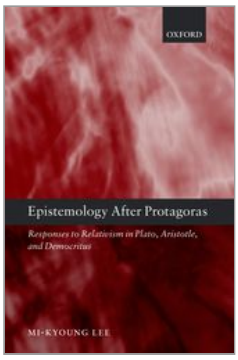
University Press Scholarship Online
Oxford Scholarship Online



Epistemology after Protagoras: Responses to Relativism in Plato, Aristotle, and Democritus
Mi-Kyoung Lee

Print publication date: 2005
Print ISBN-13: 9780199262229
Published to Oxford Scholarship Online: October 2005
DOI: 10.1093/0199262225.001.0001

The Secret Doctrine in Plato's Theaetetus

Mi-Kyoung Lee (Contributor Webpage)

DOI:10.1093/0199262225.003.0005

Abstract and Keywords

In the Theaetetus, Plato develops a theory of perception and of sensible qualities for Protagoras' measure doctrine. Protagoras states that whatever appears to be the case to one is the case for one; this is construed as an epistemological thesis asserting the truth of all human beliefs. Plato attributes to Protagoras a "Secret Doctrine", a collection of loosely related metaphysical theses, including a thesis of constant flux and a thesis of the compresence of opposites. His aim is to show how these theses can be used to develop a full-fledged theory for Protagoras in the case of sensible qualities, in particular, to show what it means to say that, for example, the wind is cold for Theaetetus. The result is a relativist account of perception and of sensible qualities offered on Protagoras' behalf.

Keywords: secret doctrine, measure doctrine, perception, sensible qualities, perceptible qualities, truth, flux, compresence of opposites, conflicting appearances, relativist

5.1 Introduction

Plato and Aristotle both suggest that Protagoras' measure doctrine requires him to relativize all properties or states of affairs to perceivers. We now want to explore this idea by examining the so-called Secret Doctrine in Plato's *Theaetetus*. The Secret

Doctrine represents Plato's attempt to build as strong a case as possible for Protagoras by drawing upon additional resources which Protagoras himself did not use. As I will try to show, the Secret Doctrine is not simply a doctrine of flux, but a collection of metaphysical theses that includes the relativist principle that nothing is anything in itself, but is whatever it is relative to something else. In this chapter we will see how Plato uses this principle to develop a theory of perception, on Protagoras' behalf, that explains how all perceptions and perceptual appearances are true. In particular, it explains how to relativize properties to perceivers.

Plato's attempt to build a positive case for Protagoras in the *Theaetetus* must be understood in the context of the dialogue. The *Theaetetus* is devoted to the question of what knowledge is. Protagoras' measure doctrine is introduced in connection with a definition of knowledge proposed by Theaetetus according to which knowledge is the same as perception (T).

> SOC.: You hold that knowledge is perception [αἴσθησις, φῄς, ἐπιστήμη]?…But look here, this is no ordinary account of knowledge you've come out with: it's what Protagoras used to maintain. He said the very same thing, only he put it in rather a different way. For he says, you know, that 'Man is the measure of all things: of the things which are, that they are, and of the things which are not, that they are not.' You have read this, of course? (151e6–152a4)

In the rest of the dialogue, Socrates treats Protagoras' thesis that whatever appears to be the case to one is the case for one, (P), as a substitute for Theaetetus' definition. Why? Unfortunately, Plato does not discuss Theaetetus' definition in any detail either before or after introducing Protagoras' measure doctrine, which leaves the exact nature of the connection between (T) and (P) unclear. As it is, Theaetetus' definition of knowledge can be construed in a number of different ways. It can be interpreted as the statement that knowing and perceiving are the same because 'perceive', like 'know', is a success-verb; just (p.78) as it is impossible to know that something is the case and be wrong about it, so too it is impossible to perceive that something is the case and be wrong about it. However, if this is what he meant, then Theaetetus is not denying that one can go wrong about anything, since the fact that 'perceive' and 'know' are success-verbs is compatible with the fact that we experience false perceptual appearances and make false judgements all the time; hence, on this interpretation, he is not committed to Protagoras' measure doctrine.

Theaetetus' definition can also be understood as the conjunction of two theses, (T2) what one knows one perceives through the senses, and (T3) what one perceives through the senses one knows. In other words, every case of knowing is a case of sensing, and everything one senses is a case of knowledge. (T3) tells us that sense-perception is a reliable way to acquire knowledge (if you want to know whether the taxi has arrived, take a look out of the window), and also implies that we never go wrong in perception. This is more promising if the intention is to establish a link with (P). However, the problem is that, given what we have been told about Theaetetus in the

dialogue, it is implausible in the context that by (T) he meant that (T2) all cases of knowledge are matters of sense-perception. For just before giving (T) as a definition of knowledge, he had been telling Socrates (147d–148b) about a discovery in number theory made by him and his friends, in which he emphasized that the achievement was not available through the exercise of sensation alone.[1]

Theaetetus' definition can be construed in yet another way by supposing that *aisthēsis* does not mean sense-perception or sensation narrowly construed, but ‘awareness’, as it often does in non-philosophical Greek, where one is made conscious or aware of something primarily, though not necessarily, through sensory means.[2] Walter Burkert (1972: 270 n. 270) gives examples:

> In non-philosophical language αἰσθάνεσθαι means ‘perceive’ or ‘comprehend’ (Soph. *Aj*. 553; cf. Thrasymachus fr. 1), or ‘perceive’ and ‘feel’ (a misfortune, for example, as at Soph. *OT* 424). Plants, too (Protagoras ap. Pl. *Tht*. 167c), and even lifeless things haveαἴσθησις (cf. Hippoc. *Morb*. VI 386 L., *Vet. med*. 15). According to Hippoc. *Morb*. VI 392f L., heart and diaphragm have nothing to do with thinking; and yet they αἰσθάνονται μάλιστα i.e. ‘feel [emotions] most poignantly’.[3]

And early on in the *Theaetetus*, as Dancy notes, Socrates says of Theaetetus ‘I have never yet seen [ἠσθόμην] anyone so amazingly gifted’ (144a2–3), and of midwives ‘have you noticed [ᾔσθησαι] this about them, that they are the cleverest of matchmakers?’ (149d5–6). Thus, when Theaetetus says that knowledge is perception, perhaps what he means is that when you know something, you are aware of it. This is plausible, but little more than a bland tautology explaining one word in terms of a virtual synonym. And again, under this (p.79) interpretation, Theaetetus' definition does not commit him to Protagoras' measure doctrine.[4]

None of these interpretations of Theaetetus' definition is both plausible in the context and sufficient to explain why Socrates treats Protagoras' measure doctrine as an adequate substitute for Theaetetus' definition. We can better explain why Plato has Socrates connect Theaetetus' definition with Protagoras' measure doctrine by supposing that it is meant to clarify what Theaetetus is prepared to commit himself to. When Socrates introduces Protagoras' measure doctrine by saying that it is ‘the very same thing’ as Theaetetus' definition, only ‘put in rather a different way’, he is not saying that the two are equivalent, or that Theaetetus is already committed to it. Rather, Socrates offers Protagoras' measure doctrine to Theaetetus in the following spirit: ‘Theaetetus, I don't know what exactly you have in mind by (T). Protagoras used to say something similar. Do you mean by your definition what Protagoras said?’ Since Theaetetus' definition is ambiguous between a number of interpretations, Socrates is asking for clarification of (T), in the form of a substitute, (P), whose commitments are clearer.[5] Another example of a friendly amendment which develops and recommends a thesis under consideration can be found at *Meno* 86d where Plato introduces the method of hypothesis.[6] There, the thesis ‘virtue can be taught’ is on the table. Since

Meno has been too impatient to discuss the question of what virtue is, Socrates finds grounds for recommending the thesis under consideration using an indirect approach, by hypothesizing the proposition ‘virtue is knowledge’, which implies that virtue can be taught. Then Socrates offers some arguments showing that virtue cannot be taught; this in turn undermines the hypothesis that virtue is knowledge. Here in the *Theaetetus*, Socrates hypothesizes (P) to recommend (T).

Theaetetus' definition does not commit him to (P), so Socrates must secure his assent to (P) in a separate step. He does so by showing that if Protagoras' thesis is true, it follows, given some apparently reasonable assumptions, that Theaetetus' thesis that perception is knowledge must be true as well.

1. Whatever appears to be the case to one is the case for one. (οἷα μὲν ἕ καστα ἐμοὶ φαίνεται τοιαῦτα μὲν ἔ στιν ἐμοί, οἷα δὲ σοί, τοιαῦτα δὲ αὖ σοί. 152a6–8)

(p.80)

2. The expression ‘it appears’ means ‘he perceives it’. That is, appearing and perceiving are the same ‘in the case of hot and things like that’. (Τὸ δέ γεφαίνεται' αἰσθάνεταί εστιν;...Φαντασία ἄρα καὶ αἴσθηοις ταὐτὸν ἔν τεθερμοῖς καὶ πᾶσι τοῖς τοιούτοις. 152b12–c2)

Premiss (2) allows one to substitute ‘perceive’ for ‘appears’ in (1) for a restricted range of cases.

3. Things are for the individual such as he perceives them (in the case of hot, etc.). (οἷα γ' ἄρ'[7] αἰσθάνεται ἕκαστος, τοιαῦτα ἑκάστῳ καὶ κινδυνεύει εἶναι. 152c2–3)

4. Being unerring and true is sufficient for knowledge. (implicit assumption)

And from (3) and (4) Socrates can derive (T):

5. Perception is always of what is, and unerring, as befits knowledge. (Αἴσθησις ἄρα τοῦ ὄντος ἀεί ἐστιν καὶ ἀψευδὲς ὡς ἐπιστήμη οὖσα. 152c5–6)[8]

Once Theaetetus agrees to (P), he thereby indicates that he will accept any arguments supporting (P) as support for (T) as well.

We can therefore explain why Plato replaces (T) with (P) in the *Theaetetus*. (T) seems plausible, but is ambiguous; in order to clarify what Theaetetus is prepared to commit himself to, Socrates introduces (P), and has Theaetetus agree to it. Theaetetus thereby assents to a more radical interpretation of (T): (T3) whatever one perceives is a case of knowledge. Note that Socrates' argument at 152a6–c6 only shows us how to get from Protagoras' measure doctrine in the perceptual case to (T3), not to (T2); this may be why Socrates never mentions (T2) in the rest of the *Theaetetus*. Indeed, Plato devotes so much more space to investigating (P) than to (T) that one suspects he was really

more interested in Protagoras all along, and that Theaetetus' definition of knowledge as perception was simply a device allowing him to introduce (P) into a dialogue on knowledge.[9]

By connecting Protagoras' measure doctrine with Theaetetus' definition of knowledge as perception Plato highlights the fact that Protagoras' claim is most plausible in the perceptual case. When Socrates has finished his refutation of Protagoras' doctrine, he concedes that while in some areas we may insist that one person is superior in judgement to another, Protagoras may be right for a (p.81) smaller range of questions and issues such as the perceptual case, that no one is any better a judge than anyone else.

> We may also suggest that the theory would stand firm most successfully in the position which we sketched out for it in our attempt to bring help to Protagoras. I mean the position that most things are for the individual what they seem to him to be; for instance, warm, dry, sweet and all this type of thing. (*Tht*. 171d9–e3)[10]

He even suggests that Protagoras' claim may be irrefutable when restricted to immediate perception:

> But so long as we keep within the limits of that immediate present experience of the individual which gives rise to perceptions and to perceptual judgements, it is more difficult to convict these latter of being untrue—but perhaps I'm talking nonsense. Perhaps it is not possible to convict them at all; perhaps those who profess that they are perfectly evident and are always knowledge may be saying what really is. (*Tht*. 179c2–7)[11]

One can accordingly distinguish between what Fine (1996a: 213–14) calls Broad Protagoreanism, the general claim that whatever appears to be the case (on any subject) is the case for one, and Narrow Protagoreanism, the claim that whatever appears to be the case to one in perception is the case for one. Broad Protagoreanism ranges over all beliefs; Narrow Protagoreanism is restricted to perceptual beliefs. In the *Theaetetus*, Socrates regularly distinguishes between Broad Protagoreanism and Narrow Protagoreanism (e.g. *Tht*. 152c1–3). He constructs a theory of perception, in order to support Narrow Protagoreanism, and then at *Theaetetus* 157d indicates that it can be extended to the case of what is good, beautiful, etc. This mirrors and is undoubtedly a comment on Protagoras' own argument in the *Alētheia*. For Protagoras seems to have supported the measure claim using a number of well-chosen perceptual examples which strictly speaking only support Narrow Protagoreanism. Even if one grants that Protagoras' measure doctrine is true in the case of perception—so that all perceptions and perceptual appearances are correct—it still requires another large step to conclude that it is true in all cases. As Burnyeat (1976a: 45) puts it, there may be ‘little but bluff’ to support it when it is extended quite generally.

One might wonder why Plato neglects, by comparison, the topic of moral relativism in the *Theaetetus*. Burnyeat (1990: 33) points out that Plato is interested in exploring, and refuting, a relativist epistemology in the *Theaetetus*, and that one can find relativism about values tempting without wanting to go for a relativist epistemology as well. The realization that laws or customs (p.82) which are considered just in one's own country may be deemed unjust in another does not naturally lead to the thought that there is anything especially authoritative about one's beliefs about justice or our capacity to know or discover what is truly just; on the contrary, one may experience an unsettling erosion in confidence about whether it is possible to determine what is really just, and indeed, whether there is any such thing at all. One might begin to suspect that nothing is really just, beautiful or shameful, and that things only seem to be so to people. By contrast, in perception we seem to have authoritative means for determining how things are. Through the senses, we become aware of the world and its features. If a sled appears red in colour to me when I look at it, I have a strong reason to think that it is red, and unless there are salient reasons for thinking there's something wrong with me or my eyes, I will believe that it is red. Perceptual examples draw our attention to the idea that we have in our perceptual faculties a reliable and authoritative guide to how things are; they make plausible Protagoras' claim that man is a ‘measure’. It is this idea and its epistemological implications that Plato wants to explore in the *Theaetetus*.

5.2 Protagoras and the Secret Doctrine

Protagoras tells us that each person is a ‘measure’ of what is the case and what is not the case; thus, he seems to have made each person an authoritative judge of what is true, so that his beliefs are correct concerning how things really are (§3.3). Now this leaves it unclear whether the measure doctrine is a simple conditional

(P1) If *x* seems F to A, *x* is F (for A),

or a biconditional

(P2) *x* is F for A if and only if *x* seems F to A,

which is a conjunction of (P1) and

(P3) *x* is F for A only if *x* seems F to A.

In the *Theaetetus*, Protagoras' thesis is supported by the claim that if Socrates thinks the wind is hot, the wind is hot for Socrates (*Tht.* 152b). This supports the conditional reading. The conditional tells us that each person is a good measure of what is true and what is false: what one believes to be true is true, what one believes to be false is false. This is a remarkable claim, but more modest than the biconditional, which tells us not only that all beliefs are true, but that only what one believes is true; man is not only a good criterion of what is true, but the sole determinant of what is true.

None of the extant fragments from Protagoras' writings settles the question of whether he meant to argue for the full-blooded biconditional (P2), or for the (p.83) more modest conditional (P1).[12] If Protagoras made individuals, their beliefs and perceptions, the judges of what is true, then perhaps all he meant to argue for was the conditional (P1). Some indication that Protagoras would not have gone for the full biconditional (P2) comes from an admittedly late source, who describes Protagoras' measure doctrine as follows:

> …Πρωταγόρας ὁ 'Αβδηρίτης εἶπεν, Οὗτος γὰρ ἔφη "μέτρον εἶναι πάντων χρημάτων τὸν ἄνθρωπον τῶν μὲν ὄντων ὡς ἔατι, τῶν δὲ οὐκ ὄντων ὡς οὐκ ἔ ατιν," 'Οποῖα γὰρ ἑκάατῳ φαίνεται τά πράγματα, τοιαῦτα καὶ ῖναι. Περὶ δὲ τῶν ἄλλων μηδὲν ἡμᾶς δύνασθαι διισχυρίσασθαι. (Aristocles in Eusebius, *Praep. ev.* XIV, 20, ed. des Places = not in DK)
>
> [Protagoras of Abdera] said that man is the measure of all things, of what is that it is, of what is not that it is not. For things are as they appear to each. And concerning other things [sc. those which do not appear one way or another to us] we are not able to determine anything.

Of particular interest to us is the last sentence, which states that if we have no opinion one way or another, we are not able to decide what is really the case (cf. Sextus, *PH* I

219: τὰ δὲ μηδενὶ τῶν ἀνθρώπων φαινόμενα οὐὲ ἔ στιν). This strikes the same note as the opening line of Protagoras' *On the Gods*, where he announces that

> περὶ μὲν θεῶν οὐκ ἔχω εἰδέναι, οὐθ' ὡς εἰσὶν οὔθ' ὡς οὐκ εἰσὶν οὐθ' ὁποῖοί τινες ἰδέαν πολλὰ γὰρ τὰ κωλύοντα εἰδέναι ἥ τ' ἀδηλότης καὶ βραχὺς ὢν ὁ βίος τοῦ ἀνθρώπου.
>
> Concerning the gods I cannot know either that they exist or that they do not exist, or what form they might have, for there is much to prevent one's knowing: the obscurity [sc. of the subject] and the shortness of man's life. (Eusebius, *Praep. ev*. XIV 3, 7 and DL IX 51 = DK 80 B4)[13]

Here Protagoras again insists upon relying on his own opinions to decide matters for himself, but says that he must stop short when the evidence is too weak or insufficient to be clear. If so, it is not clear that Protagoras would accept (P3).

(p.84) However, Plato has Socrates articulate the more radical thesis and push it onto Protagoras. His first concern upon introducing (P) in the *Theaetetus* is to secure (P3) for Protagoras. Because we are now so familiar with relativism, it may seem obvious that its special punch is delivered by this half of the biconditional. However, this is exactly what Socrates emphasizes when he asks Theaetetus:

> SOC.: Well, it is not likely that a wise man would talk nonsense. So let us follow him up. Now doesn't it sometimes happen that when the same wind is blowing, one of us feels cold and the other not? Or that one feels rather cold and the other very cold?
>
> THT.: That certainly does happen.
>
> SOC.: Well then, in that case are we going to say that the wind itself, by itself, is cold or not cold? Or shall we listen to Protagoras, and say it is cold for the one who feels cold, and for the other, not cold?
>
> THT.: It looks as if we must say that. (152b1–9)

Socrates emphasizes that Protagoras is saying that the wind is not, taken by itself and apart from how it appears to anyone, cold or not cold; rather, it is cold for the one who perceives it as such, and is not for the one who doesn't. With this, Protagoras' thesis can be represented by the full biconditional (P2).

Having fixed (P2) as the object of inquiry, Socrates then introduces yet another thesis.

> Was Protagoras one of those omniscient people? Did he perhaps put this out as a riddle for the common crowd of us, while he revealed the *Truth* as a secret doctrine to his own pupils (τοῖ δὲ μαθηταις ἐν ἀπορρήτῳ τὴν ἀλήθειαν ἔλεγεν.)?...

> I'll tell you; and this, now, is certainly no ordinary theory (Ἐγὼ ἐρῶ καὶ μάλ' οὐ φαῦλον λόγον). (*Tht*. 152c8–d2)

He calls this theory a ‘Secret Doctrine’, presumably to acknowledge that Protagoras never espoused any such doctrine and that it is of his own devising. But in having Socrates suggest that Protagoras must have had secret teachings explaining the *real* truth to an inner circle of students, Plato plays on a theme to which he will return throughout his discussion of Protagoras, that the opening line of Protagoras' book was like the pronouncement of an oracle, mysterious and incomprehensible. At *Theaetetus* 162a, for example, Socrates suggests the possibility that the *Truth* is ‘simply an oracle speaking in jest from the impenetrable sanctuary of the book’. The Secret Doctrine could be a witty imitation of the type of allegorical commentary one finds in the Derveni papyrus, with the ironic suggestion that Protagoras' ‘Truth’ was as impenetrable as an Orphic poem. Socrates' playful attribution of an esoteric doctrine to Protagoras would have extra bite if Protagoras' *Truth* was in fact meant as an attack on philosophers who clothed themselves in the language of the hierophant (cf. §3.3).

Socrates says that what Protagoras secretly teaches his students is the following:

> This, now, is certainly no ordinary theory—I mean the theory that there is nothing which in itself is just one thing: nothing which you could rightly call anything or any kind of thing. If you call a thing large, it will reveal itself as small, and if you call it heavy, it is liable (p.85) to appear light, and so on with everything, because nothing is anything or any kind of thing. Rather, the things of which we naturally say that they ‘are’, are in process of coming to be, as the result of movement and change and blending with one another. We are wrong when we say they ‘are’, since nothing ever is, but everything is coming to be. (152d2–e1, trans. Levett/Burnyeat modified)[14]

This is supposed to clarify Protagoras' measure doctrine, but is even more contentious and obscure. Protagoras' claim is that things are for each as they appear to each. The Secret Doctrine seems to be a mix of metaphysical doctrines, including a Heraclitean thesis of total flux, telling us that everything is always changing in every respect. Anyone familiar with more modern varieties of relativism (such as relativism about truth) will wonder how a flux doctrine is relevant. Perhaps a doctrine of flux is supposed to allow Protagoras to escape contradictions. For example, if Socrates perceives the wind as being hot and Theaetetus perceives it as being cold, then the doctrine of flux would tell us that the world is constantly changing in such a way that both perceptions turn out to be true. For a relativist, however, the alleged problem is a non-starter. The relativist maintains that if someone believes that some *x* is F, then *x* is F for her. Once the statements have been suitably relativized, there is no contradiction which results from conflicting beliefs being true, and therefore no apparent role for a doctrine of flux or change to play.[15] Indeed, the wind is supposed to be hot for one and cold for the other *simultaneously*. Plato himself was clear about the importance of specifying qualifications completely in order to avoid the spectre of contradiction (*Rep*.

IV 436e8–437a2, quoted earlier in Ch. 4 n. 32). And he does not seem to have thought that Protagoras' measure doctrine was, at least at this level, entangled in contradictions.[16] Why then does Plato introduce the Secret Doctrine? How is it meant to help Protagoras?

This is the central problem in understanding the Secret Doctrine and the 'perception' section of the *Theaetetus* (152–86). In my view, the Secret Doctrine is introduced in order to supply auxiliary materials for understanding and explaining the measure doctrine as a biconditional. What does it mean to say that the wind is not, in itself, hot or cold, but is only hot or cold for one who (p.86) perceives it as such? What is being said about the perceived hotness or coldness? What is it for the wind to be cold *for Socrates*? (P1) states that human beliefs and perceptions are the measure of reality, but we still lack an explanation of the biconditional's second half, (P3), of what it means to say that nothing is anything in itself, but is whatever it is *for* one who is perceiving it. This is what the Secret Doctrine is meant to explain.[17]

The key to understanding Plato's Secret Doctrine is to see that the Heraclitean doctrine of constant flux is only one of a number of loosely related theses included in it. Another important thesis in this collection is the principle that nothing is anything by itself, but is so only relative to something else. This principle recommends total relativity—not in the trivial sense that everything bears some relation to something, but in the sense that everything is whatever it is relative to someone who perceives it as such. Plato uses this to explain what it means to say that something is only F for someone who perceives it as such.

5.3 The Secret Doctrine: a sketch

The Secret Doctrine is usually identified as the thesis that everything is changing (*Tht*. 160d, 181–3). For this reason many commentators call it the 'Heraclitean doctrine'—a label Plato never uses—in honour of Heraclitus' famous image of a river constantly flowing.[18] But in fact, there is no single, well-formulated statement of the doctrine to be found in the *Theaetetus*. What is introduced under the rubric of the Secret Doctrine is a bunch of slogans loosely strung together. Look again at the passage where Socrates introduces the Secret Doctrine, quoted above. In this passage, I count at least three distinct ideas:

> (i) Nothing is any *one* thing by itself—in the sense that where something is qualified by one property, substantial or non-substantial, it will also reveal itself (or appear, φανεῖται) to be qualified by the opposite property. (152d2–6)
> (ii) Nothing is anything *in itself*—in the sense that all things come to be what they are from change, movement, mixture *with respect to one another* (πρὸς ἄλληλα). (152d6–e1)
> (iii) Nothing *is* anything in itself—in the sense that nothing *is* (anything at all), but everything is always coming to be (i.e. changing). (152e1)

(p.87) These in turn can be construed in different ways. (i), for example, could mean that everything always gives rise to conflicting appearances: if something appears *F* it will also appear not-*F*, either to the same person or to some other perceiver (154a3–9). Or it could mean that a thing *can* bear opposite properties, or even that everything *does* always bear opposite properties. (iii) could mean that everything is always changing in *some* respect or in *every* respect. The semi-fanciful arguments for these ideas given at 152e1–153d7 attribute still other theses to the distinguished assembly gathered by Socrates, which includes Homer, Heraclitus, Empedocles:

> (iv) Being (what passes for such) and becoming are a product and offspring of motion (κίνησις), while not-being and passing-away result from a state of rest. (153a5–7)
> (v) What is good is change (κίνησις), in both mind and body; what is bad is the opposite. (153c4–5)

Later Socrates introduces other theses, e.g.

> (vi) Everything is change (κίνησις). (156a5)

There may be others; I simply want to stress that there is a plurality of theses and ideas sheltering under the 'Secret Doctrine'.[19] Plato makes no attempt—at least here at their debut—to show us how they are connected with each other, or which if any is the most important. Some of these theses will make another entrance; for others, such as (v), this is their single appearance in the show. If there is a core idea and if there is a story to be told about how the other ideas fit together with it, it can only emerge in an interpretation of what Plato does with the Secret Doctrine as a whole—it is not given to us at the outset.[20] It is not even clear at the very end of the exposition of the Secret Doctrine theory of perception at 160d, when Socrates summarizes it as the thesis 'of Homer and Heraclitus and all their tribe, that all things flow like streams', whether what is meant is the thesis that everything is changing in some respect, the thesis that everything is changing in every respect, the thesis that there is no respect in which a thing cannot change, or the thesis that everything comes to be whatever it is. For this reason, we should avoid labelling as 'Heraclitean' the theory Socrates and his interlocutors develop on Protagoras' behalf, in so far as that would imply that the doctrine of constant change is the sole idea in the Secret (p.88) Doctrine. Socrates usually refers to it simply as 'the *logos*'.[21] And he attributes this *logos* to Homer just as often as to Heraclitus, and indeed, to all the Presocratics except Parmenides.[22] This is an extravagant genealogy—perhaps Plato's way of gesturing towards a way of thinking, shared by the vast majority of his predecessors and contemporaries, and not a unified doctrine clearly articulated by any one person.[23] For the time being, we shall stick with the neutral label 'Secret Doctrine' to refer to this collection of theses, and by extension the general strategy of defence Plato develops for Protagoras from *Theaetetus* 152d to 160e.

One influential way of understanding the role of the Secret Doctrine, which I reject, is to see it as implying and implied by Theaetetus' definition, and as implying and implied by Protagoras' measure doctrine.[24] According to this interpretation, Plato's strategy is, first, to show that each of the three theses commits one to holding the others: Theaetetus ↔ Protagoras ↔ Heraclitus (H).[25] They stand or fall together. Next, Plato demolishes them one by one. Socrates refutes (T) indirectly with arguments against (P) and arguments against (H), and then undertakes one final direct refutation of (T). Such a strategy, if (p.89) executed correctly, would provide a thorough and decisive way to investigate, then neatly dispatch, a set of problematic theses. It has the advantage of making the question of the relation between the three theses not merely of historical interest (who among his predecessors and contemporaries was Plato trying to attack and why?), but also of philosophical interest, a question of whether relativism is ultimately untenable because it commits one to a series of metaphysical absurdities, such as a doctrine of extreme flux. When taken to its logical conclusion this approach imposes the equivalence of (T), (P), and (H) as a constraint on interpretation of the dialogue as a whole, and on any satisfactory interpretations of (P) and (H).[26] That is, any interpretation of (T) or (P) under which they fail to imply or commit one to (H) should be rejected in favour of an interpretation under which they do.

Why does it make sense to think that Protagoras is committed to Heraclitean flux? The answer usually given is that the thesis that everything is always changing offers the metaphysics needed to guarantee the incorrigibility which Protagoras claims for human perceivers.[27] Consider a world in which perceivers cannot be mistaken. If all their perceptions are true, then things must change according to their different and changing beliefs. Things cannot have continuing identity over time, whether for different perceivers, or for a single perceiver over time. For if there were any kind of stability in an object, this would imply that there is an objective truth about how it is; (i) an object would be that way independently of how anyone perceives it, and (ii) it would be possible to be mistaken about how it is. As Burnyeat puts it,

> If a thing is stable, or stable in some respect (the qualification makes no odds), that means there is an objective basis for correcting or confirming someone's judgement as to how it is, or how it is in that respect. There is a fact of the matter, independent of the person's judgement. The whole point of eliminating first objectivity between persons and then identity through time was to ensure that there would be no basis in the experience of other times and other people for charging anyone with untruth.…Stability, even for a moment, entails objectivity, even if only for that moment. (1990: 49)

If something remained stably F, this would constitute an objective state of affairs, on the basis of which a judgement about it could be convicted of being false. Protagoras denies objectivity, and is therefore committed to the thesis of constant change.

Certainly Protagoras must allow the possibility of change with respect to any feature. For if it appeared to me at one time that the coffee was hot, and then at (p.90) another time that the coffee was cold, then Protagoras ought to allow that the coffee was once hot for me, now cold for me, and therefore has undergone change. Nothing is fixed; change is always possible. But it is not clear that (1) Protagoras or any other relativist is committed to the doctrine that everything is always changing with respect to every feature, or that (2) introducing instability will explain the most important feature of the relativist doctrine, namely, that reality is radically perceiver-dependent, as (P3) implies.[28] The proposal is that Protagoras is committed to extreme flux because stability and constancy in an object's qualities will imply that there is an objective truth about how that object is, which will in turn be an objective basis for correcting someone in her perceptions of it. Therefore a relativist who denies that anything is objectively true (true independently of whether anyone thinks it is true) must eliminate any trace of stability in objects. Take this cold wind which Theaetetus feels. If it is not constantly changing, then there will be a fact of the matter about how it is, about which Theaetetus could be mistaken. But this doesn't follow. If there is a fact of the matter about the wind's being cold, how does it help the relativist to make the wind change? There will also be a fact of the matter about its changing. That is, if one assumes that stability implies that there is an objective truth about an object (i.e. that it is possible to be mistaken about it), then one cannot eliminate objectivity by introducing flux, for one can be wrong about a changing object just as well as a stable one. Stability does not, however, imply that there is an objective truth about an object. Stability is possible even in a relativist world: if it appears to me for all my life that this stone is black, the relativist should say that it will be black for me for that entire length of time. Its remaining stably black does not make it an ‘objective fact’ in the sense of being true independently of whether I perceive it as black or not. For it is black only because it appears so to me, and may at the same time be different colours for other perceivers. In my view, we need an explanation of why nothing is anything in itself but only has properties relative to a perceiver, and that explanation cannot be found in an appeal to constant flux. It is not obvious that one who wishes to deny the existence of objective facts is committed to a doctrine of constant flux.

Thus, we have a choice concerning the intended connection between the Secret Doctrine and Protagoras' measure doctrine: either (1) Protagoras' thesis implies the doctrine of constant flux, where that fact will determine how to interpret Protagoras' position,[29] or (2) Protagoras' thesis does not imply the doctrine of total flux.

I shall make a case for option (2). There is no clear indication that Plato intends to argue that Protagoras' measure doctrine, Theaetetus' definition, and (p.91) the Secret Doctrine imply each other.[30] And therefore we should not assume mutual entailment as the default interpretation, or expect that all three theses will stand in the same relations to each other. As I see it, the main project of this part of the *Theaetetus* is to show that the Secret Doctrine can explain how (P) and (T) can be true, at least in the

case of perception and perceptible properties (152c1–2, 153d8–9, 156e7–9). As Socrates later puts it,

> We may also suggest that the theory would stand firm most successfully in the position which we sketched out for it in our attempt to bring help to Protagoras. I mean the position that most things are for the individual what they seem to him to be; for instance, warm, dry, sweet and all this type of thing. (*Tht*. 171d9–e3)

Plato introduces the Secret Doctrine as an independent set of theses which he will use to explain the biconditional claim that *x* is F for A if and only if *x* seems F to A. That the direction of explanation goes from the Secret Doctrine to Protagoras' thesis is (p.92) suggested by Socrates' remarks upon completing the construction of the Secret Doctrine. Concerning the relation of the three theses, he says:

> So we find the various theories have fallen in together at the same point (εἰς ταὐτὸν συμπέπτωκεν): that of Homer and Heraclitus and all their tribe, that all things flow like streams; of Protagoras, wisest of men, that man is the measure of all things; and of Theaetetus that, *these things being so*, knowledge proves to be perception. (160d6–e2, trans. Levett/Burnyeat modified)

He does not say that the three theses are equivalent. Rather, if Protagoras' thesis and the Secret Doctrine are true, then Theaetetus' definition comes out true as well (cf. *Tht*. 183b7–c3).

Plato introduces the Secret Doctrine in order to develop Protagoras' claim. Developing a philosophical position does not necessarily or even usually consist of working out the implications or necessary commitments of that view; one may fashion a theory out of whatever borrowed materials seem most promising for defending it. Theaetetus' thesis is vague and nebulous—Protagoras' thesis is introduced to firm it up. Similarly, Protagoras' thesis is ambiguous and puzzling on its own—the Secret Doctrine is introduced to amplify and support it. It has the status of an independent hypothesis, which provides Socrates with substantial metaphysical resources for developing a theory for Protagoras. This follows a familiar strategy in Platonic dialogues, where Socrates tests a thesis not by working out its implications, but by introducing ancillary premisses.[31] Socrates does not insist that the interlocutor is already committed to the ancillary premisses because of his initial thesis; he must agree to them separately, sometimes with no small amount of coaxing from Socrates. In the *Theaetetus* Socrates must provide Theaetetus with reasons to suppose that the Secret Doctrine will in fact support Protagoras' claim, and provide sufficient conditions for its truth.[32]

Why did Plato hit upon the idea of using the complex of theses contained in the Secret Doctrine as supporting materials for Protagoras if, as I have suggested, he does not think that Protagoras is committed to it? The reason is that Plato has an independent interest in examining these ideas. This is not a novel answer; most late nineteenth-century scholarship on the *Theaetetus* tended to assume that Plato had other targets in mind besides Protagoras (for example, Antisthenes, Aristippus, Cratylus, the

Megarians, Democritus)—and they engaged in a futile effort to identify these unnamed opponents.[33] It may very well be that the Secret Doctrine is meant to represent an amalgam of metaphysical doctrines which many would find plausible, and to which many of Plato's predecessors were committed. His point, then, could be that there are many philosophers who are ultimately committed in virtue of their metaphysics to the sorts of things Protagoras evidently said.

(p.93) 5.4 Constructing the Secret Doctrine (*Theaetetus* 153–160)

The most important element of the Secret Doctrine in Plato's strategy is not the flux doctrine, but rather a ‘relativity’ principle: ‘Nothing is anything in itself, but is whatever it is relative to some perceiver.’ Since Protagoras' claim is neutral between the simple conditional (P1), that if something seems F to someone, it is F for her, and the full biconditional (P2), it is only by bringing in the Secret Doctrine's relativity principle that Plato secures the converse rule (P3), that something is F (for a person) only if it seems so to that person. The flux doctrine, by contrast, plays a subsidiary role in the development of the Secret Doctrine. It describes the generation and behaviour of the main elements in the Protagorean theory of perception which Socrates constructs.

As we follow the construction of the Secret Doctrine, it is useful to keep in mind a number of peculiarities of Socrates' exposition of this theory. First, when describing the participants in each perceptual encounter Socrates makes use of high-flown, mysterious language, presumably in order to evoke the language that proponents of this doctrine might use. The language is so obscure that one suspects Plato is hamming it up. Socrates is made to speak of objects and perceivers which are ‘parents’ giving birth to ‘offspring’, i.e. perceptual properties and perceptions. He speaks of the offspring quickly zipping around between their parents, while the parents slowly change. His layers of description are not always consistent with each other—for example, he first says that objects are constantly changing, later that they are themselves nothing but changes.[34] How all this translates into more sober language is never entirely clear.

Second, the construction of the Secret Doctrine is slow going: it starts at 153 and is not finished until 160. Along the way, there are four stages of argumentation, each stage revising the result of the previous one. Each step is difficult to understand in itself, how they all fit together even more so. Things are made worse by the fact that, at the end of any given argument, Socrates often fails to tell us explicitly what the larger conclusion is supposed to be. Each argument refines the results of the previous step, and Socrates only reveals in the final stage how the Secret Doctrine is supposed to support Protagoras' thesis. Our aim is to read these four stages as parts of one complex but continuous argument to that end.

Third, the centrepiece of Socrates' construction of the Secret Doctrine is an analogy with relational properties like ‘is taller’ or ‘is more in number’. This analogy is presented in the form of a puzzle, whose solution, Socrates tells us, lies in the Secret

Doctrine. Unfortunately, he never spells the solution out in detail, and most commentators have concluded that the puzzles either involve a confusion on Plato's part about relational properties, or that Plato is trying to show, in an underhand way, that Protagoras is confused about relational properties. (p.94) We will see what the intended solution is by examining the presentation of the puzzles and thinking about how it relates to the passages before and after it.

As I suggested earlier, the central question of Plato's inquiry is: what does it mean to say that something is ‘cold for Theaetetus’, or ‘sweet for Socrates’? There are at least three candidate explanations. ‘Sweet for Socrates’ could mean ‘sweet according to Socrates’; to say ‘this is sweet for Socrates’ is equivalent to saying that it seems sweet to Socrates (cf. §3.4). Or it could mean ‘sweet at the time when Socrates was in contact with it’. Thus, for example, to say that the Thames Elementary School was good for Adam but bad for Sophie is not to suggest that it was good or bad in relation to either one, but rather that it was well-run by good teachers when Adam was attending it, but fell on hard times by the time Sophie came along. Similarly, the cake could be sweet for Socrates but not for Theaetetus because the part which Socrates tasted was sweet but Theaetetus' piece was not. ‘For Socrates’ is not a genuine relativizing qualifier, but is simply a way of marking changes in the qualities of a thing over time, or qualitative differences in its parts. Note that on this view a thing cannot be both F for one person and not-F for another simultaneously and in the same respect, whereas the other two ways of regarding the relativizing qualifier do allow this possibility.

A third way of dealing with ‘sweet for Socrates’ is to regard it as a genuinely relativizing qualifier marking a relational predicate; the qualifiers complete an otherwise incomplete predicate.[35] Take an example used by Nicholas Denyer, ‘Ankara is east’. ‘Ankara is east’ is an incomplete sentence which doesn't have any meaning—east of what? If one replies, ‘Ankara is east of Madrid’, then the sentence is complete and we can assess its truth-value. Slightly more complicated is the case of ‘is small’. This predicate is not incomplete, but in order to evaluate a sentence containing ‘is small’, one needs to know what the comparison class is; it is usually implied by the context. Thus, it may be true to say of the John Hancock Tower that it is small, in comparison to the Sears Tower, but not in comparison to the total class of man-made structures in Chicago. One could regard perceptual properties like ‘is sweet’ the same way. ‘The wine is sweet’ is incomplete, like ‘Ankara is east’; one needs to know for whom it is sweet. There are a variety of theories of perceptual properties which view them as relative or relational in important ways. For example, according to dispositional theories of colour, for something to be coloured is for it to tend to appear a certain colour to observers of a certain kind under certain viewing conditions. Things do not have perceptual properties in themselves; for something to have a perceptual property is for it to stand in a certain relation to observers of a certain kind.

Plato explains the relativizing qualifier in the third way, in terms of an analogy with clearly relational properties, like ‘bigger than’ and ‘smaller than’.

> SOC.: Whenever I come to be perceiving, I necessarily come to be perceiving something; because it's impossible to come to be perceiving, but not perceiving anything. And (p.95) whenever it comes to be sweet, bitter, or anything of that kind, it necessarily comes to be so for someone; because it's impossible to come to be sweet, but not sweet for anyone (γλυκὺ γάρ, μηδενὶ δὲ γλυκὺ ἀδύνατον γενέσθαι). (160a9–b3, trans. McDowell)[36]

As we shall see, his point is that no attribution of a sensible quality is complete without a relativizing qualifier.

5.5 Stage I (153d8–154b6)

Having introduced a complex of theses in the Secret Doctrine (152d2–153d7), Socrates begins by applying them to the case of colours.

> 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 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. (153d8–e2)

In accordance with the principle that nothing is but is always coming to be and in a constant state of motion, perceived colours must always ‘come to be’, and therefore cannot be at rest or be located anywhere, in the eyes or the object. But if one cannot locate the colour in the eye or in the object, how should one think of it (153e3)?

Socrates recommends that they start with the thesis that nothing is one thing just by itself and proceed from there:

> SOC.: Let's follow what we said just now, and lay it down that nothing is one thing just by 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 is will be neither the thing which collides, nor the thing it collides with, but something which has come into being between them; something peculiar to each one. (153e4 –154a3)

When that thesis is applied to the case of colours, they will find that a colour is neither the object nor the perceiver, but something which has come into existence between them, produced by the encounter of the eye with the object, and peculiar to the two.[37] Socrates will explain this further in Stage III (155d5–157c3). But first he must show that neither the eye nor the object is coloured but (p.96) rather something in between them; or, as he also puts it, the colour should not be located in the eye or in the object.[38]

One potential source of confusion is Socrates' way of switching between these two statements. For Socrates, ‘Whiteness is not in the stone’ and ‘The stone is not white’ are equivalent. In the first sentence, whiteness is the subject; the grammar suggests that it is an independently existing entity which has location. In the second, ‘white’ is the predicate; whiteness appears to be a property borne by substances. Compare Aristotle's use of the locution ‘F is in *x*’ in the *Categories* to characterize non-substantial individuals (e.g. individual qualities or quantities):

> Some things are in a subject, but are not said of any subject. By ‘in a subject’ I mean what is in something, not as a part, and cannot be separated from what it is in. For example, individual grammatical knowledge is in a subject, the soul, but is not said of any subject, and individual white is in a subject, a body (for every colour is in a body), but is not said of any subject. (*Cat*. 2. 1^{a}23–9)

He uses ‘F is in *x*’ as a way of characterizing non-substantial individuals, where ‘*x* is F’ would presumably not yield such a characterization, since all the different kinds of predications superficially share this form. For Socrates too, ‘white is in the stone’ is another way of saying ‘the stone is white’. To say that colour is neither in the eye nor in the stone is to say that neither the eye nor the stone is coloured. This is important to keep in mind; the connection for Socrates between the location of a colour and its belonging to a particular object is very tight.[39]

Socrates' thesis is that neither the object nor the perceiver is coloured, or, to put it the other way, that the colour is neither in the object nor in the perceiver. Rather the colour is ‘something which has come into being between them, something peculiar to each one’. He argues:

> SOC.:…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?
>
> THT.: Certainly not.
>
> **(p.97)**
>
> 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. (154a3–9)

Socrates begins with the assumption that (i) whatever appears F will also appear not-F. Things appear differently to different people—or even to different animals.[40] Since, for Protagoras, whatever seems to be the case to one is the case for one, this means that anything which is F will also be not-F. It then follows that colours cannot be located either in perceived objects or in the perceivers themselves. Why? They become

different (for example, are coloured differently) depending on who comes into contact with them, without themselves changing:

> SOC.: Well now, (1) if what we measure ourselves against or touch had been large, white or hot, it would never have become different by bumping into a different person, at any rate not if it didn't undergo any change itself. (2) And on the other hand, if what does the measuring or touching had been 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 happen to it: not if it hadn't, itself, had anything happen to it. (154b1–6)[41]

Here are two arguments: first, the perceived object does not have the colour, and second, the perceiver does not have it either. First,

(1a) suppose the perceived object were large, white, or hot.

(1b) It would not become different unless it changed.

(1c) But as it is, it *does* become different when something else comes up against it, though it does not change.

(1d) Therefore, the object is not large, white, or hot. That is, largeness, whiteness, and heat are not in the object.

(p.98) Second,

(2a) suppose the sense-organ were large, white, or hot.

(2b) It would not become different when something else approaches it unless it were affected (i.e. when another thing approaches it) or unless something happens to the thing approaching.

(2c) But the sense-organ *does* become different without being affected.

(2d) Therefore, the sense-organ is not large, white, or hot.[42]

One might wonder about the point of argument (2). Why would anyone suppose that the *eye* is large, white, or hot? So McDowell (1973: 132): 'It is obscure why anyone might be thought to want to say (except for obviously irrelevant reasons) that an eye is white; this does not seem to be quite the same as locating the white colour which one sees in the eyes, which we are told not to do at 153d8–e2.'[43] But, as we noted before, saying that the eye might be white is indeed the same as saying whiteness might be in the eye.[44] The question being (p.99) asked is, where should one locate the colour—in the eye, in the object, or somewhere else (153d8–e1, 153e7–154a2)? Arguments (1) and (2) proceed by elimination: the colour is not in the perceiver, nor in the perceived object, and therefore somewhere else in between.

If one expected an argument that (P) implies flux, one might wonder why Socrates would say that the perceiver and the perceived object do not change as they approach each other, when the Heraclitean doctrine tells us that everything is always changing.[45] I have interpreted argument (1) as follows:

> (1) If the object were large, white, or hot, then it would not become different (when it comes into contact with something else) without changing. But it does become different when it comes into contact with something else, without changing; *therefore it is not large, white, or hot*. (154b1–3)

Shouldn't it rather be construed as an argument for Heraclitean flux, as follows?

> (1′) If the object is large, white, or hot, it will not become different (when it comes into contact with something else) unless it changes. But it does become different when it comes into contact with something else; *therefore, it has changed*.

The first problem in taking it this way is that it is difficult to explain what the second half of the argument is supposed to establish. On my reading, it goes as follows:

> (2) If the sense-organ were large, white, or hot, then when something new approached it or when something happened to the first thing which approached it and the sense-organ was not affected, it would not have become different. But it does become different without being affected; *therefore, the sense-organ is not large, white, or hot*. (154b3–6)

One could instead understand the argument as follows:

> (2′) If the sense-organ is large, white, or hot, it will not become different when something new approaches it or when something happens to the first thing that approached it, unless it changes. But it does become different; *therefore, it has changed*.

Together, (1′) and (2′) tell us that when a stone looks white to Socrates, the whiteness is *both* in Socrates' eye *and* in the stone, until they both change. But surely this is the exact opposite of what Socrates has been arguing so far: that the whiteness is in *neither*.[46] Moreover, the conditionals are present counterfactuals, with the imperfectἦν in each of the antecedents (‘if X were true, then Y would be true…’), which indicates that neither the consequents nor the antecedents are true. (1) and (2) are better understood as arguments that neither the stone nor Socrates' eye is white.

(p.100) 5.6 Stage II (154b6–155d5)

Arguments (1) and (2) in Stage I show that whiteness should not be located in the perceiver's eye or in the perceived object. It is simply asserted that the object of perception and the perceiver become different without changing. But why does the stone become different when different perceivers approach it, without changing? If it becomes different, hasn't it changed? The answer lies in the next stage of argument. In this notoriously difficult stretch of text, Socrates offers a number of puzzles which will trip one up if one fails to get the point of the Secret Doctrine. Unfortunately, he does not explicitly say what the point of the Secret Doctrine is or how it solves the puzzles. I shall argue that we are supposed to see why it would be a mistake to locate the colours —against the dictates of the Secret Doctrine—anywhere but between the object and perceiver. Socrates first illustrates the confusions which would lead one to make that mistake (Stage II), then describes what is required to avoid the mistake (Stage III). The answer comes from the Secret Doctrine: things become different (in relation to other things) without changing (in themselves) because nothing is anything in itself. Colours do not belong intrinsically to objects but are relational properties; things take on different perceptual, and relational, properties (and thus undergo relational change) without undergoing change in themselves.

Having stated in Stage I that colours should not be located in the object or in the perceiver's eye, since these both become different without changing, Socrates now adds:

> SOC.:…*As things are*, though, 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.
>
> THT.: How do you mean? What sort of thing? (154b6–10)

Socrates offers two examples of the ‘absurd things’ which will result if one fails to grasp the point of the Secret Doctrine. The first goes as follows (154c1–6). Place six dice on a table. Put four beside them. The six dice are more than the four. Then put twelve dice beside the six dice. Now the six dice are less than the twelve. The six dice are ‘more’ when placed next to four dice, and ‘less’ when placed next to twelve, although they have not themselves changed in number. One can easily become confused by this type of example, as Theaetetus does in trying to answer Socrates' next question:

> SOC.: 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 (ἔ σθ' ὅπως τι μεῖζον ἢ πλέον γίγνεται ἄλλως ἢ αὐξηθὲν)?’ What will you answer?

> THT.: If I answer by saying what I think with a view to this present question, Socrates, I'll say that there isn't. But if I answer with a view to the one before, I'll be on my guard against contradicting myself and say that there is.
>
> SOC.: Splendid! Well done! Still, if you answer that there is, it looks as if it'll turn out like that tag from Euripides: we'll find that your tongue is irrefutable, but not your heart. (154c7–d6)

(p.101) When asked whether it is possible to become bigger or more in number in any other way than by being increased, Theaetetus is initially inclined to say No, that it is not possible to become bigger or more in number without increasing. In other words, it is not possible to become different without changing. However, when he considers the dice, he is inclined to say Yes, that something *can* become more in number without increasing, and to become different without changing. Socrates' second example concerns relative size: suppose Socrates is said at one time to be bigger than Theaetetus, but a year later, after Theaetetus has grown, has become smaller than Theaetetus, though he has not changed in height (155b7–c4). Though one may be initially inclined to say that it is not possible to become bigger or smaller without changing in height, it certainly seems that Socrates has become smaller without changing.

How do ordinary, non-Protagorean ways of speaking cause this confusion, and what does the Secret Doctrine recommend to solve the puzzles? The problem may seem to be one of apparent contradictions—the dice are both more and less, Socrates is both taller and shorter—which can be dissolved by the Secret Doctrine. McDowell (1973: 133) sets out the two main options for dissolving these contradictions: 'We can distinguish two possible views as to the identity of the present practice which is said to lead to the puzzles. According to one view, it is the practice of using non-relational forms of statement where we ought to be using relational forms. According to the other, it is the practice of using "be", contrary to the Secret Doctrine.'[47] According to the first option, the Secret Doctrine tells us to dissolve the apparent contradictions in 'the dice are both more and less' by specifying what the dice are more and less *than*. According to the second, it tells us to replace the language of being with the language of flux. Socrates *does* change when approached by the taller Theaetetus, and the dice *do* change when approached by twelve dice. But—against the second option—why does Protagoras need to appeal to flux, when the contradictions can be dissolved by simply filling in the qualifications? Indeed, introducing flux seems to involve a mistake, since both Socrates and the dice clearly do *not* change while becoming 'shorter' and 'more'.[48] I believe the problem itself has been misdescribed.

(p.102) The problem with the dice is not that they exhibit contradictions. Cornford correctly identifies both the problem and the Secret Doctrine solution to the puzzles:

> 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’. By suffering this internal change it will have ‘become small’. He will then be puzzled when we point out that the thing has not altered in size. (Cornford 1935: 43–4)[49]

Those who persist—despite what the Secret Doctrine tells us—in locating largeness and smallness *in* objects will assume that change with respect to these properties constitutes internal change. They will then be unable to understand how something can ‘become different’—larger or smaller—without changing in itself. Like Theaetetus, we initially find it difficult to understand that things can become different without changing, but the argument at 154b1–6 requires us to do so. Consider again the first part of it:

> (1) If whiteness were in the stone, then when something approaches the stone, but the stone isn't affected, the stone wouldn't become different without changing. But the stone *does* become different when something else approaches it, without changing. Thus the whiteness is not in the stone.

The argument requires us to agree that the stone *does* become different without changing. The puzzles are meant to soften up Theaetetus, and the reader, and get us to agree, by convincing us of two points.

First, coming to be larger or smaller, more or less, does not necessarily indicate internal change. Socrates' becoming shorter and the dice becoming less are both changes in relational properties produced purely through comparison of Socrates and the dice with other objects. Thus, it is possible for something to cease to be the subject of some attribute without undergoing change itself. Second, the reason for this is that things are not intrinsically large, small, more, or less, but only so in relation to something else. One shouldn't locate being larger, smaller, more, or less in objects themselves, that is, one shouldn't suppose that these are intrinsic properties of things—if one does, changes in predicate will appear to constitute changes in the things themselves.[50]

When Theaetetus flip-flops on the question of whether anything can become bigger without increasing in size—first thinking No, then Yes—Socrates (p.103) discourages him from answering Yes, even though that is the correct answer, because he does not want Theaetetus to move on to the next stage of argument without having a proper understanding of this one (154d3–6). Otherwise, he says, ‘it'll turn out like that tag from Euripides: we'll find that your tongue is irrefutable, but not your heart [or mind, ἡ

φρήν].’ To arrive at a proper understanding, they must examine the three ‘apparitions’ (τὰ φὰσματα, 155a2) battling each other inside Theaetetus.

1. Nothing could ever become larger or smaller, either in size or in number, as long as it was equal to itself.[51]
2. A thing to which nothing is added and from which nothing is taken away undergoes neither increase nor diminution, but is always equal.[52]
3. It's impossible that a thing should be, later on, what it was not before, without having come to be and coming to be.[53]

These are responsible for the conflicting answers Theaetetus gives to the question of whether anything can become bigger without increasing in size. When Theaetetus thinks about the examples of the dice and of Socrates becoming shorter, he answers Yes because he's inclined to reject Apparitions 1 and 2. But Theaetetus answers No, when Apparition 3 is prominent in his mind.

The apparitions are in fact ambiguous, true or false depending on whether they are taken to be about objects in themselves or objects in relation to others. One way to disambiguate the first two is as follows:

(1′) Nothing could ever become larger or smaller *than itself*, either in size or in number, as long as it was equal to itself—*but it can become larger or smaller, in size or in number, relative to something else that has changed*.

(2′) A thing to which nothing is added and from which nothing is taken away undergoes neither increase nor diminution, but is always equal *to itself—but it can become bigger or smaller than another*.

Apparition 3 is also ambiguous. Socrates by himself cannot be said to become bigger, or to increase, without an underlying change in himself. But Socrates in relation to another *can* become different—bigger in height—without a corresponding change in himself. One way of disambiguating Apparition 3 would be as follows:

(3′) It is impossible that a thing should be, later on, what it was not before, without having come to be and coming to be *either by changing in itself or by changing in relation to something else*.

(p.104) Thus, Stage II illustrates the point made in Stage I that whiteness and other perceptual properties should not be located in the perceiver or in the object itself. An object is now white, now dark, now hot, now cold, as different perceivers approach it; it becomes different for different perceivers without changing itself. How is it possible for something to ‘become different without changing’? In Stage II Socrates presents us with two puzzling cases whose solution answers that question. Six dice become more and less, Socrates becomes taller then shorter, without changing, because these properties do not belong to a thing intrinsically, but in relation to other objects. Once one has grasped this point concerning ‘larger’, ‘smaller’, ‘more’, and ‘less’, one can

apply it to perceptual properties. As we shall see, Socrates does this in Stage III. Perceptual properties are neither in perceivers nor in the objects they perceive. Can something change with respect to perceptual properties without undergoing change in itself? Here too, the correct answer is Yes; as with relational properties, perceptual properties do not belong to anything intrinsically. The object and the eye become different—by coming to be coloured and coming to perceive—without changing. For they do not change in themselves, but take on qualitative alterations in relation to each other. That is, they become different by changing in relation to each other, though they do not undergo change in themselves.

5.7 Stage III (155d5–157c3)

When Theaetetus confesses that he does not see the point of the puzzles, Socrates appears to change the topic. For he announces that 'everything is change and nothing else' and then returns to the perceptual theory which he was describing before he introduced the puzzles. Has Socrates, as Dancy (1987: 80) puts it, simply 'bullied a bewildered Theaetetus into accepting the theory of perception (157cd) without returning to his puzzles to tell us how to handle them'? Most commentators take this view, but Cornford (1935: 44–5) and Ross (1951: 101–2) thought, correctly I believe, that there are hints of a solution in the theory of perception which follows. On closer examination Socrates has not changed the topic but spells out the parallels between relational properties (e.g. being taller) and perceptual properties (e.g. being red), though he never explicitly refers back to the puzzles themselves.

Socrates begins with the principle that 'the universe is change and nothing else' (τὸ πᾶν κίνησις ἦν καὶ ἄλλο παρὰ τοῦτο οὐδέν, 156a5), which forms the basis of a genealogical *mythos*:

> There are two kinds of change, each unlimited in number, the one having the power of acting and the other the power of being acted on. From their intercourse, and their friction against one another, there come to be offspring, unlimited in number but coming in pairs of twins, of which one is a perceived thing (τὸ αἰσθητόν) and the other a perception, which is on every occasion generated and brought to birth together with the perceived thing. (156a5–b2)

(p.105) There are two kinds of change, active and passive in power, whose intercourse produces a sensible quality (e.g. a colour) and its inseparable twin, the perception of it. For each encounter there are two parents (the sense-organ and the object of perception) plus their twin offspring (the sensible quality and the perception).[54] Perceptions include seeings, smellings, and hearings; sensible qualities include colours, smells, and sounds. Despite their apparent reification, the offspring are not objects but properties of the parents (cf. n. 39). A 'perceiving' is, according to this *mythos*, always conceived and born together with its twin perceptible property.

The key players have been introduced and the stage is set for Socrates' main point, including the solution to the puzzles. He launches into his explanation by saying, ‘Well now Theaetetus, what does this story [*mythos*] mean to convey to us? What is its bearing on what came before? Do you see?’ (156c3–5). When Theaetetus replies, quite understandably, that he does not, Socrates spells out the *mythos* with a corresponding *logos* at 156c7–157b1:

> Well, have a look at it, and see if we can get it finished off somehow. What it means to say is this. All those things are involved in change, as we were saying; but there's quickness or slowness in their changing. Now anything that is slow keeps its changing in the same place, and in relation to the things which approach it, and that's how it generates. But the things which are generated are quicker; because they move, and their changing naturally consists in motion. (156c7–d3)

Here Socrates introduces a new distinction between types of change: slow and fast. The offspring (perceptual property and perception) undergo ‘fast’ change; they move around between the parents, and do not remain in one place.[55] The parents undergo ‘slow’ change. We are told that slow change is not change of place, that it occurs ‘in relation to the things which approach it’, and that this is how parents generate their offspring.

It is fairly clear that the offspring—the colour and the perception of it—undergo fast changes, that the parents undergo slow changes, and that fast changes consist of local motion. Unfortunately it is not clear what slow changes are. One theory is that (A) fast and slow *kinēseis* are both kinds of movement, the former being fast motions from place to place, the latter being slow revolutions in one place. Another is that (B) fast *kinēseis* are motions, whereas slow *kinēseis* are changes, in particular, qualitative alterations. (κίνησις can be translated either way.) The principal reasons both for favouring and for rejecting (p.106) interpretation (B) come later in the dialogue at 181c2–d6, where Socrates argues that there are two kinds of *kinēsis*: (1) moving from place to place or revolving in the same place (φορά), and (2) remaining in the same place, but growing old, becoming black or hard, that is, undergoing qualitative alteration (ἀλλοίωσις).[56] Is this distinction meant to be the same as the earlier distinction between fast and slow change? Day argues that they are not the same: ‘there is too close a verbal echo between “flux in the same place” (ἐν τῷ αὐτῷ καὶ πρὸς τὰ πλησιάζοντα τὴν κίνησινι ἴσχει) characteristic of “slow fluxes” at 156c and the “turning about in the same place” (ἐν τῷ αὐτῷ στρέφηται) which is classed at 181c7 as a kind of *motion*, i.e. specifically *not* as change’ (Day 1997: 64).[57] Thus, (A) slow change is simply the slow dance that parents do in each other's vicinity. However, things undergoing qualitative alteration are also said to change, e.g. to become old or white,ἐν τῷ αὐτῷ ‘in one place’ (181c9–d1). Thus, verbal echoes also allow us to identify qualitative alterations as slow change. Since the distinction between slow and fast change made at 156cd seems to map onto the distinction between motion and

qualitative alteration at 181cd, where the latter passage spells out in more prosaic language the distinction made earlier, most opt for (B).[58]

Neither reading is entirely satisfactory, and I do not think it is possible to be confident of either option. According to (A), parents engender offspring by slowly rotating near each other; this is picturesque but does not make much sense. On the other hand, according to (B), slow changes are qualitative alterations in the parents; parents, i.e. objects and perceivers, undergo slow, gradual qualitative alteration; they become older, paler, healthier, sicker by themselves. This in turn affects the kind of offspring they produce, the kind of perceptual qualities and perceptions they give birth to. Thus, as he says in Stage IV of the argument (157c4–160e5), when some wine encounters a healthy Socrates it encounters a different Socrates from when Socrates is sick; Socrates can undergo slow change in becoming ill or healthy.[59]

In any case, Socrates' main point has to do with what happens subsequent to an encounter between parents. He has just introduced the notion that everything is always undergoing some kind of change, and he can be expected to incorporate this into his description.

> When an eye, then, and something else, one of the things commensurable with it, approach one another and generate the whiteness they do, and a perception cognate with it—things which would never have come into being if either of the former pair had come up against something different—then at that moment, when [a] the seeing, from the eyes, (p.107) and [b] whiteness, from the thing which joins in giving birth to the colour, are moving in between, [c] *the eye has come to be full of seeing*; it sees at that moment, and has come to be, not by any means seeing, but an eye that sees. [d] *And the thing which joined in generating the colour has been filled all round with whiteness*; it has come to be, again, not whiteness, but white—a white piece of wood, or stone, or whatever it is that happens to have that sort of colour. (156d3–e7)

In this description of a perceptual encounter, Socrates describes everything as undergoing changes of one kind or another. The parents approach each other and generate the offspring. The offspring—seeing and whiteness—change in their own way by ‘moving in between’ (a, b). The parents simultaneously undergo a set of changes (c, d); the eye ‘comes to be full of seeing’ and ‘becomes an eye that sees’, and the object becomes ‘filled all round with whiteness’, and ‘comes to be white’.

Socrates' next point is that qualitative alterations occur for a parent only in relation to its partner.[60]

> We must think of the other cases, too, in the same way: we must take it that *nothing is hard, hot, or anything, just by itself* —we were actually saying that some time ago—*but that in their intercourse with one another things come to be all things and qualified in all ways as a result of their change*. Because even in the case of those of them which act and those which are acted on, it isn't possible to arrive at a firm conception, as they say, of either of them, taken singly, as being anything. It isn't true that something is a thing which acts before it comes into contact with the thing which is acted on by it; nor that something is a thing which is acted on before it comes into contact with the thing which acts on it. And what acts when it comes into contact with one thing can turn out a thing which is acted on when it bumps into something else. The upshot of all this is that, as we've been saying since the beginning, nothing is one thing just by itself, but things are always coming to be for someone (ὥστε ἐξ ἁπάντων τούτων, ὅπερ ἐξ ἀρχῆς ἐλγομεν, οὐδὲν εἶναι ἕν αὐτὸ καθ’ αὑτὸ, ἀλλά τινι ἀεὶ γίγνεσθαι). (156e7–157b1)

Here Socrates finally spells out how the *mythos* at 156a2–c3 ‘bears on what came before’, that is, on the puzzles. We are meant to see that nothing is anything in itself, but comes to be in relation to something else. Even the parents' active and passive powers, in virtue of which they generate their offspring, belong to the parents only in relation to each other, not in themselves. A parent which is active in one relation may be passive, the object of perception, in another. Thus, according to the theory of perception Socrates and Theaetetus have developed for Protagoras, seeing colour and being coloured do not exist in themselves, but are relational properties; a colour belongs to a thing only in relation to a perceiver, and a perceiver only sees in relation to that colour.

We now have a continuous line of argument from Stage I to Stage III. In Stage I we are told that whiteness and heat should not be located in perceivers or objects, but in between, and that objects should not be said to have these (p.108) properties, lest we fall into the confusions illustrated by the example of the dice in Stage II. By thinking about the dice we are supposed to realize that properties like ‘more than’ do not belong to objects in themselves, but can be attributed to them because of their interactions with or relations to other objects. In Stage III Socrates applies that lesson to perceptual properties and perceptions: they do not belong to objects in themselves, but can be attributed to them because of their interactions with or relations to other objects.

Perceptual properties and perceptions are similar to relational properties such as ‘more’ and ‘bigger’: like relational properties, perceptual properties and perceivings can only be applied in a given relation. Just as nothing is, or becomes, taller just by itself, so too nothing is white, or comes to see, just by itself. Perceptual properties and perceptions do not belong intrinsically to anything; they come into being given particular relations, and then go out of existence when those relations no longer obtain.[61] And just as things can take on different relational properties without changing in themselves, so too a stone can become different—white or black—without changing. When a stone comes to be white for someone, it becomes different—since it was not

white before—but does not change itself. Rather, it undergoes ‘slow change’, i.e. qualitative alteration, in relation to something else. Slow changes are, in my view, the same as Peter Geach's ‘Cambridge changes’.[62] That Socrates calls these alterations ‘changes’ at all may seem peculiar if one assumes that only intrinsic changes can be real changes, but we have no reason to import that assumption here. By calling these alterations ‘slow changes’, he can apply the principle of constant (p.109) change to the theory of perception while at the same time respecting and accommodating a point which the puzzles demand that we make: when a stone comes to be white for one person, it is not undergoing intrinsic change in itself, but nonetheless takes on a (relational) property which it did not have before.

5.8 Stage IV (157c4 –160e5)

In the final stage of the construction of the Secret Doctrine, Socrates shows how to use this account of perception and perceptual properties to support and defend Protagoras' claim. He offers this explanation in response to an objection he imagines someone raising against Protagoras' measure doctrine (157e1–158a3): are the perceptions and beliefs of dreamers and madmen just as true as those of the sane person?

Socrates begins by mentioning the disputes he imagines Theaetetus has often heard people engaged in: what evidence could one point to, if someone asked at this very moment whether one is asleep and dreaming everything one has in mind, or awake and having a discussion (158b5–e4)? These arguments are meant to undermine one's confidence that there is any way to tell which beliefs are true and which are false, or that there is any reason to prefer the beliefs of those who are awake and healthy to those of dreamers and madmen. However, as we noted in Chapter 2, they give us no positive reason to suppose that all beliefs are true—and not, say, false. That is why Socrates goes on to deploy the newly constructed Secret Doctrine theory to explain why one should think that all beliefs and perceptions are true (158e5–160e5).[63] If Socrates ill and Socrates healthy, or Socrates dreaming and Socrates awake, are different, then they must be different in their powers to affect and be affected. It follows, Socrates claims, that the perception and perceptual property generated by a perceiver and object are unique to each episode. The argument depends on some dubious but familiar assumptions taken from the Secret Doctrine: (iii) things are always changing and becoming different, and (i) they always appear differently and in contrary ways. If Socrates dreaming and Socrates awake are indeed completely different in their powers to affect and be affected, then they will produce different offspring—e.g. sweetness and the perception of sweet—when they encounter the wine on different occasions. Both the perception and the perceived reality will shift from one encounter to another, and thus the perceptions of madmen and dreamers are just as true as those of the sane and those who are awake.

(p.110) The elements of the Secret Doctrine have been assembled; now Socrates can show how the Secret Doctrine supports Protagoras' claim, as well as Theaetetus'

definition of knowledge as perception. For convenience, I begin by quoting the passage in full.

> SOC.: Whenever I come to be perceiving, I necessarily come to be perceiving something; because it's impossible to come to be perceiving, but not perceiving anything. And whenever it comes to be sweet, bitter, or anything of that kind, it necessarily comes to be so for someone; because it's impossible to come to be sweet, but not sweet for anyone [γλυκύ γάρ, μηδενὶ δὲ γλυκὺ ἀδύνατον γενέσθαι].
>
> THT.: That's quite so.
>
> SOC.: Then what we're left with, I think, is that it's for each other that we are, if we are, or come to be, if we come to be, since necessity ties our being together, but doesn't tie it to anything else, or indeed to ourselves. So what we're left with is that we're tied to each other. It follows that, whether one uses ‘be’ or ‘come to be’ of something, one should speak of it as being, or coming to be, *for* someone or *of* something or *in relation to* something. As for speaking of a thing as being or coming to be anything just by itself, one shouldn't do that oneself, and one shouldn't accept it from anyone else either. That's what's indicated by the argument we've been setting out.
>
> THT.: That's quite so, Socrates.
>
> SOC.: Now since what acts on me is for me and not someone else, it's also the case that I, and not someone else, perceive it?
>
> THT.: Certainly.
>
> SOC.: So my perception is true for me—because it's always of the being that's mine—and, as Protagoras said, it's for me to decide, of the things which are for me, that they are, and of the things which are not, that they are not.
>
> THT.: Apparently.
>
> SOC.: Well, then, if I'm free from falsehood, and don't trip up in my thinking about the things which are, or come to be, how could I fail to have knowledge of the things I'm a perceiver of ?
>
> THT.: You couldn't.
>
> SOC.: So you were quite right to say that knowledge is nothing but perception. (160a9–d6)

The Secret Doctrine implies that perceptions and perceptual properties are necessarily tied together: it is impossible to have a perception without perceiving the property which was generated together with it, and, conversely, nothing is sweet, bitter, etc.,

without appearing and being so for someone. This is a more prosaic translation of Socrates' earlier claim that perceptual properties and perceptions are ‘twin offspring’. There is no room for mismatch between the perception and what it is a perception of; Socrates' perception cannot fail to be true of the object he has perceived.

Second, sensible qualities are relative to perceivers. At 160b8–9, Socrates remarks that it does not really matter whether one says of something that it ‘becomes’ or ‘is’, nor whether one indicates the relations by means of the dative, genitive, or by πρός τι (‘relative to’). The important thing is to avoid saying that a thing is F tout court, thereby implying that F is an intrinsic property of the thing. Socrates' emphasis on the relational aspect of the twins rather than on (p.111) their state of flux should not be surprising since, as we have seen, the primary recommendation of his arguments so far has been that we think of perceptual properties and perception as relational properties. A property does not belong to anything intrinsically, but comes into and passes out of existence depending on relations which the object has with other things. Because each encounter between perceiver and perceived object issues in the twin conception and birth of a perceptual property and perception, one cannot separate the perception from what it is supposed to be of; neither is prior to the other. Note that even if sensible qualities depend on these perceptual encounters, that does not mean they are nothing more than perceptions or ideas. We are not being presented with some kind of thoroughgoing phenomenalism or idealism, where nothing exists but one's thoughts and perceptions. As Burnyeat (1982) has argued, the *Theaetetus* never takes the step of making everything dependent on perceivers and ideas. Throughout the exposition of the Secret Doctrine, perceptions and objects of perception are generated by ‘parents’, which constitute an independent, uncharacterizable reality. With this, Socrates has argued that perceptions and perceptible properties are inseparable and exist relative to each other; he can therefore be satisfied that he has made a good case for both Protagoras' thesis and Theaetetus' definition of knowledge as perception.

5.9 Does the Secret Doctrine work?

According to this reading of the *Theaetetus*, Plato develops a theory of perception for Protagoras which is based on a metaphysical doctrine, a ‘Secret Doctrine’, which is itself neither systematic nor unified. As I noted in §5.3, the Secret Doctrine introduces at least five ideas for use as material for defending Protagoras. Thesis (i), according to which nothing is any one thing by itself, but whatever is F will appear to be not-F, is used at 154a2–9 to state the fact of conflicting appearances: anything which appears red to one person will appear otherwise to someone else. Thesis (ii), according to which nothing is anything in itself, but all things come to be what they are from change, movement, and mixture with respect to each other, is interpreted to mean that nothing is anything in itself, but is relative to some perceiver. This idea is central to Socrates' argument that the Secret Doctrine confirms the truth of Protagoras' claim. Thesis (iii), according to which nothing is, but is coming to be (i.e. is changing), is reprised at 157a, when Socrates concludes that nothing is whatever it is, but comes to be whatever it is through the interaction of the active and passive in a perceptual encounter. When the Secret Doctrine is introduced it is not clear which of these is the most important or how they are related. But at 156a5, Socrates collects them under one ‘first principle’, the principle that everything is motion (or change) and that there is nothing but motion (or change). This serves as a mythical principle of generation, telling us first of all that everything is either a passive or active motion, and then that these active (p.112) and passive motions produce twin offspring, a perceiving and a sensible quality that always match each other. The principle also tells us that colours and perceivings of colours come into being and literally move around between perceiver and object without coming to rest. Eyes and perceptual objects themselves move around slowly or quickly, and undergo relational change with respect to each other. The syntactic difference between ‘everything is motion (or change)’ and ‘everything is *in* motion (or is changing)’ seems to be significant. For the Secret Doctrine is at bottom a robust metaphysical doctrine which posits πράξεις δὲ καὶ γενέσεις καὶ πᾶν τὸ αόρατον ‘actions and processes and the invisible world’ (155e5–7) as the fundamental units of reality. There is an invisible world made up of actions and processes which work to produce everything else in reality—in particular, the perceivings which we experience and the sensible qualities which we perceive.

Plato returns to these mysteries and their ‘first principle’ after he has got rid of Protagoras' measure doctrine in a sequence of arguments, the last of which (170–1) we examined in Chapter 4. Having already disposed of the doctrine of unrestricted relativism (P), Socrates notes that this leaves open the question of whether (P) is true when restricted to judgements about hot, cold, white, etc.

> SOC.: So long as we keep within the limits of that immediate present experience of the individual which gives rise to perceptions and to perceptual judgements, it is more difficult to convict these latter of being untrue—but perhaps I'm talking nonsense. Perhaps it is not possible to convict them at all; perhaps those who profess that they are perfectly evident and are always knowledge may be saying what really is. And it may be that our Theaetetus was not far from the mark with his proposition that knowledge and perception are the same thing. We shall have to come to closer grips with the theory, as the speech on behalf of Protagoras required us to do. We shall have to consider and test this moving Being, and find whether it rings true or sounds as if it had some flaw in it. There is no small fight going on about it, anyway—and no shortage of fighting men.
>
> THEOD.: No, indeed; but in Ionia it seems to be even growing, and assuming vast dimensions. On the side of this theory, the Heraclitean party is conducting a most vigorous campaign.
>
> SOC.: The more reason, then, my dear Theodorus, why we should examine it by going back to its first principle, which is the way they present it themselves. (179c1–e2, trans. Levett/Burnyeat; see also 171e–172b)[64]

Before we examine Socrates' test of ‘this Moving Being’, we should be clear about its significance. According to the view that Protagoras is committed to the thesis of Heraclitean flux, this constitutes the final refutation not only of the Heraclitean thesis that everything is changing, but also of Narrow Protagoreanism (NP). If NP implies Heraclitean flux, then, by modus tollens, if Heracliteanism is false, then so is NP. Thus, a refutation of Heracliteanism constitutes a final knock-out blow to Protagoras, who is then eliminated once and for all. But according to the interpretation I have been arguing for, Protagoras is not committed to Heraclitean (p.113) flux, and thus this test cannot be a refutation of Protagoras' measure doctrine, or even of NP. Rather, the ‘test of Moving Being’ tells us to reject the Secret Doctrine because it contains a major internal flaw rendering it incompatible with Protagoras' thesis; the Secret Doctrine is thereby eliminated as a potential source of support for Protagoras. Socrates and his interlocutors looked to the Secret Doctrine in the hopes of finding independent support for NP, but now it turns out that no such support can be gained. For the Secret Doctrine not only implies that NP is true, but also that it is false; similarly, it implies that Theaetetus' definition is true, and also that it is false. And in general, for any F, the Secret Doctrine implies both F and not-F. (Thus, it should come as no surprise that Aristotle uses this argument in *Metaphysics* Γ4 and 5 to connect the Heracliteans with a denial of the principle of non-contradiction.)

The Secret Doctrine was introduced in order to provide materials for supporting Protagoras' thesis. We were supposed to reserve judgement concerning whether Socrates' Secret Doctrine would turn out to be a successful strategy for developing and defending Protagoras' claim. The preliminary answer reached at *Theaetetus* 160e was that it works, that it makes Protagoras' claim plausible, and even deflects the objection

about madmen and those who are ill. But now, we will see in Plato's refutation of the Secret Doctrine that the strategy ultimately fails. The refutation of the Secret Doctrine is not meant to refute Protagoras; for that, Plato has already given numerous arguments. Rather, it is presented as proof that Protagoras can find no quarter in the Secret Doctrine. It is also an independent argument against the coherence of the Secret Doctrine itself, aimed at the 'growing numbers' of people who have joined the Heraclitean party, with the intention of cutting them off at the root, their 'first principle', which was vaguely identified as the principle that 'everything is really motion and there is nothing but motion' (156a5).

Socrates tests the Secret Doctrine by applying the doctrine of total flux—the thesis that things are *always* changing in *every* respect—to the theory of perception constructed from 152d to 160e. Recall that, according to that account of perception, an eye and an object have an encounter and generate a 'seeing' and a colour as offspring. At 156a–157b these four items are set in motion, in accordance with the 'everything is in motion' principle. The eye and the object undergo 'slow changes', and come to be percipient and coloured, respectively; the 'seeing' and colour undergo 'fast changes', quickly moving around their parents.

Now Socrates unleashes the full force of the principle that everything is changing onto the twins. If that principle tells us that everything is always changing and never subject to rest, then everything must be changing in *every* respect, 'lest it be convicted of standing still in [any] respect'. It is apparently not enough to satisfy adherents of the principle of change that a thing be changing in *some* respect. If everything must be changing in every respect, and things can change either in place, by moving, or in characteristic or quality, by altering, it (p.114) follows that anything which is changing in place must also be changing in quality, and vice versa.[65] This is applied to the items in the Protagorean account of perception as follows:

> SOC.: But since not even this abides, that what flows flows white; but rather it is in process of change, so that there is flux of this very thing also, the whiteness, and it is passing over into another colour, lest it be convicted of standing still in this respect—since that is so, is it possible to give any name to a colour which will properly apply to it?…And what about any particular kind of perception; for example, seeing or hearing? Does it ever abide, and remain seeing or hearing?
>
> THEOD.: It ought not to, certainly, if all things are in motion.
>
> SOC.: Then we may not call anything seeing rather than not-seeing; nor indeed may we call it any other perception rather than not—if it be admitted that all things are in motion in every way? (182d1–e6)

A colour and a seeing of colour were earlier said to undergo 'fast change', i.e. to move around constantly without being in any one place. The principle that everything is changing in every respect now dictates that these must be changing in quality as well. A colour not only moves around in the area between the eye and the object, it must also

change with respect to the colour it is (182d1–7). For example, what flows will not just flow white, but will ‘pass into another colour’; thus, whiteness will become not white. If so, it will no longer be possible to identify any colour, or in general to identify anything as having any quality. Likewise a seeing of that colour must not only move around, but also change with respect to seeing (182d8–e6). For example, perceiving white will become not perceiving (white), and it will not be possible to identify anything as seeing, as opposed to not seeing. But if whiteness does not stay the same but changes into being not-white, and if perceiving white does not stay the same but changes into not-perceiving-white, then any case of perceiving will also be a case of failure to perceive, since the twins themselves will metamorphose into something else, preventing any correspondence between them.

With this, the entire theory collapses, since the point of the Secret Doctrine was to make Protagoras' thesis and Theaetetus' definition come out true. Socrates finds that it is incompatible with the Protagorean measure doctrine, even when restricted to the perceptual case. For the flux doctrine implies (T) but also its negation, so it cannot be very good support for (T), or (P) for that matter.[66]

> SOC.: A fine way this turns out to be of making our answer [sc. Theaetetus'] right. We were most anxious to prove that all things are in motion, in order to make that answer come out correct; but what has really emerged is that, if all things are in motion, every answer, on whatever subject, is equally correct, both ‘it is thus’ and ‘it is not thus’—or if you like ‘becomes’, as we don't want to use any expressions which will bring our friends to a standstill. (183a2–8)

(p.115) The Secret Doctrine implies (T) and not-(T). Thus, Socrates' strategy of propping up (P), and ultimately (T), by means of the Secret Doctrine fails, and we cannot derive any independent support from it. He concludes:

> Then we are set free from your friend, Theodorus. We do not yet concede to him that every man is the measure of all things, if he be not a man of understanding. And we are not going to grant that knowledge is perception, not at any rate on the line of inquiry which supposes that all things are in motion (κατά γε τὴν τοῦ πάντα κινεῖσθαι μέθοδον); we are not going to grant it unless Theaetetus here has some other way of stating it. (183b7–c3)

Here, as before at 160d5–e2, Socrates describes the inquiry into the truth of (P) and (T) as proceeding on the assumption that everything is in motion.[67] The refutation of the Secret Doctrine shows that the principle ‘everything is changing’ cannot be used to show that Theaetetus' definition and Protagoras' measure doctrine are true.

The obvious question is why Socrates takes the step of insisting that everything must always be changing in every respect. Why is total flux allowed to demolish the theory of perception Socrates constructed for Protagoras? This question is difficult to answer if one assumes that flux is introduced because Protagoras is committed to it. Why should Protagoras have to say that things are *always* changing in *every* respect—colours with

regard to their colour, perceivings with regard to their perceiving? Earlier, ‘everything is changing’ is used to generate and characterize the twins which come into being, perceivings and perceptual properties. The more extreme form of Heraclitean flux applies the principle ‘everything is changing’ to the twins themselves; they are made to undergo, in addition to local motion, qualitative alteration. If Protagoras' thesis were committed to the flux doctrine, it would be difficult to explain why Plato does not limit, on Protagoras' behalf, the application of Heraclitean flux to the former kind. Why not distinguish the moderate form of Heraclitean flux that is used earlier in the theory of perception from the more extreme form of Heraclitean flux which destroys it in the end,[68] and limit the extent of flux to what is compatible with Protagoras' measure doctrine?

This would be appropriate if Socrates had meant to argue that Protagoras is committed to the doctrine of Heraclitean flux. However, Socrates' strategy has instead been to exploit a general metaphysical world-view, summed up in the (p.116) theses constituting the Secret Doctrine, for the purpose of finding support for Protagoras. If we ask why we cannot modify this set of theses so that they are not incompatible with Protagoras' doctrine, then we have been convinced of the point Plato is trying to make, that the Secret Doctrine, when taken literally as some of its more fanatical proponents do, is inconsistent with Protagoras' measure doctrine, and is internally inconsistent as well. In Chapter 6, we will see that Aristotle explicitly identifies the doctrine of total flux with certain neo-Heracliteans. If Plato did also, then perhaps he too thought that moderating the flux doctrine would require a concession on the part of people who would be most unwilling to do so. Plato emphasizes that their ‘first principle’ is the extreme thesis that everything is change and nothing but change (156a5); we get an amusing description from 179d to 181c of how difficult it is to argue with advocates of this thesis or even to pin them down on anything. It is clear from this that such people would reject any limitations on the extent of flux. Certainly, if the flux doctrine had been introduced as a statement of what Protagoras is committed to, then it could be modified to read: some things are changing in some respects. But this is so bland as to be acceptable to everyone except perhaps the Eleatics, and too weak to underwrite the features of the theory of perception described in Stage III at *Tht*. 156, in particular, the twin births of perceptions and perceptible properties which make all perceptual appearances true.

The principal objection to my interpretation—and the principal source of support for the view that the refutation of flux is meant to show that Narrow Protagoreanism is false as well—comes from the fact that it is possible to think of reasons why Protagoras should be committed to a kind of flux doctrine. The relativity principle tells us that nothing is anything in itself, but is whatever it is relative to perceivers. It also tells us, in accordance with the measure doctrine, that nothing is anything unless it seems so to someone. Now consider the things which lose or gain these properties. Whether they gain or lose these properties is, of course, determined entirely by the Protagorean measure principle: a thing has a property (which is relative to a person) if and only if it

seems to her to have it. Given that a thing can gain or lose these properties, it can be said to change with respect to these properties. Protagoras' claim implies that it is not possible to be mistaken, and that there is no property a thing has which it cannot be said to lose if that is how a perceiver perceives it. Thus, Protagoras appears to be committed to saying that it is possible for things to change with respect to any property, even if he is not committed to saying that everything is changing with respect to every property. There is nothing (at least in perception) with respect to which a thing cannot change.

But Plato does not make this argument in the text. In the refutation of the flux doctrine, he presents the universal applicability of flux as a simple matter of consistency for adherents of the flux doctrine, not for Protagoras. If they say that ‘everything is change and nothing but change’, then they have to admit that everything is changing in every respect. And thus, if they posit entities such as (p.117) colours which are moving, then they must be undergoing qualitative alteration as well. Socrates and Theodorus both qualify each move in the argument with reminders of the ‘first principle’ to which the adherents of the flux doctrine profess allegiance: for example, ‘if they are to be wholly and completely in motion’ (182c8), ‘lest it be convicted of standing still in this respect’ (182d3–4), ‘if, being in flux, it is always quietly slipping away as you speak’ (182d7), ‘if it be admitted that all things are in motion in every way’ (182e5–6). The reason Socrates gives for concluding that even the colours and seeings must be changing with respect to their colour and being percipient is always that those in the ‘Moving Being’ camp maintain that all things must be in motion. But it turns out that the Secret Doctrine makes any of these as well as its opposite true (183a2–8). Thus, Socrates looked for help to those in the Moving Being camp, in order to make Protagoras' and Theaetetus' theses come out right, but they have proven to be false friends. He concludes with the remark that they have ‘got rid’ of Protagoras, since all along Socrates has talked about the Secret Doctrine as though it was Protagoras' mystery teaching, and they are also rid of Theaetetus' thesis, ‘at any rate on the line of inquiry which supposes that all things are in motion’. This leaves open the possibility that there might be other ways to make good on (NP) and (T).

It seems to me that the Secret Doctrine cannot be the only way to defend or understand Protagorean relativism—and that Plato never says that it is. The Secret Doctrine is an experiment in thinking about relativism; it is not a conclusive proof with far-reaching implications for modern-day versions of Protagoras' claim. It is simply a line of argument which Plato thought was promising for a relativist to pursue. He presumably thought that the metaphysical principles which make up the Secret Doctrine were among a cluster of vague ideas in the air, which form part of the backdrop against which Protagoras' claim seems plausible. And indeed the most successful aspect of Plato's strategy is the fact that these metaphysical principles allow him to develop a theory of perception that explains why all perceptions are true, and why sensible qualities are relative to perceivers.

If anything, the direction of implication goes the other way: Plato is not arguing that Protagoras must or should have been a secret Heraclitean, but that many philosophers, virtually everyone except Parmenides, think and talk in ways which appear to commit them to some version of Protagorean relativism, at least in the case of perception. Linking Narrow Protagoreanism with those background ideas provides a neat opportunity to examine—and then to demolish—those ideas themselves. If it turns out on independent grounds that Protagoras' thesis is insupportable, this provides one more way to undermine these other philosophical views. In the next two chapters, we will be exploring this idea further. We will compare Plato's *Theaetetus* with Aristotle's treatment of Protagoras in *Metaphysics* Γ5—in particular, the way he links Protagoreanism with three metaphysical principles that will be familiar from the Secret Doctrine: the doctrine that everything has opposing properties, the thesis that everything is relative, and the principle that everything is always changing.

Notes:

(1) Cf. M. Frede 1987, Dancy 1987.

(2) Cf. M. Frede 1987, Dancy 1987: 62–3.

(3) On the pre-Socratic use of *aisthēsis* see also Langerbeck 1935: 44–51.

(4) Dancy (1987: 68–9) thus argues that when Socrates treats Protagoras' claim as equivalent to Theaetetus', he subverts the natural meaning of Theaetetus' claim and undermines it by giving it a much more radical, and less plausible, interpretation.

(5) Aristotle discusses the strategy of drawing one's opponent into the kind of statement against which one is well supplied with lines of argument in *Topics* VIII 5.

(6) On hypothesis in Plato, see Robinson 1953: esp. 116–17. S. Menn (2002: 216) argues that the method of hypothesis introduced at *Meno* 86d is in fact the method of geometrical analysis; Socrates' method is ‘to reduce the ποῖόν ἐστι question to a τί ἐσTι question, and to keep reducing it until we reach a question that we can answer directly’. Socrates is making comparable use of the geometers' method of discovery in the *Theaetetus*: he realizes that it may be easier to answer the question of whether Theaetetus' definition of knowledge is correct by ‘reducing’ it to the question of whether Protagoras' claim is correct. This of course leaves open the question of whether one claim implies the other, or whether auxiliary premisses are needed to get from one to the other.

(7) γάρ is in the manuscripts, and is the reading of the 1995 OCT. But it suggests incorrectly that (3) gives the reason for (2). Badham suggests γ’ ἄρ’ which makes (3) at 152c2–3 an inference from (1) and (2); this is endorsed by McDowell 1973: 120–1.

(8) ὡς ἐπιστήμη οὖσα can also be translated ‘as being knowledge’. But as McDowell (1973: 120–1) notes, this suggests incorrectly that ‘perception is knowledge’ is an assumption in this argument, rather than the demonstrandum.

(9) As David Sedley (1996: 81–2, 88–9) notes, Proclus regarded the whole of the *Theaetetus* as an investigation into Protagoras' epistemology.

(10) ἢ καὶ ταύτῃ ἄν μάλιστα ἵστασθαι τὸν λόγον,·ᾗ ἡμεῖς ὑπεγράψαμεν βοηθοῦντες Πρωταγόρᾳ, ὡς τὰμὲν πολλὰ ᾗ δοκεῖ, ταύτῃ καὶ ἔστιν ἑκάστῳ, θερμά, ξηρά, γλυκέα, πάντα ὅσα τοῦ τύπου τούτου.

(11) ῎ρί δὲ τὸ παρὸν ἑκάστῳ πάθος, ἐξ ὧν αἱ αἰσθήσεις καὶ αἱ κατὰ, ταύτας δόξαι γίγνονται, χαλεπώτερον ἐλεῖν ὡς οὐκ ἀληθεῖς, ἴαως δὲ οὐδὲν λέγω·ἀνάλωτοι γάρ, εἰ ἔτυχον, εἰσίν, καὶ οἱ φάσκοντες αὐτὰς ἐναργεῖς τε εἶναι καὶ ἐπιστήμας τάχα ἄν ὄντα λέγοιεν, καὶ Θεαίτητος ὅδε οὐκ ἀπὸ σκοποῦ εἴρηκεν αἴ σθησιν καὶ ἐπιστήμην ταὐτὸν θέμενος.

(12) Cf. Ketchum 1992: 79–81. Burnyeat (1976*b*: 178) argues that, in Plato's *Theaetetus*, Protagoras ‘commits himself to the full equivalence [sc. the biconditional]’ because the example given to illustrate Protagoras' claim (the wind seems cold to one person, and does not seem so to the other, and thus it is cold for one and not cold for the other) is not of two conflicting appearances or beliefs, but of one belief together with the absence of one. In order to infer anything from the absence of a belief, the conditional (P1) ‘If *x* seems F to A, it is F for A’ is not enough. We need in addition (P3) *x* is F for A only if *x* seems F to A. Thus Burnyeat concludes that the example shows that Protagoras is committed to the full biconditional from the beginning. However, Ketchum (1992: 77) argues, ‘Plato makes it abundantly clear that we are to understand the situation as one in which one person feels the wind as chilly and the other feels it to be not chilly. For immediately after pointing out that if we agree with Protagoras we shall have to claim that the wind is cold for the one who feels chilly and not for the one who does not, Socrates asks, “Does it appear thus to each person?” (152b9). The anticipated affirmative answer requires us to say that the wind appears some way to the person who does not feel chilly and the only “way” the example makes available to us is “not cold” ’. Fine (1998*b*: 140) also argues against Burnyeat's proposal.

(13) Cf. *Tht*. 162d6–e2 = DK 80 A23: θέονς …, οὓς ἐγώ ἓκ τε τοῦ λέγειν καὶ τοῦ γράφειν περὶ αὐτῶνὡς εἰσὶν ἢ ὡς οὐκ εἰσίν, ἐξαιρῶ (‘the gods, whose existence or non-existence I exclude from all discussion, written or spoken’).

(14) 152d2–e1: 152d2-e1: ἐγὼ ἐρω0311; καὶ μάλ οὐ φαῦλον λόγον, ὡς Ǵρα ἓν μὲν αὐτὸ καθ' αὐτὸ οὐδέν ἐστιν, οὐδ ἄν τι προσείποις ὀρθῶς οὐδ' ὁποιονοῦν τι, ἀλλ' ἐὰν ὡς μέγα προσαγορεύῃς, καὶ σμικρὸν φανεῖται, καὶ ἐὰν βαρύ, κοῦφον, σʜμπαντά τε οὕτως, ὡς μηδενὸς ὄντος ἑνὸς μήτε τινὸς μήτε ὁποιουοῦν·ἐκ δὲ δὴ φορᾶς τε καὶ κινήσεως καὶ κράσεως πρὸς ἄλληλα γίγνεται πάντα ἅ δή φαμεν εἶναι., οὐκ. ὀρθῶς προσαγορεύοντες· ἔστι μὲν γὰρ οὐδέποτ' οὐδέν, ἀεὶ δὲ γίγεται. The translation of the contrasting and emphatic δὲ δή in 152d7 (where δέ picks up μέν in 152d2) has been modified to avoid importing ‘what is really true, is this’ into the sentence, as Levett does.

(15) Cf. Cooper 1990: 16–58, especially 39–58, Dancy 1987: 79, McDowell 1973: 125–6, Bostock 1988: 45, Fine 1996*a*, Fine 1996*b*. McDowell suggests that certain Parmenidean assumptions led Plato to view the contradictions as unresolved even when suitable qualifications have been added. Fine (1996*a*, 1996*b*) argues that relativism about truth and flux are incompatible, and thus, given the connection criterion (see Ch. 4 n. 7 above), Plato's Protagoras should not be interpreted as espousing relativism about truth.

(16) As we saw in Ch. 4, the problem with contradiction and self-refutation arises for Protagoras at the level of second-order judgements about beliefs, not first-order judgements.

(17) That this is the purpose of the Secret Doctrine has been suggested by McDowell (1973: 131), Matthen (1985: 37), Burnyeat (1976*b*: 181–2, 1990: 13), Denyer (1991), and Ketchum (1992: 83), but the suggestion has never been fully worked out.

(18) Heraclitus DK 22 B12, B49a, B91. Whether Plato was right in rendering Heraclitus' river-statement asπάντα ῥεῖ or πάντα χωρῖ (*Crat*. 402a8–10 = DK 22 A6; cf. Aristotle, *Ph*. VIII 3. 253^{b}9, *Met*. A6. 987^{a}32), and what influenced him in this interpretation of the historical Heraclitus (Cratylus? fifth-century sophists?) is controversial; cf. Vlastos 1955: 338–44, Guthrie 1962: 449–54, Mejer 1968, Kirk, Raven, and Schofield 1983: 194–7.

(19) Others have also noted that the formula ‘nothing is one thing by itself [ἕν μὲν αὐτὸ καθ’ αὐτὸ οὐδν έστιν]’ can be read in several ways, and some have suggested that Socrates (illegitimately) exploits these multiple readings in working out the Secret Doctrine; cf. McDowell 1973: 122, Bolton 1975: 69–70, Dancy 1987: 72, Cobb-Stevens 1989: 253, Bostock 1988: 51.

(20) Thus, Fine (1996*a*: 225 n. 28) seeks to explain the presence of different versions of Heracliteanism by arguing that Plato develops Heracliteanism from a moderate version to a more extreme version as required for Protagoreanism; as the argument progresses, they find that Protagoras is committed to more and more radical versions of Heracliteanism.

(21) οὐ φαυλον λάγον 152d2; περί τούτου 152e2; τῷ λόγῳ 1538a5; ὑπόλαβε… οὑτωσί 153d8; ἐξ ὧν τὸν Πρωταγόραν φαμὲν λέγειν 155d6; τὰ μυστήρια 156a3; οὗτος ὁ μῦθος 156c4; ὁ λόγος 160c2; ὁ ὑπὲρ Πρωταγόρον λόγος 179d2; τούτον τοῦ λόγου 179d8. Sometimes Socrates is referring to the entire theory he develops for Protagoras; sometimes he is referring to individual theses he uses in Protagoras' defence.

(22) Homer: *Tht*. 152e5, 153a2, 153c10, 160d7, 179e4. Heraclitus: 152e3, 160d7, 179e4.

(23) For this reason, some scholars, such as W. A. Heidel (1906: 339), have suggested that the Secret Doctrine is supposed to represent a tendency in all the Presocratics to derive the origin of things from motion and composition without having a clear concept of identity for objects and properties.

(24) This interpretation is proposed by McDowell (1973: 120–2), but worked out most fully by Burnyeat (1982, 1990: xiii), who acknowledges the influence of Bernard Williams (cf. Williams 1981, Williams 1992); it has also been endorsed by Gottlieb (1988), Fine (1996*a*, 1996*b*) and Day (1997). Earlier scholars of the *Theaetetus* did not suppose that all three theses were meant to imply each other; they assumed instead that Plato had other targets in mind besides Protagoras (e.g. Antisthenes, Aristippus, Cratylus, the Megarians, Democritus); they also tended to see *Tht*. 152–60 as containing not one 'Secret Doctrine' but several theories, for example, the 'Heraclitean' doctrines at 152d–153d as distinct from those of the 'more subtle type (κομψότεροι,)' at 156a–157c (cf. Schleiermacher 1836: 189–204, Campbell 1883: xxix–xlvi, Natorp 1890*a*: 347–62, Capelle 1862: 288–94, Friedländer 1969: 154–61, Guthrie 1969: 498–9). However, Jackson (1884) and Natorp (1890*a*) argued that the Secret Doctrine cannot conclusively be identified with any particular figure and is almost certainly a creative invention of Plato's; commentators then began to look instead for hints of Plato's own theory of forms in the *Theaetetus*, focusing on the striking resemblances between the Secret Doctrine and Plato's own statements about change and perception in other dialogues. But, as commentators after Cornford have noted, the question of whether Plato himself endorses the Secret Doctrine is the wrong question to ask here; rather, its function in the dialogue must be explained by its intended connection with Protagoras (see Cooper 1970, Cooper 1990).

(25) Thus, Burnyeat (1982: 6–7 n. 2) argues that the Secret Doctrine is supposed to provide necessary and sufficient conditions for the truth of Protagoras' thesis and Theaetetus' definition: 'It is thought to be reasonably clear that (1) Her → Prot → Th. The work goes into showing (2) Th → Prot → Her, and then, that both Protagoras and Heraclitus engender absurdity. (2) is hammered out step by step through the construction of the Protagorean-Heraclitean theory down to 160dc' (see also Burnyeat 1990: 7-19). (More precisely, the thesis that perception is a kind of knowledge implies and is implied by Narrow Protagoreanism, which in turn implies and is implied by Heracliteanism.)

(26) Cf. Fine (1996*a*). She notes, however, that the relations between the three theses are not strict implications; rather, each of the three theses best supports and is best supported by each of the others (Fine 1996*a*: 214–16, especially 215 n. 10; Fine 1996*b*: 108–9, esp. 108 n. 9). We are then to use this as a 'connection criterion' in our interpretation of these three theses, aiming to 'interpret each of the three theses in a way that makes it plausible to suggest that each of them is committed to and best supported by the others' (Fine 1996*a*: 217).

(27) Cf. Gottlieb 1988, Irwin 1988: 189–90, Burnyeat 1990: 49, Day 1997: 77.

(28) The connection between stability and objectivity is also called into question by Brown (1993: 205–9) and Matthen (1985).

(29) Fine (1996*a*) argues that Protagoras' claim is best understood as infallibilism, since infallibilism implies and is implied by the doctrine of flux, whereas relativism about truth is not.

(30) Burnyeat (1982: 6–7 n. 2) lists passages containing ‘stage directions’ indicating the intended relations between the three theses, three of which appear to indicate that (T) ↔ (P) ↔ (H): 152cd (Heraclitus gives the ‘real truth’ behind Protagoras' riddling statements [(P) → (H)]), 160de (Socrates says the three theses ‘come to the same thing’ [(T) → (P) → (H)]), 183b (the refutation of Heraclitus demolishes Protagoras [(P) → (H)] and disposes of Theaetetus' definition [(T) → (H)]—unless Theaetetus can find some other method than Heraclitus' to work out his equation of knowledge and perception). However, none of these are conclusive. The first passage, 152cd, could also indicate (H) → (P). At 160de, Socrates only argues that (P)+(H) → (T). Finally, the refutation of Heraclitus at 183b demolishes Protagoras and Theaetetus not because they are committed to (H), but because they both received critical support from (H), which has now been taken away; they have been refuted unless there is some other way to support these claims (cf. §5.9 below). The interpretation I offer here is more in the spirit of Burnyeat's remark that ‘the Protagorean-Heraclitean theory states a complete set of sufficient conditions for Theaetetus' definition to hold good’, which leaves open the ‘abstract possibility at the end that Theaetetus might find some alternative’ way to show that his definition holds good, though that is closed out at the end (1981: 7 n. 2, cf. Burnyeat 1990: 10).

(31) For example, at *Protagoras* 332a–333a, Socrates tests Protagoras' claim that wisdom is different from temperance and dissimilar, while each is a part of virtue. He does so by introducing the ancillary premisses, that (i) for one thing, there is only one opposite, (ii) folly is the opposite of temperance, and (iii) folly is the opposite of wisdom.

(32) Contra Burnyeat (1982: 7 n. 2) who says that it is ‘reasonably clear that (1) Her → Prot → Th. The work goes into showing (2) Th → Prot → Her.’ It is not clear to me that the thesis that everything is changing implies that all beliefs and perceptions are true for someone, since, after all, things might change in ways which belie those beliefs and perceptions. For example, the weather in Chicago is constantly changing, and I am invariably mistaken about it. As will become clear, it's difficult enough to show how to put together the elements of the Secret Doctrine, including the flux doctrine, to provide a coherent and consistent defence for Protagoras.

(33) See n. 24 above. Mejer (1968) has a judicious discussion of how far Plato really reproduces the doctrines of other philosophers in the *Theaetetus*; although he thinks ‘nothing can be proved’ on the question of whether Plato had in mind figures like Antisthenes, Aristippus, and the Megarians, he thinks that Plato is not inventing the

views discussed in the *Theaetetus*, but is referring to and describing the real views of Protagoras, Heracliteans, and others accurately. There is a particularly close resemblance between the theory of the *kompsoteroi* at *Tht*. 156a–157c and the epistemology of the Cyrenaics, though Natorp (1890*a*) thinks the evidence is ultimately inconclusive, and Tsouna (1998: ch. 10) denies any connection. Day (1997: 80) examines the Secret Doctrine theory of perception for historical precedents, and argues that it is neither Plato's nor any one else's, but 'an amalgam' which consists in part of 'ideas which Plato doubtless did accept, but which were commonplace in Greek thought rather than specifically Platonic'.

(34) On these inconsistencies in the Secret Doctrine, see Day 1997.

(35) Denyer (1991: ch. 3) is particularly helpful here.

(36) In §§5.4–8, I will quote from McDowell's translation of *Tht*. 153–60 because it is slightly more literal than the Levett translation.

(37) Socrates repeats this—that the colour should not be identified with the perceiver or the object—three more times (156e4–6, 159e4–5, 182a6–8). It might seem strange for Plato to postulate a third entity in between the eye and the stone which is coloured. What could this be? It must be the colour itself. The colour comes to be in between the eye and the stone, and *it* is coloured, not the eye or stone. It may seem peculiar to think that colours and other perceptual properties can be predicated of themselves, but this is simply another example of self-predication in Plato (cf. *Prot*. 330c). That colours are coloured is a premiss in Socrates' refutation of the Secret Doctrine (182d1–5): in Heraclitean terms, 'white is flowing white (τὸ᾽ λευκὸν ῥεῖν τὸ ῥέον).' See Meinwald 1992 on how to unpack these apparent cases of self-predication.

(38) Plato's theory of perception can be interpreted as a physical or metaphysical theory (Burnyeat 1990: 16–18), or, to use Crombie's labels, in accordance with a 'Causal Theory' interpretation or a 'Phenomenalist' interpretation (cf. Day 1997: 64–70). According to the first, the theory is meant to explain perceptual experience by tracing how it is caused in a physical framework; it assumes the existence of objects and perceivers which literally generate perceptions and perceptual properties. The phenomenalist interpretation will object that this assumes the existence of stable objects and perceivers which it is the very purpose of the *Theaetetus* story to deny. Thus, as Burnyeat puts it, we must take 'the phenomena of perception as the basic items in terms of which other things should be explained', and should not expect scientific details about the physics of perception. There are significant difficulties for both interpretations (cf. Bostock 1988: 81–3, Matthen 1985, Brown 1993, Day 1997: 64–70). For arguments against the underlying motivation for the phenomenalist interpretation, see §5.3 above; in what follows, we will pursue a causal theory interpretation of the text.

(39) Cf. Burnyeat 1979: 77, Matthen 1985: 38. Matthen notes that ‘Plato makes Protagoras correlate *something's coming-to-be-coloured* with the *coming-to-be of a colour* (i.e. of the offspring's whiteness), which, in effect, allows him to reduce attribution and alteration to existence and creation.’ Cornford (1935: 35), by contrast, thinks Socrates treats properties as things, not as qualities which need some other thing to support them; objects then are simply collocations of these property-things.

(40) Why does Socrates assume that everything always appears differently to every perceiver, that nothing ever appears the same to different perceivers or to the same perceiver at different times (McDowell 1973: 152–3, Bostock 1988: 49, 60–1)? This is, as Bostock says, ‘an astounding claim. The suggestion that we cannot have qualitatively similar perceptions for any length of time is flatly contradicted by common sense, and surely not needed by the Protagorean thesis that all judgements of perception are true’ (1988: 61). Burnyeat (1979: 86) thinks it is nonetheless justified because ‘The theory [Socrates] 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’ (see also Fine 1996*b*: 132 n. 48). I think the explanation may be simpler. The assumption is not forced on Protagoras or Theaetetus; rather, Socrates is entitled to use this assumption because it is already on the table, placed there as part of the Secret Doctrine package to which they have already agreed: (i) whatever appears F will also appear not F (152d4–6). (He uses it again at 159e7–8.)

(41) 154b1-6: Οὐκοῦν εἰ μὲν ᾧ παραμετρούμεθα ἢ οὗ, ἐφαπτόμεθα μέγα ἢ λευκὸν ἢ θερμὸν ἤ, οὐκ ἂν πτοτε ἄλλῳ προσπεσὸν ἄλλο ἄ ἐγεγόνει, αὐτό γε μηδὲν μεταβάλλον εἰ δὲ αὖ τὸ παραμετρούμενον ἢ ἐφαπτόμενον ἕκαστον ἦν τούτων, οὐκ ἄν αὖ ἄλλου προσελθόντος ἢ τι παθόντος αὐτὸ μηδέν παθόν ἄλλο ἂν ἐγένετο.

(42) Burnyeat (1979: 77) argues, correctly in my view, that the aim of this passage (154b1–6) 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', that 'Neither the object seen nor the perceiving subject is in itself white (154b)'. Fine (1996*b*: 114) summarizes his interpretation of the argument, which she calls 'perceptual relativism', as follows: (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. (C) The stone hasn't changed between the different appearances. (D) Therefore the stone isn't really, or in itself, white; rather, sensible qualities are relative to perceivers. Fine rejects this interpretation on the grounds that it makes Plato's argument depend on (B) which is philosophically dubious because it conflates being really F with being F in itself, and hence implies, wrongly, that relational properties are not real properties (Fine 1996*b*: 115, 118–19, *contra* Burnyeat 1979: 76–81 and Dancy 1987: 66, 78 ff.). Burnyeat's interpretation can be slightly modified to meet her objections. Instead of (B), read (B'): if the stone is white *in itself*, then it will not become different (for different people) without changing. Thus, Socrates does not conflate being intrinsically *F* with being really *F*. Furthermore, the argument begun at 154b1–6 is not yet complete; it is premature to suppose, with Burnyeat (1979: 77), that it follows from 154b1–6 alone that 'Neither the object seen nor the perceiving subject is *in itself* white (154b)'. 154b1–6 is just the first step in a larger argument leading to the conclusion, reached in Stage III, that colours and other perceptual properties are relational rather than intrinsic. See §5.6 below.

(43) Because of this difficulty, McDowell proposes to understand argument (2) as follows: 'If a perceiver is seeing white and does not himself change, he does not come to be other than seeing white. But any perceiver of whom one might be inclined to say that he is seeing white does, without himself changing, come to be other than seeing white, either by coming to perceive a different object or because of a change in the original object. Therefore it cannot be true of any such perceiver that he is seeing white.' However, this construal of the Greek is implausible, for the reference of 'each of these' (ἕ καστον τούτων) is 'big or white or hot' (μέγα ἢ λευκὸν ἢ θερμὸν); such a construal would only be warranted if the text at 154b4 read: 'But if, in turn, what was measuring or touching were <perceiving> any of these' (εἰ δὲ αὖ τὸ παραμετρούμενον ἢ ἐφαπτὸμενον ἓ καστον <ἠσθάνετο > τούτων) (see also Burnyeat 1979: 80). Furthermore, on McDowell's reading, the connection between this passage and the previous one is severed; in fact, both passages contribute to the argument that neither the object nor the eyes are white. McDowell thinks that we get a new argument here, that (1) what we measure ourselves against or touch *is not* but *becomes* large, white, or hot, and (2) we do not perceive, but *come to* perceive, large, white, or hot. Accordingly, he inserts a paragraph break between 154a9 and 154b1. But on my interpretation, 154b1–6 is meant to confirm a claim that has already been stated twice before.

(44) Burnyeat (1979) gives ancient and modern examples of the view that the perceiving eye takes on the perceived colour.

(45) Cf. Fine 1996*a*: 229–30, Fine 1996*b*: 115–17, 119.

(46) Fine (1996*b*) does not discuss argument (2), but perhaps to avoid this problem, she would accept McDowell's reading ofἕ καστον τούτων as ‘perceiving any of these [i.e. large, white, hot]’. For difficulties with this reading see n. 43 above.

(47) The first alternative is endorsed with varying degrees of confidence by Cornford (1935: 43–5), Ross (1951: 101–2), Bluck (1961: 8), Burnyeat (1990: 13), the second by McDowell (1973, *ad loc*.), Dancy (1987: 82, 87–8), Gottlieb (1988: 21–9), and Fine (1996*b*: 122–30).

(48) Some think Plato has fallen victim to a confusion himself—for example, that he does not know how to distinguish between so-called Cambridge changes (e.g. the mug on my right ‘changes’ when I move to the other side of it, cf. n. 62 below) and real changes (McDowell 1973: 137, Kirwan 1974: 127–8), or that his argument ‘shows great confusion about the logic of relative predicates’ (Day 1997: 55–6). Others think that Plato unfairly attributes such a confusion to Protagoras to make the case against him appear stronger (Haring 1992). Still others argue that Plato is *right* to charge Protagoras with this confusion. Fine (1996*b*: 130) argues: ‘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 by itself (153e4–5), 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’ (cf. Gottlieb 1988: 21–9, Irwin 1977: 5–6).

(49) See also Grote 1875: iii. 127–8.

(50) Does this interpretation attribute to Socrates the assumption that something can only change from being F to being not F if it is intrinsically F, and that relational change is not genuine change? I think it is still open at this stage of the argument whether relational change is genuine change. But Stage III makes it clear that it is possible to change relationally without changing intrinsically. This does not imply that relational change is not genuine change, only that relational change is not intrinsic change.

(51) 155a3—5: μηδέποτε μηδὲν ἂν μεῖζον μηδὲ ἔλαττον γενέσθαχι μήτε ὄγκῳ μήτε ἀριθμῷ, ἕως ἴσον εἴη αὐτὸ ἑαυτῷ.

(52) 155a7—9: ᾧ μήτε προστιθοῖτο μήτε ἀφαιροῖτο, τοῦτο μήτε αὐξάνεσθαί ποτε μήτε φθίνειν, ἀεὶ δε ἴσον εἶναι.

(53) 155b1—3: ὃ μή πρότερον ἦν, ὕστερον ἀλλὰ τοῦτο εἶναι ἄνευ τοῦ γενέσθαι καὶ γίγνεσθαι ἀδύνατον.

(54) Strictly speaking, Socrates does not yet talk of sensible qualities, but uses the more imprecise expression τὸ αἰσθητὸν, ‘what is perceived’, which can be ambiguous between the sensible quality and the object which has it. Plato coins the more precise expressionἡ ποιὸτης, ‘quality’, later at 182a9–b1 when he refutes the Secret Doctrine.

(55) At 156d1–2, where one would expect further explanation of why these are called *fast* changes, there unfortunately seems to be a lacuna, because οὕτω δή at 156d2 has no obvious referent. The 1995 OCT edition of the *Theaetetus* prints the passage with a lacuna; McDowell and Levett do not translate οὕτω δή. At the same time, we are also lacking an explanation of what ‘slow change’ means, with no reason to think that it too has dropped out from the text.

(56) Plato makes the same distinction much more concisely at *Parmenides* 138b, where he says that there are only two kinds of change: change of quality (or alteration) and change of place (motion).

(57) See also Campbell 1883: 58–9, 147, Matthen 1985: 37.

(58) Cf. Cornford 1935: 49–50, McDowell 1973: 138, Cooper 1990: 39, Nakhnikian 1955: 135, Crombie 1963: ii. 23.

(59) Note that on both readings (A) and (B), objects move or have their own properties such as being healthy or sick, prior to and independently of any encounter they have as parents, and hence both are more consistent with the causal interpretation, than with the phenomenalist interpretation, of the Secret Doctrine theory of perception (cf. n. 38).

(60) At 182b5–7, Socrates states again that the parents ‘give birth to perceptions and perceived things, and one lot come to be qualified in certain ways while the others come to be perceiving’.

(61) Bostock (1988: 61) wonders about how far the analogy goes, since looking white arises as a result of a complex physical interaction, whereas being taller does not. Similarly, McDowell (1973) rejects the relational reading of the puzzles because ‘comparative adjectives need to be applied to things only in relation to objects of comparison’, whereas ‘perceptual qualities should be ascribed to things only in relation to perceivers’. Haring (1992: 527) notes that there is a significant disanalogy between relational properties and perceptual properties because being larger and being smaller can be measured and therefore there is a fact of the matter about them, whereas whiteness and hotness do not for Protagoras have inter-subjective existence. But as Grote (1875: iii. 127–8) also noted, one can offer an analogy without implying that the two cases are identical in every respect. Plato is not suggesting that the logic of relational predicates depends on anyone's beliefs, or that perceptual properties and relational properties are the same in every way; rather, relational properties serve as a

perspicuous model for understanding what it means to say in the Secret Doctrine that ‘nothing is anything in itself ’.

(62) That is, in the strict sense in which Geach (1969: 71–2) uses that term, according to which something ‘Cambridge-changes’ when contradictory properties hold successively of it: ‘The only sharp criterion for a thing's having changed is what we may call the Cambridge criterion (since it keeps on occurring in Cambridge philosophers of the great days, like Russell and McTaggart): The thing called “x” has changed if we have “F(x) at time t” true and “F(x) at time t1” false, for some interpretation of “F”, “t”, and “t1”. But this account is, intuitively, quite unsatisfactory. By this account Socrates would after all change by coming to be shorter than Theaetetus; moreover, Socrates would change posthumously (even if he had no immortal soul) every time a fresh schoolboy came to admire him.…The changes I have mentioned, we wish to protest, are not “real” changes.… I cannot dismiss from my mind the feeling that there is a difference here.…But it would be quite another thing to offer a criterion for selecting, from among propositions that report at least “Cambridge” changes, those that also report “real” change (given that they are true); and I have no idea how I could do that —except that I am certain that there is no “real” change of numbers.’

(63) Burnyeat (1990), Bostock (1988), and Silverman (2000) argue that Socrates is going for a more extreme conclusion, namely, that Theaetetus and Protagoras are ultimately committed to the total dissolution of identity of objects and perceiving subjects. The argument has progressed from the initial assumption of public objects to instability, and finally to the dissolution of objects and perceivers into bundles of momentary perceptions. For problems with this interpretation see Matthen 1985 and Brown 1993: 205–9.

(64) From here on, translations of the *Theaetetus* will be from Levett/Burnyeat.

(65) Cf. McDowell 1973: 180–4.

(66) Cf. Cooper [1967] 1990: 91–3.

(67) Robinson (1953: 68–9) remarks on the difficulty of characterizing the meaning of μήθοδος here; it seems to be equivalent to ‘hypothesis’ or ‘assumption’.

(68) Cf. McDowell 1973: 179, White 1976: 161–2. As White notes, we require further explanation of the fact that what is refuted at 181–3 (the thesis that ‘for any object and any two temporal points in its career, however close, the object undergoes a change in *every* respect in the interval between those two points’) is a much stronger version of radical flux than what is used at *Tht*. 152–7 (the thesis that ‘for any object and any two temporal points in career, however close, the object undergoes a change in *some* respect in the interval between those two points’). His explanation is that ‘Plato's argument is a kind of *obiter dictum* of which we can guess the purpose, attacking an absurdly strong doctrine of flux’, where he is inclined to agree with Owen's suggestion

(1953) that Plato is criticizing his own earlier views. I prefer a simpler explanation: Plato is attacking would-be proponents of the Secret Doctrine who would be inclined to go for this ‘absurdly strong’ doctrine of flux.