committed to, a Heracleitean doctrine of flux. I therefore ascribe to Protagoras a different position, which I call infallibilism, on which his Heracleitean associations are clearer.

II

I begin with some general preliminary remarks about Protagoras and his place in the dialogue. Protagoras claims that 'man is the measure of all

[1] M. F. Burnyeat, 'Conflicting Appearances', *Proceedings of the British Academy*, 65 (1979), 68–111. Subsequent references to this article will generally be given by page reference alone, and they will generally be cited in the text.

things, of those that are that they are, and of those that are not that they are not' (*Tht.* 152 A 2–4). Plato tells us that Protagoras' measure doctrine (P) 'means [*legei*] something like this [*pōs*]: everything is, for me, the way it appears to me, and is, for you, the way it appears to you' (*Tht.* 152 A 6–8).[2] 'Appears' (*phainetai*) can be veridical or nonveridical: I can say, 'It is apparent that it is cold', where this means that it obviously, evidently, is cold. But I can also say, 'It appears to be cold', where this means that I believe it is cold.[3] (P) uses 'appear' in the second way; that is, 'appears', in (P), indicates belief. (P) then makes the striking claim that, however I believe things are, so they in fact are (for me).[4]

In discussing (P), Plato considers two different ranges of appearances or beliefs. 'Appears' statements can be used in statements about perceptual appearances, to say how one believes things are on the basis of perception (e.g. 'It appears red to me'). But they can also be used in statements about what one is inclined to believe about any matter whatever (e.g. 'The argument appears sound to me').[5] So we need to distinguish between what I shall call *Narrow Protagoreanism* and *Broad Protagoreanism.* According to Narrow Protagoreanism, each thing is, for any person, the way he perceives it as being. According to Broad Protagoreanism, each thing is, for any

[2] The first passage is generally agreed to be a quotation from Protagoras; there is some dispute as to whether the second passage is also a quotation or Plato's own explanation of what Protagoras means. J. H. McDowell, *Plato:* Theaetetus, trans. with notes (Oxford: Clarendon Press, 1973), translates '*legei*' as 'means', which suggests he thinks that Plato is offering his own explanation; but in his notes ad loc. he says that *Cra.* 386 A 1–3 suggests that Plato is offering a second quotation from Protagoras. For further occurrences of the undisputed quotation, see *Cra.* 385 E 6–386 A 3; Sextus Empiricus, *M.* 7. 60–1; Diogenes Laertius, *Lives* 9. 51.

[3] In Greek, the first use is indicated by an accusative plus participle, the second by an accusative plus infinitive. But sometimes, as in (P), the relevant accusative or participle is omitted, and so one has to decide from the context which construction is intended.

[4] 'Appears' can also be used both nondoxastically and doxastically: I can say that the oar appears (looks) bent in water, where I do not mean to commit myself to the belief that it is bent in water; or I can say that the wind appears cold, where I do mean to express my belief about how it is. If, as I have suggested, (P) uses 'appears' to express beliefs, then it uses 'appears' doxastically.

[5] However, it is, of course, difficult to determine the range of perceptual predicates. The discussion that follows is indebted to McDowell, *Plato:* Theaetetus, 119–20. See also M. F. Burnyeat, 'Protagoras and Self-Refutation in Plato's *Theaetetus*', *Philosophical Review*, 85 (1976), 172–95 at 178 n. 9. (This note refers back to n. 2 of 'Protagoras and Self-Refutation in Later Greek Philosophy', *Philosophical Review*, 85 (1976), 44–69, though I cannot find any note in this latter paper that makes the relevant point; the point is, however, made on p. 45 of that paper, where n. 2 also occurs.) Although Burnyeat agrees that (P) sometimes uses 'appears' to cover all beliefs, he thinks that using 'appears' for more than perceptual appearances 'may have little but bluff to support it' ('Protagoras and Self-Refutation in Later Greek Philosophy', 45).

person, the way he is inclined to think it is. The distinction between Narrow and Broad Protagoreanism is that between two different substituends for 'each thing'. According to Narrow Protagoreanism, only perceptual predicates are appropriate substituends; according to Broad Protagoreanism, any term whatever is an appropriate substituend.[6] The *Theaetetus* considers both Narrow and Broad Protagoreanism. In the famous self-refutation argument (169 D–171 D), for example, Plato focuses on Broad Protagoreanism. But in his initial discussion of Protagoreanism (152 A–169 D), he focuses on Narrow Protagoreanism.[7] In this chapter I focus on Narrow Protagoreanism. In the next chapter, I consider Plato's refutation of Broad Protagoreanism.

III

These brief remarks underdetermine the precise content of (P). In attempting to arrive at a deeper understanding, it is vital to consider Protagoras' place in the dialogue. For he is not discussed in isolation. Rather, the first part of the *Theaetetus* (151 E–186 E) is a complex and subtle dialectical investigation of the connections among three theses: Protagoras' measure doctrine (P), Theaetetus' claim that knowledge is perception (T) (151 E 1–3), and a Heracleitean ontology (H) according to which 'all things change, like streams' (160 D 7–8)—clearly an allusion to Heracleitus' claim that 'one can't step into the same river twice'.[8] At 160 D 6 Plato says that the three theses coincide.

There is considerable controversy about precisely how Plato takes the three theses to coincide. On the account I favour, Plato argues that Theaetetus' claim that knowledge is perception commits him to a Protagorean

[6] Jonathan Barnes, in *The Presocratic Philosophers* (2 vols.; London: Routledge & Kegan Paul, 1979), ii. 240–2, distinguishes between phenomenological and judgemental seeming, where an example of the first is 'The oar seems bent in water' (it presents itself to the senses as being bent in water, whether or not I believe that it is bent in water) and the second expresses any belief whatsoever. What Barnes calls judgemental seeming corresponds to Broad Protagoreanism. But what he calls phenomenological seeming does not correspond to Narrow Protagoreanism. Narrow Protagoreanism involves judging that things are as they appear to the senses to be; Narrow Protagoreanism, that is, is a sort of judgemental seeming. Barnes's phenomenological seeming corresponds instead to nondoxastic appearances in the perceptual realm; but, in my view, nondoxastic appearances are not at issue in (P) (see n. 4 above).

[7] For places where he distinguishes, at least implicitly, between Broad and Narrow Protagoreanism, see 152 C 1–2 ('that which is hot and everything of that sort'), 171 E, and 178 B 5.

[8] There is dispute as to whether Heracleitus did say this. But Plato thinks that he did: *Cra.* 402 A 8–10 (=DK A 6; cf. B 91).

epistemology which, in turn, commits him to a Heracleitean ontology. He also argues that Theaetetus' definition is best supported by a Protagorean epistemology which, in turn, is best supported by a Heracleitean ontology.[9] (More precisely, Plato argues that (T), (H), and Narrow Protagoreanism are connected in these ways. Obviously, the claim that knowledge is perception, for example, is neither committed to nor best supported by Broad Protagoreanism, since the latter allows knowledge to range outside the perceptual sphere, since it takes all beliefs, not merely perceptual beliefs, to be true (to the believer).)[10] Having articulated the connections among the three theses, Plato proceeds to the offensive, arguing against each of the three theses in turn.

On this account of the structure of the first part of the *Theaetetus*, Plato is not propounding his own views about knowledge and perception; rather, he is asking what Theaetetus, and then Protagoras, are committed to, and how they are best supported. His strategy is the same as that pursued in many of the Socratic dialogues: an interlocutor proposes a definition, which Socrates tests against various principles and examples; eventually the interlocutor is caught in contradiction. Generally, the definition is then

[9] This view has been well defended by Burnyeat; see e.g. his 'Idealism and Greek Philosophy: What Descartes Saw and Berkeley Missed', *Philosophical Review*, 91 (1982), 3–40, esp. 5–7; and *The* Theaetetus *of Plato*, trans. M. J. Levett, rev. and intro. M. F. Burnyeat (Indianapolis: Hackett, 1990), esp. 7–19. Plato gives various 'stage-directions', as Burnyeat calls them, to indicate the connections that he has in mind. Here (ignoring several complications) are just a few of them. When Theaetetus proposes that knowledge is perception, Socrates tells him that 'what you've said about knowledge is no ordinary theory, but the one that Protagoras too used to state' (151 E 8–152 A 1). This suggests that Plato takes (T) and (P) to be equivalent. He then describes Protagoras' 'secret doctrine' (152 C 10), which, among other things, involves a Heracleitean flux ontology. The point of calling it Protagoras' secret doctrine is presumably to indicate that he is unwittingly committed to it (so McDowell, *Plato:* Theaetetus, 121–2). So (P), and therefore also (T), implies (H). That (H) implies (P), and so (T), is suggested by, for example, 156 A 3–5, where Plato tells us that everything that's been said depends on the assumption that everything is change, in which case (P), and so (T), depends on (H). That is, I assume, (H) is the basis for, and in that sense implies or supports, (P), and so (T). Cf. 183 A 2–3: (H) was introduced in order to establish (T); that is, it was taken to imply or support (T). (Strict implication is not in view here; the idea is, rather, that each of the three theses best supports and is best supported by the others. Note that the best available support might not be very good. I take it that Plato argues just this in refuting the theses.)

[10] Of course, to say that all beliefs are true (to the believer) is not to say that all beliefs constitute knowledge, since being true (to the believer) is not sufficient for being knowledge. However, it is necessary for knowledge, and it is the condition on knowledge that Plato focuses on in assessing (T). One might argue that to say, as Broad Protagoreanism does, that all beliefs are true (to the believer) does not conflict with (T), since Broad Protagoreanism does not say that beliefs can range outside the perceptual sphere. But, as Plato conceives Broad Protagoreanism, it does have this broader scope. (McDowell, *Plato:* Theaetetus, 168, however, thinks that 167 A 8 might restrict beliefs to perceptual beliefs.)

rejected, just as here Theaetetus' definition of knowledge as perception is eventually rejected (184–6). In all this, Socrates is exploring, not his own views, but those of his interlocutor. In just the same way, this part of the *Theaetetus* investigates Theaetetus' claim that knowledge is perception. But here, rather than proceeding quickly to criticism, Plato begins by asking how far the initial thesis can be supported: he constructs an elaborate defence of Theaetetus' claim before dismantling it.

It is often difficult to figure out precisely what position is being ascribed to, say, Heracleitus. Commentators sometimes try to decide about this by asking what interpretation best corresponds with views Plato expounds in his own right elsewhere. But the right question to ask here is not 'What does Plato himself believe?' Rather, the right questions to ask are 'What version of Heracleiteanism best supports Protagoras?' and 'What version of Heracleiteanism is Protagoras committed to?'[11]

Of course, it might turn out that a Protagorean epistemology is best supported by, or is committed to, one of Plato's own views. Similarly, in the Socratic dialogues, Socrates might agree with one of his interlocutors on a given point. However, we should not come to the text aiming to find agreement. Nor does it count in favour of an interpretation that, on it, this part of the *Theaetetus* meshes with views Plato expresses in his own right elsewhere. The best interpretation is one that makes it as clear as possible why Plato takes the three theses to be related as he does. We have no reason to suppose that such an interpretation will involve importing Platonic views (except in the sense mentioned in n. 11).

Once we are clear about Plato's strategy, we can also guard against another mistake. Some of the arguments attributed to, say, Protagoras appear to be confused. Commentators sometimes then search for alternative interpretations on which there is less, or no, confusion, in the belief that this will make Plato look better. However, the mere fact that Plato attributes a confused argument to Protagoras does not by itself show that Plato is confused. Of course, he might be. But before concluding this, there is an alternative worth considering: perhaps Plato is suggesting that the confused

[11] Of course, asking these questions involves asking about Plato's views, in so far as we need to ask, for example, what version of Heracleiteanism Plato thinks best supports Protagoras, and what version of Heracleiteanism he thinks Protagoras is committed to. But we should not assume in advance that Plato believes that Protagoras, say, is committed to or best supported by any view Plato himself accepts. A full discussion should answer not only the questions raised in the text, but also the question of what version of Protagoreanism and Heracleiteanism are required in connection with Theaetetus' claim that knowledge is perception; but in this chapter I focus on the connections between Protagoras and Heracleitus.

argument is the best that Protagoras, given his views, can do. If we can see why Plato might argue in his way, then that is some reason to suppose that the confusion is Protagoras' rather than Plato's.[12]

IV

These preliminaries out of the way, I turn now to *Theaetetus* 153 D–154 B. I begin by quoting it in full:

SOC. Well, then, you must think like this. In the case of the eyes, first, you mustn't think of what you call white colour as being some distinct thing outside your eyes, or in your eyes either—in fact, you mustn't assign (153 E) any place to it; because in that case it would, surely, be at its assigned place and in a state of rest, rather than coming to be.

THT. Well, how can I think of it?

SOC. Let's follow what we said just now, and lay it down that nothing is one thing (153 E 5) itself in itself. On those lines, we'll find that black, white, or any other colour will turn out to have come into being from the collision of the eyes with the appropriate motion. What we say a given colour (154) is will be neither the thing which collides nor the thing it collides with, but something which has come into being between them, something private to each one. Or would you be prepared to insist that every colour appears to a dog, or any other living thing, just the way it appears to you? (154 A 5)

THT. Certainly not.

SOC. And what about another man? Is the way anything appears to him like the way it appears to you? Can you insist on that? Or wouldn't you much rather say that it doesn't appear the same even to yourself, because you're never in a similar condition to yourself?

THT. Yes, I think that's nearer the truth than the first alternative.

SOC. (154 B) Surely then, if what we measure ourselves against or touch was large, white, or hot, it would never have become different by bumping into a different perceiver, if it itself didn't undergo any change. And on the other hand, (154 B 5) if what does the measuring or touching was any of those things, then, again, it wouldn't have become different when another thing came up against it, or the thing which came up against it had something to happen to it, if it itself hadn't had anything happen to it.[13]

[12] Of course, Plato might be wrong to think that Protagoras is confused in some way; so saying that he takes Protagoras to be confused does not automatically absolve Plato from confusion. But if he does turn out to be confused, it would be because he has misunderstood what, for example, Protagoras is committed to, and not because he himself necessarily accepts the content of the confused argument he thinks Protagoras must accept.

[13] I follow Burnyeat's translation (in his 'Conflicting Appearances'), with some modifi-

The general aim of the passage is clear enough: Plato is explaining Protagoras' solution to the problem of conflicting appearances in the case of sensible qualities. But precisely what solution does he ascribe to him? I begin by considering Burnyeat's explanation. He suggests that Plato's aim 'is to establish on behalf of Protagoras that sensible qualities like hot and cold, white and black, are essentially relative to the individual perceiving subject' (p. 77). On this view, 'Neither the object seen nor the perceiving subject is in itself white (154b)' (p. 77).[14] Burnyeat takes this to show that

> no sentence of the form 'x is white' is true as it stands, without a qualifying clause specifying a perceiver for whom it is true. This gives us the result that the colour white is essentially relational . . . there is no unqualified predicate 'white' to be abstracted from its predicative position and made the subject of the definitional question 'What is white?'. There is no such thing as (being) white *simpliciter*, only white for you and white for me. (pp. 77–8)

It follows, Burnyeat suggests, that 'white is not a distinct thing existing in the subject or in the object of perception' (p. 78); indeed, it is 'not a distinct thing existing anywhere at all' (p. 77).

Burnyeat's idea seems to be as follows. We know that Protagoras thinks that all appearances are true for those who have them. But appearances seem to conflict. Must Protagoras then violate the law of noncontradiction, counting conflicting appearances as true? On Burnyeat's account, Protagoras avoids this result by relativizing sensible properties to perceivers. The appearance that there are conflicting appearances therefore turns out to be deceptive, at least in the case of sensible qualities; and so seemingly conflicting appearances can all be true (for those who have them) without violating the law of noncontradiction.

This, then, is the solution that Burnyeat finds in the passage. How does he think it is defended? He suggests that 'The argument for the relativity of

cations. His translation is in turn based on McDowell's. M. J. Levett, by contrast, translates 154 B 1–2 as 'supposing such things as size or warmth or whiteness really belonged to the object'; but the Greek contains nothing corresponding to 'really'. She translates 154 B 3 as 'without any change in itself'; but '*auto*' merely indicates the object, not anything about what the object is in itself. (Her translation was originally published in 1928, by the University of Glasgow Press. A version that has been somewhat revised by Burnyeat is contained in his *The* Theaetetus *of Plato.* He unfortunately did not correct her translation in these two places.) F. M. Cornford, *Plato's Theory of Knowledge: The* Theaetetus *and the* Sophist *of Plato*, translated with a running commentary (London: Routledge & Kegan Paul, 1935), also mistranslates the passage in these two ways. As we shall see, these differences are significant.

[14] In his translation of 154 B in 'Conflicting Appearances', Burnyeat correctly refrains from translating '*auto*' as 'in itself' (see n. 13 above). However, the passage just quoted in the text shows that he, none the less, takes the passage to be discussing what objects are in themselves.

sensible qualities is entirely general, and its leading premiss is the conflict of sensible appearances' (p. 78). In particular, Socrates claims that sensible appearances vary;[15] and he 'asserts at 154b that this is incompatible with attributing sensible qualities either to the object or to the subject of perception' (p. 78). Burnyeat continues:

> We may elucidate his claim as follows. Take, as before, an event of the kind we would ordinarily describe as the seeing of a white stone . . . Then, first, the stone cannot be white in itself or else, so long as it suffered no change, it would appear white to any other perceiver . . . More generally, if sensible qualities inhere in the objects of perception, they ought to make themselves apparent to every perceiver alike, regardless of differences between perceivers or changes in the condition of a single perceiver . . . But it is a fact of experience familiar to us all that sensible appearances vary with differences and changes on either side of the perceptual encounter. So we are invited to draw the desired conclusion: sensible qualities are essentially relative to the individual perceiver. (p. 79)

This argument, according to Burnyeat, rests on the striking premiss that:[16]

(1) If something appears F to some observers and not-F to others, then it is not inherently/really/in itself F.

But, as Burnyeat points out, (1) is equivalent to:

(2) If something is inherently/really/in itself F, then it appears F to all observers or it appears not-F to all.[17]

Furthermore, Burnyeat claims, Plato makes 'absolutely explicit the important point that with either formulation [i.e. with either (1) or (2)] the argument applies only on the assumption that the thing we are talking about remains unchanged' (p. 79). The view that the passage assumes that the object does not change is not unique to Burnyeat; on the contrary, it seems to be generally accepted.[18]

We can summarize Burnyeat's interpretation of the argument as follows:

[15] As Burnyeat notes, Socrates 'actually implies the strongest possible claim, that no two colour appearances are alike'; but it is 'sufficient for the argument Socrates has in view to start from the more modest claim that variations do occur' (p. 78).

[16] R. M. Dancy, 'Theaetetus' First Baby: *Theaetetus* 151e–160e', *Philosophical Topics*, 15 (1987), 61–108 at 79, also believes that Plato's argument assumes this premiss.

[17] Since the second disjunct is irrelevant to our discussion, I shall follow Burnyeat in ignoring it.

[18] See e.g. Cornford, *Plato's Theory of Knowledge* 40–1 n. 1; McDowell, *Plato:* Theaetetus, 132; Dancy, 'Theaetetus' First Baby', 79; and D. Bostock, *Plato's* Theaetetus (Oxford: Clarendon Press, 1988), 59. I discuss McDowell's interpretation further below.

(A) There are, or at least seem to be, conflicting appearances; for example, the stone appears white to me, but not to you.
(B) If the stone is really, or in itself, white, then (unless it changes) it will appear white to everyone.[19]
(C) The stone hasn't changed between the different appearances.
(D) Therefore the stone is not really, or in itself, white; rather, sensible qualities are relative to perceivers.

Let us call this position *perceptual relativism*.[20] Two points about perceptual relativism are worth making before proceeding further. First, as Burnyeat conceives it, it claims not only that perceptual properties are relational but also that objects do not really have them. This is clear from (1), which speaks indifferently of being inherently or in itself F, and being really F.[21]

Secondly, according to perceptual relativism, 'change' of colour can be what Geach calls a mere 'Cambridge change' in the object.[22] Perceptual relativism says that an object is red in a given relation if and only if it appears red to a perceiver. So, if the object no longer appears red to a perceiver, the object no longer is red in relation to that perceiver. But an object can cease to appear red to me if I am suddenly struck blind. Perceptual relativism says that, in this sort of case, the object ceases to be red in relation to me without itself genuinely changing.[23]

[19] This involves assumption (1) mentioned just above.

[20] Burnyeat uses this label on p. 71; see also Burnyeat, *The* Theaetetus *of Plato*, 15.

[21] See Burnyeat's discussion of (1) on pp. 74 and 91. See also pp. 78–9. (On the other hand, on p. 71 Burnyeat says that Protagoras 'allows the honey to be both sweet and bitter, subject to the qualification that it is sweet *for* (in relation to) some palates and bitter *for* others'. Depending on the force of the qualification, this seems to allow honey to be sweet and so on.) I am not claiming that Burnyeat himself believes that things really have only intrinsic properties; but he does say that that is Protagoras' view. Dancy also seems to assume that something is really F if and only if it is intrinsically, in itself, F; see e.g. p. 66, which moves freely between the two claims. (Perhaps Dancy assumes this only on Protagoras' behalf; I am not sure.) Levett's insertion of 'really' into the text encourages this view; see n. 13 above.

[22] See P. T. Geach, *God and the Soul* (London: Routledge & Kegan Paul, 1969), 71. Geach introduces what he calls the 'Cambridge criterion' for change: 'The thing called "x" has changed if we have "F(x) at time t" true and "F(x) at time t′" false, for some interpretations of "F", "t", and "t′".' On this criterion, I undergo a Cambridge change if I grow from being 5′1″ to 5′2″; I also undergo one if I come to be shorter than Theaetetus in virtue of his growth. As Geach uses the phrase, real or genuine changes are a subclass of Cambridge changes; mere Cambridge changes are the subclass of Cambridge changes that are not intuitively taken to be genuine changes.

[23] Perceptual relativism is, or is close to, a view Locke sometimes seems to hold. Locke says that colours and so on are powers in objects to produce certain sorts of sensations in perceivers. (See e.g. *An Essay concerning Human Understanding* II. viii. 10: secondary qualities 'are nothing in the objects themselves but powers to produce various sensa-

V

Now that we have seen how Burnyeat interprets 153–4 we can ask whether his account is correct. Let us note, first, that there is a good reason to hope that it is not. As we have seen, Plato does not discuss Protagoras in isolation, but as part of a dialectical investigation of Theaetetus' claim that knowledge is perception. He argues that Theaetetus is committed to a Protagorean epistemology which, in turn, is both committed to and best supported by a Heracleitean ontology according to which the world is in constant flux or change. In our passage, Plato is explaining Protagoras' solution to the problem of conflicting appearances. He should do so in a way that appeals to, or at least prepares us for the appeal to, Heracleiteanism.

Yet, according to Burnyeat, 'the argument [on behalf of (P)] applies only on the assumption that the thing we are talking about remains unchanged' (p. 79). This is very surprising: if Plato thinks that (P) is best supported by (H), why would he here support (P) with an argument that assumes that the object doesn't change? On Burnyeat's account, (P) is supported by a doctrine of stability rather than one of change. Nor, on Burnyeat's account, does Protagoras seem to be committed to Heracleiteanism. In Burnyeat's interpretation, Protagoras solves the problem of conflicting appearances by relativizing sensible properties in a way that, at least in some cases, does not require any change in the object.

On Burnyeat's account, then, Protagoras, so far from being supported by Heracleiteanism, is initially defended by an ontology that looks incompatible with Heracleiteanism. Nor does Protagoras seem to be committed to Heracleiteanism, in so far as he allows objects to appear different without changing. Perceptual relativism therefore seems to be the wrong sort of theory to secure Protagoras' Heracleitean associations. Given the gap

tions in us'.) This makes them relational: objects have the colours they do partly in virtue of their relation to perceivers. Locke also says that only a thing's primary qualities are its real qualities (e.g. *Essay* II. viii. 17). So he seems to hold that colours are in some sense not real properties of objects. Locke also seems to be committed to the view that an object can change colour without undergoing a genuine change. For it is essential to an object's being red that it appear red to someone. (In *Essay* IV. iii. 15, Locke seems to say that an object is red just in case it appears red to someone. I owe this reference to Nicholas Sturgeon.) So, if an object no longer appears red to someone because the person is struck blind, the object no longer is red (in that relation). Locke is then committed to the view that 'change' of secondary qualities can be a mere Cambridge change in the object. I would not claim that this is Locke's only view of the nature of secondary qualities; but it does seem to be a view that he is sometimes committed to.

between perceptual relativism and Heracleiteanism, it is not surprising that Burnyeat does not mention the latter here at all.[24]

Now it is true that the account of Heracleiteanism develops. Plato begins with a moderate sort of Heracleiteanism. He then points out that Protagoras is committed to, and requires, a stronger version; and so on, until his final position has been fully articulated. So perhaps 153 D–154 B assumes that objects can remain unchanged in the face of conflicting appearances, and it is only later passages that abandon that assumption? This is, to be sure, a theoretical possibility. I argue below, however, that the text does not require us to endorse it; and, on the alternative reading that I propose, the dialectical unfolding of Protagoras' position proceeds more smoothly.

VI

Still, to say that Heracleiteanism is irrelevant to perceptual relativism is not to say that Protagoras is not a perceptual relativist: perhaps Plato ascribes to Protagoras a position that sits ill with his view about Protagoras' Heracleitean connections. So we need to press further.

As Burnyeat construes the argument (A–D above), it is valid. Moreover, premiss (A)—that there are, or at least seem to be, conflicting appearances—seems obviously true. But premiss (B) involves the false and surprising claim that if x is really, in itself, F, it will appear F to everyone.[25] Burnyeat agrees that this assumption is false; indeed, exposing its falsity is one of his main aims. But it contains a defect he does not mention: it takes

[24] Later in his article Burnyeat says that 'Socrates makes the very strong suggestion that no two colour appearances are alike. The theory he is elaborating is committed to the view that, if this were so, each appearance should still yield knowledge of a real state of affairs. If the theory is to hold good, it must be able to take in its stride the most extreme variation imaginable in the course of appearances. So we had better suppose, for the sake of the argument, that extreme variation actually obtains. Each appearance is independent of every other appearance, yet each is knowledge. But now, if each appearance is independent of every other, yet each is knowledge, there must be a matching variation in the states of affairs which correspond' (p. 86). *Here* Burnyeat says that, if appearances vary, so too do the objects of perception. But this seems to conflict with his claim that 153–4 assumes that the objects need not change when they appear different. Perhaps Burnyeat would say that Protagoras abandons the assumption of 153–4, according to which objects need not change when they appear different—his initial support is later overturned. But he nowhere explicitly says this; nor does everything he says fit well with this suggestion. And, in any case, I shall suggest that the text reads more smoothly on my alternative.

[25] Although the assumption is obviously false, Burnyeat believes that many philosophers have, perhaps unwittingly, relied on it. He mentions Democritus, Berkeley, and Russell as examples. It is easier to think that 154 B involves this assumption if we follow Levett in inserting 'really' into the text, and if we take '*auto*' to mean 'in itself'; see nn. 13, 21 above.

being really F, and being F in itself, to be the same. However, if to be really F is to be truly (i.e. in fact) F, and if to be F in itself is to be intrinsically (i.e. non-relationally) F, then the two are not the same. For objects can really (in fact) have relational properties. This is so even if the relational property is subjective, in the sense of being relational to a perceiver.[26]

I agree with Burnyeat that Protagoras takes perceptual properties to be in some sense relational. (However, as will become clear, we have different accounts of what this involves.) But, unlike Burnyeat, I do not think that Protagoras denies that objects really have perceptual properties. Burnyeat seems to favour his view partly because he takes 153 D 9–E 1 to say that whiteness, for example, is not in the object. It is true that Protagoras says that 'white colour is not some distinct thing outside your eyes, or in your eyes either'. But the reason he gives for this is that, if it were, then 'it would be at its assigned place and in a state of rest, rather than coming to be'. This suggests that Protagoras means only that whiteness is not *stably* in the object—or, more precisely, that no whiteness-token is stably in any object.[27] And it is clear why he believes this, since otherwise Heracleiteanism would be violated.

That Protagoras believes that objects are genuinely coloured, even if they have any given colour-token only for a moment and only in relation to a given perceiver, is also suggested by 156 E 5–7, where he says that, when an eye and a suitable object generate a whiteness-token, the object 'comes to be not whiteness but, again, white—a white log or stone or whatever happens to have that sort of colour'. Here he speaks clearly of an object's actually being white. So, although Protagoras takes perceptual properties to be relational, he does not think that this shows that objects do not really have them.[28]

Moreover, although Protagoras takes perceptual properties to be in some sense relational, that point does not seem to be stressed in 154 B. Burnyeat thinks that it is, partly because he takes the passage to say that 'Neither the object seen nor the perceiving subject is *in itself* white (154b)' (p. 77,

[26] For this point, see C. McGinn, *The Subjective View* (Oxford: Clarendon Press, 1983), 119.

[27] Protagoras seems to believe that we do not see general properties, but property-tokens, or what are sometimes called tropes; he also seems to believe that no two perceptual encounters involve numerically the same property-token. Indeed, as our passage makes clear, he also believes that, since conditions are never exactly the same, no two property-tokens are ever exactly alike.

[28] McDowell, *Plato:* Theaetetus, 139–40, seems to agree with me about this (though contrast pp. 132–3). I discuss McDowell further below. Burnyeat, p. 77 with n. 3, seems to think that 156 E says how 'we would ordinarily describe', for example, a white stone; but he thinks that Protagoras would view this description as inaccurate.

emphasis added), where, in his view, we are meant to understand that colours and so on are relational rather than intrinsic. However, 154 B does not say that the object is not *in itself* white; it says that if the object is white, then it will not become different, when it appears different, unless it changes. Nothing corresponding to 'in itself' occurs in the text at 154 B: Plato says something about what will happen if the object is white, not about what will happen if it is white in itself.[29]

Nor, so far as I can see, does Plato say or assume that the object does not change; he does not, that is, assert premiss (C) of the above argument. He says only that if the object is white, then it will not become different, when it appears different, unless it changes. The argument, that is, offers us disjunctive options: when the object appears different, either it was not previously F, or else it became different and so it changed (from being F to being not-F). But the passage does not tell us which disjunct is the favoured one. To know which disjunct Protagoras favours, we need to look elsewhere.[30]

In place of Burnyeat's (A)–(D), therefore, all we have so far is the following:

(A) There are, or at least seem to be, conflicting appearances; for example, the stone appears white to me, but not to you.
(B′) If the stone is white, then it will not become different, when it appears different, unless it changes.
(C′) Therefore, either it is not white, or else it becomes different and so changes (from being white to not being white).[31]

[29] As McDowell, *Plato:* Theaetetus, 135, remarks, if 154 B were concerned to stress the relational nature of properties, then we should expect it to say 'if what we measure ourselves against or touch had been *on its own* large, white, or hot . . .'. In Burnyeat's paraphrase of 154 B, the passage says just this; but this is not what the text actually says. It is true that 'in itself', *kath' hauto*, occurs *earlier* in our passage: at 153 E 4–5, they 'lay it down that nothing is one thing itself in itself'. But 'in itself' does not occur at 154 B. Moreover, the force of 'in itself' is of course disputed.

[30] In seeing that this is all that the present passage says, I have been helped by a paper by Christie Thomas. Previously, I took the passage to say that, since the object appeared different, it was different and so it must have changed, from being white to not being white. But Thomas has convinced me that the passage is neutral as between Burnyeat's reading and my earlier reading.

[31] I have wondered whether the passage could instead be taken to say: (A); (B′); and then 'The stone became different; and so either it was not white or else it changed'. On this reading, it would be being assumed that since the stone appeared different, it became different, and the question then is whether becoming different requires change. On the reading suggested in the text, it is assumed that the object appeared different but not that it thereby became different.

Of course, perhaps the ensuing discussion will show that Plato does assume, on Protagoras' behalf, that the object did not change and was not white (in itself). That is, perhaps Burnyeat's general account of Protagoras is correct, even if he should not read it into the present passage. So we need to see what happens next in the text.

VII

Before doing so, however, it will prove interesting and instructive to compare McDowell's interpretation of our passage with Burnyeat's. McDowell suggests that the argument relies on the following principle:[32]

(P) If something is f and does not itself change, then it does not come to be other than f.

He then says:

> By (P), if something is white and does not itself change, it does not come to be other than white. But (Socrates implies) anything of which one might be inclined to say that it is white does, without itself changing, come to be other than white, by coming into contact with a different person.... Therefore it cannot be true of any such thing that it is white.

Like Burnyeat, then, McDowell thinks the argument assumes that the object does not change. However, he derives a different moral from the passage from the one Burnyeat draws. Burnyeat thinks the moral we are meant to draw is that colours and so on are relational. McDowell argues, as I have done, that the passage does not emphasize the relational nature of properties. He then concludes that the argument says, not that nothing is white in itself, but that nothing is white, period.[33] One reason McDowell favours this interpretation is that he thinks that the passage assumes that the object does not change; I have already challenged this assumption. But McDowell also has another reason for favouring his interpretation. He thinks, rightly, that we should read the passage in accordance with Protagoras' 'secret doctrine', adumbrated at 152 C–153 D. As he notes (p. 123), on one interpretation of the secret doctrine, its main concern is the relational nature of sensible properties. But he rejects this interpretation. One of his reasons for doing

[32] The two quotations that follow are from McDowell, *Plato:* Theaetetus, 132.

[33] In a sense, Burnyeat also derives this moral, in so far as he says that objects do not really have relational properties; but the main point Burnyeat wants to stress is the relational nature of sensible properties, whereas McDowell argues that this point is not stressed.

so is that it pays 'too little attention to a striking parallelism' between the secret doctrine and some passages in the *Republic* and *Timaeus*.[34] So he endorses a second account of the secret doctrine on which (he thinks) it meshes with these passages.

But, as we have seen, this is the wrong strategy for interpreting our passage; the mere fact that the secret doctrine sounds like passages in the *Timaeus* and *Republic* is not a good reason to interpret them in the same way. Our guiding concern should not be finding Platonic parallels, but discovering what Protagoras is committed to, and how he is best supported.[35] McDowell's method of interpretation is, at this point, not sufficiently sensitive to Plato's dialectical strategy.

I agree with McDowell, against Burnyeat, then, that our passage does not emphasize the relational nature of properties. I also agree with McDowell that *if* the passage assumes that the object does not change, we should conclude that the object is not white—not merely that it is not intrinsically white. But I do not agree with McDowell, Burnyeat, and others that the passage assumes that the object does not change; nor do I think we should follow McDowell in looking for Platonic parallels in attempting to interpret our passage.

All we know so far, then, is that our passage says that either the object was not previously white, or else it changed (from being white to not being white). Which disjunct do later passages favour?

VIII

Having said that, if an object is F, it does not become different, when it appears different, unless it changes, Plato says: 'As things are, however, we carelessly get ourselves committed to saying things which are extraordinary and absurd: so Protagoras, and anyone who sets out to state the same doctrines as he does, would say' (154 B 6–8). Plato is quite clear about his strategy: he is going to tell us, not what he thinks, but what Protagoras thinks. Protagoras believes that we say things that are extraordinary and absurd. To explain why Protagoras believes this, Plato introduces what

[34] McDowell also gives other reasons for rejecting the first interpretation. One of them is that 'it leaves unexplained the fact that the secret doctrine is taken to imply radical instability in the perceptual world' (ibid. 123). This is the right sort of reason for rejecting the first interpretation; but it sits unhappily with looking for Platonic parallels. One reason appeals to the dialectical demands of the context, the other assumes that Plato is speaking in his own voice.

[35] Nor are the passages as parallel as McDowell suggests. See my 'Plato on Perception', *Oxford Studies in Ancient Philosophy*, suppl. vol. (1988), 15–28.

Cornford calls 'some puzzles concerning size and number' (p. 41). Socrates begins with a 'small example' (154 c 1): 'Take six dice. If you put four beside them, we say they're more than the four, in fact one and a half times as many; and if you put twelve beside them we say they're fewer, in fact half as many' (154 c 2–4). Theaetetus agrees that this is what we say. Socrates then says: 'Well, now, suppose that Protagoras, or anyone else, asks you this: "Theaetetus, is there any way in which something can become larger or more numerous, other than by undergoing increase?" What will you answer?' (154 c 7–9). Theaetetus is unsure. On the one hand, focusing on the example of the dice, he is inclined to say that there is; on the other hand, focusing on the question just asked, he is inclined to say that there is not.

It is obvious what the correct answer is; that is, leaving Plato and Protagoras to one side for now, it is obvious what we ought in fact to say here. We ought to say that the six dice are more than the four and fewer than the twelve, and that they are so without undergoing any genuine change. Of course, six dice cannot become more than they are—cannot become a group of more than six dice—without genuinely changing. But six dice can 'become' more than a group of four dice, and fewer than a group of twelve dice, without genuinely changing. Similarly, they can appear more (than the four) and fewer (than the six) without really changing. Appearances might seem to conflict here; but we can resolve the conflict, and we can do so without invoking change.

Not only is this the correct solution to the puzzles, but it is also the solution Plato ought to offer Protagoras, if the latter is a perceptual relativist. On this account, Plato would be explaining Protagoras' alleged view that, since perceptual properties are relational, objects can appear different without changing—just as six dice can appear more (in relation to four dice) and fewer (in relation to twelve dice) without really changing. As Burnyeat explains, 'the new puzzles are explicitly about relative predicates (e.g. six dice are more *than four* and less *than twelve*). Their solution can thus serve as a perspicuous model for the thoroughgoing relativization which Protagoras recommends. When you add an explicit specification of the different relations in which opposite predicates hold of the same thing, the contradiction disappears.'[36] Protagoras' idea, on this interpretation, is

[36] *The* Theaetetus *of Plato*, 13. Unfortunately, Burnyeat nowhere discusses the puzzles in detail. The passage just cited suggests that he favours the same interpretation of the puzzles as that favoured by Cornford (discussed further below). However, Burnyeat goes on to say that 'relativization is not the complete answer to our problem', since Heracleiteanism enters the picture as well. He suggests that 'objects cannot have a continuing identity through time if every feature they manifest is relativized to a single perceiver and to the time of their perception' (ibid. 17). This claim, however, sits awkwardly with his interpretation of 153 D–

that, once we are clear about relational properties, we will see that conflicting appearances can all, in a sense, be true without contradiction and without positing change.[37]

Cornford thinks that this is Protagoras' solution to the puzzles. He says:

> It is clear that the difficulty here exists only for one who thinks of 'large' as a quality residing in the thing which is larger than something else, with 'small' as the answering quality residing in the smaller thing. If that is so, then, when the large thing is compared with something larger instead of something smaller, he will suppose that it has lost its quality 'large' and gained instead the quality 'small'. He will be puzzled when we point out that the thing has not altered in size. (pp. 43–4)

Cornford goes on to argue that, in the *Phaedo*, Plato 'shares the ordinary view and thinks of tallness as an internal property on the same footing as "hot" or "white", not as standing for a *relation between* the taller person and the shorter' (p. 44). However, by the time of the *Theaetetus*, Cornford believes, Plato has abandoned this view. He no longer believes that 'any of these qualities—hot, white, large—is an instance of a Form residing in an individual thing' (p. 45). We can now see, therefore, that 'The six dice will *appear* more than twelve, but they have not become more or fewer in themselves. This will help us to understand how a thing can appear or become white for me, without that implying that whiteness in it has replaced some other colour' (p. 45). According to Cornford, then, although in the middle dialogues Plato viewed colours and so on as intrinsic rather than as relational, in the *Theaetetus* he sees that they are relational properties, such that an object can be or appear white to me, but not to you, without contradiction and without genuinely changing.

On Cornford's account of the puzzles, the extraordinary and absurd thing that we non-Protagoreans do is to treat relational properties as though they were intrinsic; and this, in turn, leads us to view mere Cambridge changes as though they were real changes. Protagoras then rescues us from our error, by pointing out that these properties are relational; and this,

154 B, according to which the relational nature of properties is established by assuming that objects can appear different without changing. Nor does Burnyeat provide any explanation of why objects cannot persist if all their features are relativized.

[37] However, as McDowell remarks (*Plato:* Theaetetus, 135), the claim that objects have properties only in relation to perceivers is not really very similar to the claim that predicates such as 'smaller' need to be supplemented with a 'than' clause. So if Protagoras' solution to the puzzles means to emphasize the relational nature of various properties, as part of an effort to explain perceptual relativism, the explanation is not very helpful. This gives us one reason to suppose that this is not Protagoras' solution; below, I give another reason for thinking that it is not his solution. We have also seen that 154 B does not stress the relational nature of properties.

in turn, allows us to see mere Cambridge changes for what they are. So Protagoras has the correct view, and we have the wrong view. Nor is it only Protagoras who has the correct view of relational properties. Cornford thinks that Plato is describing his own solution to the puzzles; and he commends Plato for (as he thinks) finally seeing, as he allegedly did not before, that properties like largeness and so on are relational rather than intrinsic. But, as we have seen, Plato is not expounding his own solution to the puzzles about the dice; he is saying how Protagoras would resolve them. Plato is quite clear about this (154 B 6–8, C 6, 155 D 5–7, 156 A 2 ff.).[38]

Of course, one might argue that Plato attributes the correct solution of the puzzles to Protagoras; and one might then argue that this is a philosophical advance, in so far as, earlier, Plato did not see that this was the correct solution. On this interpretation, however, we once again have to wonder why Protagoras is committed to a Heracleitean ontology; for once again, Protagoras is being offered a solution to the problem of conflicting appearances on which they are all in a sense true without contradiction and without change. But then Heracleiteanisn is simply irrelevant.

Cornford's account of the puzzles therefore seems to ignore the dialectical structure of the passage, both in assuming that Plato is articulating his own views, and in interpreting Protagoras in such a way that Heracleitus has no role to play. But is Cornford's solution none the less correct? Does Plato ascribe to Protagoras the view that some seemingly conflicting appearances can be true, without contradiction and without change, simply by recognizing the relational nature of various properties? I shall now argue that this is not the solution that Plato attributes to Protagoras.

IX

Theaetetus is understandably perplexed by the difficult discussion of the puzzles about size and number (155 D 5–8), so Socrates undertakes to elucidate it (155 D 9–E 1). He goes on to say that 'Their starting point, on which everything we've just been saying depends, too, is this: the universe is change and nothing else' (156 A 3–5). Here Plato says quite clearly

[38] My own view is that, in the middle dialogues, Plato is well aware that, for example, Socrates can be taller than one person and shorter than another without genuinely changing. That is, he is well aware, in the middle dialogues, of how the puzzles about size and number should be resolved. But in the *Theaetetus,* he does not advert to his own preferred, and correct, solution; at this stage he is not articulating his own views, but Protagoras'. Roughly speaking, the account that Cornford finds in the *Theaetetus*, I find in the middle dialogues; and (as will become clear shortly) the account he finds in the middle dialogues, I find in the *Theaetetus* (minus the reference to forms).

that Protagoras' solution to the puzzles about size and number—and so also Protagoras' solution to the problem of conflicting appearances proposed in 153–4—in some way involves change: *everything* that's been said depends on the assumption that everything is constantly changing.[39] If this is so, then Burnyeat's account of 153–4, and Cornford's account of the puzzles, cannot be right, since, on their accounts, Protagoras explains seemingly conflicting appearances without invoking change, but simply by noting the relational character of certain properties. Or again, Burnyeat says that, in 153–4, the argument on behalf of Protagoreanism assumes that the object doesn't change; but 156 tells us that everything that's been said assumes that there is constant change.[40]

I suggest the following alternative solution. Plato's idea seems to be that, according to Protagoras, if an object appears different, then it becomes different and so it changes. Since the dice appear first more, then fewer, they were more, then fewer. Since the object appears first red, then green, it was red, then green. Protagoras does not believe that an object can appear different without changing. This is what *we* believe, but it is not what Protagoras believes. On the contrary, he believes that if an object appears different, it is different in a sense that involves change—real change, not mere Cambridge change. Since the dice appear more, then fewer, they change from being more to being fewer. If the wind appears warm, then cold, it changes from being warm to being cold.

Earlier, we saw that 154 B offered us disjunctive options: either the object was not previously white, or else it became different and so changed. We now know that the object became different, when it appeared different,

[39] 156 A 5 actually says, not that everything is *changing*, but that everything is *change*. This is sometimes taken to mean that there are no things, only processes; see e.g. Burnyeat, *The* Theaetetus *of Plato*, 16. An alternative is that there are things, but that they are processes.

[40] Burnyeat says: 'Finally, at 155d–156a the Heracleitean explanation of all this is at last announced. It becomes clear that relativization is not the complete answer to our problem, for Socrates proceeds to a complicated account (156a ff.) of perception, perceivers, and sensible things which spells out Protagorean relativity in the language of becoming' (ibid. 13); and, as Burnyeat agrees, this account involves change. But, again, it is not as though perceptual relativism and Heracleiteanism can sit happily side by side: the first assumes that different appearances need not involve change in the object that appears different; Heracleiteanism assumes that objects are always changing. Or again, having said that the solution to the puzzles about size and number does not involve change but only relativization, Cornford goes on to consider the theory of perception. He sees that the two passages are connected: 'light on the puzzles here is to be drawn from the theory of sense-perception' (p. 44). He also sees that on this theory 'properties, whatever they are, are always changing' (p. 51). Yet how, in that case, does the theory illuminate the solution to the puzzles which, on Cornford's view, assumes that objects are not always changing?

and so we can conclude that it must have changed. So the above argument, (A)–(C′), should be completed as follows:

(D′) The object became different and so it changed.

What about the other disjunct: was the object white? McDowell, we saw, took 154 B to deny that the object was white; I argued that 154 B neither denied nor affirmed this. But we can now see that it is affirmed, if not in 154 B then elsewhere. After all, Protagoras tells us that things are (for one) just as they appear to be. So, since the object appeared white, it was white; when it then appeared not white, it must have become not white, and so it must have changed, from being white to not being white. This suggests that, in the case described in 154 B, Protagoras argues as follows:[41]

(1) There are, or at least seem to be, conflicting appearances; for example, the stone appears white at t_1, then not white at t_2.
(2) Things are however they appear to be.
(3) Therefore, the stone was white, then not white.
(4) Therefore it changed, from being white to being not white.

In the case of the dice, similarly, Protagoras argues as follows:

(1′) There are, or at least seem to be, conflicting appearances; for example, the dice appear more (than the four) at t_1, then fewer (than the twelve) at t_2.
(2′) Things are however they appear to be.
(3′) Therefore, the dice were more, then fewer.
(4′) Therefore, they changed, from being more to being fewer.

Notice, in support of this interpretation, that Plato carefully describes the dice example in terms of conflicting appearances at different times: someone first places four dice next to six, at which time the six seem more (than the four); he then puts twelve dice next to the six, at which time they seem fewer (than the twelve). Plato doesn't ask what we should say about six dice, right now, being more than the four and fewer than the twelve. He asks what we should say when someone first sees six dice placed next to four, and then sees them placed next to twelve, so that they appear different on the two occasions of comparison. If his point were that the puzzles could be solved simply by noting that various properties are relational, he would not

[41] I do not mean that 154 B itself says this; we have seen that it does not say whether the object has changed, though it leaves this possibility open. I mean that Protagoras goes on to say that this possibility is actual.

emphasize that we are concerned with conflicting appearances that occur at different times.[42] Likewise, 154 B assumes that we are talking about different times; it is only on that assumption that the question arises of whether the object changed in between the seemingly conflicting appearances.[43]

If this is Protagoras' solution to the puzzles, then he is not a perceptual relativist, since he believes that whenever objects appear different, they genuinely change. Even if the reason that the object no longer appears red to me is that I have been struck blind, still, if it no longer appears red, it no longer is red, and so it must genuinely have changed, from being red to not being red. Protagoras, that is, believes that objects are—really are—however they appear to be. I shall call this position *infallibilism* since it takes us to be infallible about how things are.[44]

Infallibilism is like perceptual relativism in some ways. In particular, both views take perceptual properties to be both relational and subjective, in so far as both views claim that, for an object to be, say, white, it must stand in a suitable relation to a perceiver. However, on infallibilism, Burnyeat's striking premiss (1)—that if something appears F to some observers and not-F to others, then it is not really F—is irrelevant to the argument. For on infallibilism, whiteness and so on are not relational *because* they appear F only to some observers rather than to all. Even if they appeared F to everyone, they would still be relational.[45] Moreover, unlike perceptual relativism, infallibilism claims that, though perceptual properties are both relational and subjective, objects really have them. And unlike perceptual relativism, infallibilism claims that change of colour is never a mere Cambridge change in the object; even if an object appears different because of a change in a perceiver, the object itself undergoes a genuine change.

If Protagoras is an infallibilist, he cannot solve the puzzles as we would.

[42] Invoking change provides a solution only for seemingly conflicting appearances that occur at different times. So, at this point, Protagoras is offering only a limited solution to the problem of conflicting appearances; later he takes up the question of seemingly conflicting appearances that occur at the same time. As befits a dialectical discussion, his commitments are uncovered only gradually.

[43] That this is the situation that Plato envisages in 153 D–154 B is also suggested by the fact that he says that 'you are never in a similar condition to yourself'. It eventually emerges, then, that since appearances are always different, things are always different, and so there is constant change.

[44] Broad infallibilism says that all our beliefs are infallible; narrow infallibilism says that all our perceptual beliefs are infallible.

[45] As we have seen, Protagoras claims that colour appearances are never the same, so he cannot allow any object to appear precisely the same shade of, say, white to everyone. However, he can allow a given object to appear white (a generic shade) to everyone; and, in this case, he would still want to say that whiteness is relational (or that whiteness-tokens are relational; see n. 27 above).

We would say that the six dice are more in relation to the four, and fewer in relation to the twelve, and that these facts do not involve the dice changing. *We* can solve the puzzles by distinguishing between mere Cambridge and genuine change and by pointing out that differences in certain relational properties do not involve genuine change. But Plato is arguing that Protagoras cannot do this: in his view, Protagoras is committed to saying that, in every case in which things seem different, they are really different, and so they genuinely change. Since the dice seem different, they are different, and so they must have changed. On Burnyeat's view, Protagoras says that objects can appear different without changing—indeed, Burnyeat thinks that the argument in 154 B depends on this assumption. On my account, this is precisely what Plato says that Protagoras *cannot* say. So on my account, it is *we* who solve the puzzles about the dice without invoking change, simply by noting that the properties at issue are relational. Protagoras thinks that this—the correct view—is extraordinary and absurd; he thinks that genuine change is involved. If this is right, then it is not our view, but Protagoras', that is extraordinary and absurd. But that is Plato's point. He is offering an indirect argument against Protagoras; he is suggesting that Protagoras cannot distinguish between genuine and mere Cambridge change, and so has to resolve the puzzles by invoking genuine change.

Why does Plato think that Protagoras must offer this solution? I cannot provide a full answer to this question here. But, roughly, his idea seems to be that we can distinguish between genuine and mere Cambridge change only if an object is something in itself; since Protagoras claims that nothing is anything in itself (153 E 4–5), he cannot distinguish between genuine and mere Cambridge change. Plato then commits him to the view that every case of appearing different involves a genuine change in the object that appears different. This is one reason that Protagoras is committed to Heracleiteanism.[46]

[46] Bostock, *Plato's* Theaetetus, 45–6, notices that the puzzles are phrased in terms of perceivers viewing the dice at different times, and he wonders whether this involves confusion on Plato's part, since the correct solution to the puzzles does not require any reference to change or perceivers. (Perhaps Bostock is raising only a prima facie difficulty here; I am not sure.) McDowell, *Plato:* Theaetetus, 136–7, also thinks that Plato's failure to provide the correct solution shows that he is unclear about it. But this again ignores the dialectical strategy of the passage. It is not Plato himself, but Protagoras, who requires a reference to change. Of course, one might argue that Plato himself mistakenly accepts Protagoras' incorrect solution. But if the suggestion made in the text is correct, then we need not convict Plato of confusion on this score. That Plato is arguing that Protagoras cannot distinguish between genuine and mere Cambridge change is also suggested by T. H. Irwin, 'Plato's Heracleiteanism', *Philosophical Quarterly*, 27 (1977), 1–13 at 5–6. See also P. L. Gottlieb, 'Aristotle and the Measure of All Things' (diss. Ph.D., Cornell, 1988), 21–9. As we have seen (nn. 24, 36), Burnyeat also claims that, if all features of an object are relativized, so that the object

X

We have now looked at part of Plato's argument for the claim that Protagoras is committed to Heracleiteanism. The argument involves the suggestion that Protagoras cannot distinguish between genuine and mere Cambridge change. Though the argument committing Protagoras to Heracleiteanism involves Protagoras in confusion, we can also see why Protagoras should none the less welcome Heracleitus' support. For Protagoras believes that all beliefs are true, true *simpliciter*. According to Burnyeat, infallibilism 'is in clear violation of the law of contradiction, since it allows one person's judgment that something is so and another person's judgment that it is not so both to be true together'.[47] But we should not conclude so quickly that infallibilism violates the law of noncontradiction: whether it does so depends on what the world is like. If the world is populated by stable, intersubjectively available objects, then infallibilism violates the law of noncontradiction. But if the world is constantly changing to accommodate our different appearances, then it is not so clear that infallibilism violates the law of noncontradiction.[48] This is precisely why Plato sug-

is nothing in itself, then Protagoras is committed to a very strong sort of Heracleiteanism. However, again, it is not clear that that suggestion of his fits very well with his account of 153 D–154 B. Moreover, we construe the nature of the relevant relativizations differently, since I take Protagoras to be an infallibilist, whereas Burnyeat denies that Protagoras is an infallibilist (see n. 47).

[47] Burnyeat, 'Protagoras and Self-Refutation in Later Greek Philosophy', 46. More precisely, Burnyeat says that the view that he calls subjectivism violates the law of noncontradiction. But 'subjectivism' is just his label for the view I call infallibilism. I prefer my label largely because 'subjectivism' has been used in so many different ways that its use here would be liable to misinterpretation. In particular, it might suggest, misleadingly, that for Protagoras colours and so on are purely mental entities. On infallibilism, colours and so on do not exist unperceived, but they are genuine features of extra-mental objects. Burnyeat rejects the infallibilist reading of Protagoras in favour of a relativist reading, according to which 'every judgement is true *for* (in relation to) the person whose judgement it is' ('Protagoras and Self-Refutation in Plato's *Theaetetus*', 176). Although Burnyeat, in his two papers on the self-refutation argument, denies that Protagoras is an infallibilist, elsewhere he sometimes seems to conceive of him as an infallibilist. In, for example 'Idealism and Greek Philosophy', he says that 'Protagoras' book was called *Truth* precisely because it offered an account of the conditions under which things really are as they appear. The Greek use of the predicates "true" and "false" embodies the assumption of realism on which I have been insisting all along' (p. 26). Earlier in the same article, he says that Protagoras 'demands a state of affairs for every appearance, rendering that appearance true' (p. 8); and that 'every perception will be the unerring apprehension of a particular state of affairs' (p. 9). Here Burnyeat says that things change whenever they appear different. This is what infallibilism says. According to perceptual relativism, however, things can appear different without undergoing a genuine change.

[48] Conversely, if objects are as they appear, then, given the assumption that objects con-

gests that Heracleitus is Protagoras' best support: he tries to buttress at least Narrow Protagoreanism by showing that it can eliminate a number of seeming contradictions, at least in the perceptual sphere, by embracing a Heracleitean ontology. Whether infallibilism in the end violates the law of noncontradiction, especially when it strays outside the perceptual sphere (or for conflicting appearances that occur at some one time), is another question, which I take up in the next chapter. The present point is that, even if it violates the law of noncontradiction at some stage, Heracleiteanism is introduced to show that it is not as vulnerable on this score as it initially seems to be.

This, in turn, shows that Protagoras should have mixed feelings about his Heracleiteanism. On the one hand, it allows him to argue that many seemingly conflicting appearances do not in fact conflict. To this extent, invoking Heracleiteanism makes infallibilism look more plausible than it might initially seem to be. On the other hand, Protagoras is committed to being a Heracleitean, to invoking genuine change, in cases that in fact involve mere Cambridge change. So Protagoras' best support also involves him in some confusion. This, no doubt, is Plato's point. But we can see that this is his point only if we are clear about the complex dialectical character of his discussion.[49]

stantly appear different, they are constantly changing. Bostock, *Plato's* Theaetetus, 49, asks why we should assume that objects always appear different. I can think of two replies. One is that the assumption is quite reasonable; for since, as Plato says at 154 A 3–8, conditions are never exactly alike, how things appear from one moment to the next is never exactly the same. (Contrast Bostock's intuitions, p. 61.) Another is that Protagoras must allow that things can always appear different, in which case he is committed to allowing that the most radical sort of Heracleiteanism is at least possible. On either view, Plato then asks whether something Protagoras takes to be possible is in fact possible. (On the first view, he explores whether something Protagoras takes to be actual, and so possible, is in fact possible; on the second view, he explores whether something Protagoras views as possible, even if not actual, is in fact possible.) When he argues, at pp. 181–3, that the most extreme sort of Heracleiteanism is after all impossible, that undercuts Protagoreanism as well.

[49] I should like to thank Terry Irwin, M. M. McCabe, Gisela Striker, and Nicholas Sturgeon for helpful written comments; and the members of a graduate seminar held in Cornell in the autumn of 1992 for many stimulating discussions. Some of the ideas presented in this chapter are developed further in ch. 6 above.