Plato on Sense and Reference

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Protagoras claimed that man was the measure of all things; Heracleitus, that all was in flux. Plato makes the positions of these two men the object, in much of his writing, of what could be called a 'search and destroy' mission. With an eye to this combat, we might call the *Theaetetus* the climax of Plato's career. The *Theaetetus* tries to answer the question, What is knowledge? Plato considers the empiricist answer that knowledge is perception, but in exploring this answer he uncovers Protagoras' claim as well as Heracleitus' and argues that they both express one underlying position. Then he draws out the commitments of that underlying position in order to refute it.

One might have expected that Plato would have contrived his dialogue to end with this grand achievement. But it does not. Instead, he goes on to try to explain how a belief could be false. This addition to the dialogue can seem anti-climactic, because the little puzzles it raises about false belief do not seem to be of the same order of philosophical magnitude as the grand debate just concluded. And it can seem dismal, because Plato seems to fumble the answer to his puzzles—in fact he fails to find any answer.

The standard interpretation of these failures is that Plato there comes close to but just misses finding a successful explanation of false belief.¹ A natural assumption we all make which is behind this interpretation is that our own (Fregean) solution to the problem is obviously correct, so that if Plato had only understood that sort of solution, he would have been happy with it. But since Plato never gets happy about any solution in the *Theaetetus*, it follows that he did not come to understand ours (Frege's).

I disagree. It seems to me indisputable that Plato did understand the general form of Frege's solution and, understanding it, rejected it.² I shall argue that the general form of Frege's solution is to explain a *mistake* as a *mismatch*, but that Plato rejects this form of solution on the grounds that mismatching is as mysterious as mistaking.

Mistakes and mismatches

Before anything else, let me give an example to show the difference between a mistake and a mismatch. Suppose I am fixing a loose table leg. It turns out

¹ A good example of this view is McDowell, pp. 216-17. A variation of this view is that Plato has a successful solution in mind, but constructs this dialogue to hint but not state that solution, e.g. Cornford, pp. 110-11, 140

² My understanding of Plato's development of a Fregean theory of sense and reference in the *Theaetetus* originates in, though it finally disagrees with, Terry Penner's work at the University of Wisconsin, which lies in the form of seminar notes and mimeographs.

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that a nut is missing from one of the bolts that holds the leg to the table. To make the repair, I go and look in my toolbox for a nut to fit that bolt. But the nut I bring back is too big; it does not fit the bolt. Two things have happened: I have *mismatched* this nut to the table bolt. And, we might say, this mismatch was caused by my *mistaking* the too-big nut for a nut of the proper size when I was looking through the toolbox. The mismatch in this case was of nut to bolt. The mistake or, as we might more clumsily say, the misidentification involved the too-big nut and, perhaps, a nut of the proper size.

Of course, there is a corresponding difference between a right match and a right 'take' or identification. A successful repairman would have identified the right nut in the toolbox; then he would have been able to make the right match of nut to bolt at the table. The match in both cases takes place at the table and is between nut and bolt; the identification in both cases takes place in the toolbox and concerns only nuts, not bolts.

So much for differences; now we can state the puzzle both Socrates and Frege tried to answer: How can a statement of identity ever be something that needs telling? How could someone ever manage *not* to know an identity, to make a mistake?

Socrates' first explanation

Near the end of the *Theaetetus*, Socrates states this puzzle and tries out but rejects several solutions to it. The very first explanation he considers of how we might make a mistake is that we 'think that one thing is another' (188b3-4, b7).

Socrates raises the following problem for such an explanation. When someone makes a judgement, they must judge either about a thing they know or do not know. 'And of course', Socrates says, 'both to know and not know the same thing is impossible' (188a10-b1). So three cases must be considered: either the person who mistakes one thing for another knows both things, or neither, or only one of the two. Socrates then goes on to rule out all three possibilities.

He gets Theaetetus to admit that (a) it is impossible for someone to think that one thing which he knows is not itself but another thing which he also knows. The impossibility is that 'he would know both and not know both' (188b4-6).

And, he goes on, (b) it is impossible for him to think that one thing which he does not know is another thing which he does not know. The impossibility in this case is that someone who knows neither, say, the man Socrates nor the man Theaetetus could 'take it into his head' (188b9) that the man Socrates is the man Theaetetus or that the man Theaetetus is the man Socrates.

Again, he goes on, (c) it is impossible for him to think that one thing he

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knows is another thing he does not know, or that one thing he does not know is another thing he knows (188c2-4). It seems that both of the above impossibilities apply here: it is impossible that the man would know and not know one of the things, like the impossibility of case (a), and it is impossible that he would take into his head the thing he did not know, like the impossibility of case (b). In any case, (a), (b), or (c), it is impossible to find a way to think falsely that one thing is aother.

Everyone's complaint

I think that everyone, everyone since Frege, at any rate, wants to make the same complaint upon hearing this puzzle.³ It is this. Perhaps if I knew everything about an object (it would have to be a very simple object), I could never think falsely about it. And perhaps if I knew nothing about an object, not even a way to refer to it, I could not think falsely about it, either. But Socrates' argument that false belief is impossible appears to have a giant hole in it. It seems obvious that we never do know everything about an object (for instance, how many times it was discussed in the fifth century BC), and it also seems that we always know something about an object (at least, that it exists—or, to be really sure, that it either exists or does not exist). For Socrates to succeed in puzzling us, he needs to show that we either know something completely or not at all, but, we will reply, we can 'partially' know an object. There is a sense in which I do know Theaetetus, and a sense in which I do not know the same man, for we can have a bit of knowledge about something without knowing everything about it. The 'partial knowledge' or 'bit of knowledge' claim has a well-accepted explanation of the problem of false belief, thanks to Frege. Before I argue that Plato understood but rejected the general form of Frege's solution, I must make a few remarks about Frege's solution.

Frege's find

Frege did not ask 'How is it possible to mistake one thing for another?' but rather 'How is it possible that some statements of identity come as a surprise (have *Erkenntniswert*)?' An explanation of how someone can make a wrong identification covers the same ground as an explanation of how someone can be surprised by a right identification. Thus Frege is at work in the same territory as Socrates.

Indeed, Frege's analysis of mistakes agrees with the puzzle as stated by Socrates, so far as the puzzle goes. That is, Frege agrees that there is no explanation of how an identity statement 'a = b' can be surprising if we only talk about the thing which is identified, the thing named by 'a' and 'b'.

³ See, for example, McDowell, pp. 196-7, Cornford, p. 113; and Runciman, pp 29-30. The complaint is implicit in Fine.

Frege's reason is that the thing identified in the sometimes surprising sentence 'a = b' is one and the same as the thing identified in the never surprising sentence 'a = a'. Thus what explains how the surprise is different in the two cases is not the thing identified, for that thing is the same in both cases.

Since the thing identified will not by itself explain mistakes or surprises, a successful explanation will have to bring in something else. Frege's solution is to explain our surprise at a correct identification by bringing in, besides the selfsame thing, two other things which are not identified one with another but matched up. In the same way, a mistake, a wrong identification, can be explained as a mismatching.

The particulars of Frege's theory (for example, his view that 'senses' of words, not words, are the things which are matched up to give us knowledge of the world) can be ignored here. What is crucial to his explanation is the general form it takes of explaining identification by means of match-ups. Then and only then can we explain a possible mistake or surprise about this selfsame thing's being the same as itself. We explain partial knowledge of a thing by bringing in new objects. In the following, whenever I speak of 'proper objects of knowledge', I shall always be referring to the new objects, whatever they might happen to be, which the explanation under consideration brings in.

Socrates' questions

Socrates had argued that it is impossible to mistake one man for another, whether we know both, neither, or only one. We complained that he needed to consider cases of partial knowledge, and we suggested that Frege's explanation of a correct but surprising identification of a 'reference' in terms of an informative match-up of 'senses' could successfully explain the possibility of a mistake. Thus Socrates, to hold our interest, needs to consider explanations of mistakes in terms of match-ups, whether of senses or of some other kind of 'bit of knowledge'. And this is what he does. First Socrates questions an explanation using match-ups of thoughts, one to another. Problems with this explanation lead to a revised explanation using match-ups of memories to perceptions. New problems lead to a further revision using match-ups of 'birds' of knowledge, one to another. But this model, too, even when revised twice, fails to satisfy Socrates.

The mismatched-thoughts explanation

The 'allodoxia' explanation, as it has been called, talks about my thoughts of men in addition to the men themselves, so that it is able to explain my mistake of one man for another as a mismatch of one of my thoughts to another. For example, suppose that Socrates is down the road, walking towards me, and I think to myself, 'The one coming is Theaetetus'. Here I have mismatched the thought 'the one coming' with the thought 'Theaetetus', since in fact the one coming was Socrates. This seems a tidy explanation of false belief.

But Socrates rejects this explanation. Suppose, he says, that thinking is nothing but saying words to oneself silently. Then he makes what seems to be the following point.⁴ In order for thought-words to be mismatched one to another, some of those words must first be mistaken for others. In the example, the mismatch of the words 'the one coming' to the word 'Theaetetus' was only possible because in looking for a match to the words 'the one coming' I had picked out the word 'Theaetetus' when I ought to have picked the word 'Socrates'. In terms of nuts and bolts, the phrase 'the one coming' is the bolt; the word 'Theaetetus' is the wrong-sized nut (it does not match the bolt), and the word 'Socrates' is the right-sized nut. But this explanation now seems no less mysterious than the first: there we were unable to explain a mistake (of men); here we explain that mistake by assuming that a mistake (this time of thoughts) has taken place. Thus Socrates can raise the same problems as before. The first explanation, which only spoke of the references, Socrates and Theaetetus, could not explain how, if I know both, neither, or only one of the men, I might mistake the one for the other. Likewise this new explanation, which talks about my senselike 'thoughts' in addition to the references, fails in the three possible cases. In the first case, Socrates says:

It is impossible for someone who has both thoughts $(a\mu\phi\omega \delta_0\xi a\zeta_{0\nu\tau a})$ to think that the one is the other (19044-5).

And (in the second case) he says:

Surely he who has only one of the thoughts and the other not at all will never think one is the other (19007-8).

Socrates does not bother to mention the third case that if a man does not know any of the words, then he will not even be able to have them in mind at all so as to say them to himself. Although Socrates adopts here a silentspeech theory of thinking, his argument would seem to work just as well no matter what we take the thinking process to consist of—words, 'paintings' (cf. *Philebus* 39b), or Fregean senses.

Everyone's complaint again

Notice that there seems to be the same giant hole in Socrates' argument against this mistaken-thought explanation as in his first argument against

⁴ Socrates' train of thought at 189e-190e is by no means obvious Fine's discussion, pp 72-6, is sensitive to the problems any interpretation must face. But this much (which is enough for my purposes) seems clear: it would not be satisfactory to take Socrates to be finding a puzzle with a mistake of things thought of ('references'), for such a reading would make the explanation considered here identical to the first. Rather, the puzzle is with a mistake of thoughts ('senses'). McDowell, pp. 203-4, seems to agree.

a mistaken-thing explanation: he makes the outrageous assumption that either we know everything about the words with which we think or speak, or else we cannot have them in mind in any way. This simply is not so, we will say. Our knowledge of words or thoughts is not a matter of 'all or nothing'.

Again, I think, Socrates does not ignore this complaint. The remaining explanations he offers consider different ways in which we could somehow 'know' our thoughts yet mistake them. The first such way supposes that thoughts fall into two types.

The mismatched-wax-imprint explanation and its failing

Socrates divides thoughts into memories, which are represented as imprints in a block of wax, and perceptions, which cause the memories the way a signet ring causes a wax imprint. According to this wax block model, we may again explain someone's mistake of Theaetetus for Socrates as a mismatch. We have a perception of the one coming (who in fact is Socrates), but we mismatch that perception to our memory imprint of Theaetetus. This sort of mismatch seems free from mystery: it seems as easy to understand as the analogy Socrates gives of putting one's foot into the wrong shoe (193c5-6).

The problem with this sort of two-type model is that it can only explain false judgement resulting fom mismatching an object of one type with an object of another type. Yet, as Socrates points out, false judgements will arise within the same type; we shall falsely judge that one wax imprint is another (195e8-196b7), or that one perception is another. Thus to explain successfully false judgement, a many-type model will not serve. The final explanation, the birdcage model, attempts to overcome this weakness of the wax block model.

The mismatched-birds explanation

According to this model, the mind is a birdcage, and the birds we put into the cage are the bits of knowledge. The model tries to allow for mismatches by making a distinction between having a bird *at hand*, whenever it is in our cage, and having a bird *in hand*, whenever we reach into the cage and seize it. In this way we could 'know' two birds, that is, have them *at hand* in our cage, but match them up wrongly when we take them *in hand*, thus explaining any false belief. For instance, we could 'know' the bird '7+5' and the bird '11' but wrongly match them up when we for whatever reason come to believe that 7+5 = 11. In this model, of course, a bird is not the *reference* of the word, but as separate from the reference as what Frege would call its *sense*:

Whatever [bird] someone acquires and shuts up in their cage, we say he has learned or discovered the thing [the 'reference'] of which this [the bird or 'sense'] is the knowledge, and that just this is knowing (197e3-6).

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In the wax block model Socrates had used the analogy of putting one's foot into the wrong shoe as a way of establishing the possibility of error in that model. Here in the birdcage model he could just as well have used the analogy of putting on one black shoe and one brown shoe: we have both shoes *at hand* under the bed, but on account of the darkness of the room or the sleepiness in our eyes we wrongly take *in hand* and match up these shoes on our feet, even though they do not really belong together.

But Socrates rejects this model on the grounds that it has the very same problem he found with the first, the mismatched-things explanation, which is the same as the problem he found with the later mismatched-thoughts explanation: the 'explanation' that we *mismatch* the bird '7+5' with the bird '11' requires that we *mistake* the bird '11' for the bird '12'. In terms of nuts and bolts again, the bird '7+5' is the bolt, the bird '11' is the wrong-sized nut, and the bird '12' is the right-sized nut. So again the mismatch requires a mistake, but nowhere has it been explained how we could mistake one bird for the other, whether we knew both, neither, or only one.⁵

Two revisions of the birdcage model

There seem to be only two kinds of revisions those of us in favour of partial knowledge can make in our attempt to produce a workable explanation. We can either assert that there are bits of ignorance which we have in our birdcage along with bits of knowledge, or we can declare that we were not speaking strictly when we said that the proper objects of knowledge—what really is locked up in our birdcages—are bits about Theaetetus. In fact, we may say, the real objects of knowledge are other bits about the first order of bits we talked about.

For the first of these two attempts Socrates raises the same old problem yet again:

We have come round again to our first difficulty. For the real reasoner will laugh and say, 'Most excellent Sirs, does a man who knows both knowledge and ignorance think that one of them, which he knows, is another thing which he knows; or, knowing neither of them, is he of opinion that one, which he does not know, is another thing which he does not know; or, knowing one and not the other, does he think that the one he does not know is the one he knows; or that the one he knows is the one he does not know? (Fowler trans., 200a11-b5).

The 'first difficulty' reappears because, just as in the earlier explanation, the *match-up* of bits requires its own *mistake* of bits, a bit of ignorance for a bit of knowledge, which is certainly as mysterious as a mistake of eleven for twelve or of Theaetetus for Socrates.

⁵ This interpretation seems to be the likely argument behind the highly rhetorical—and obscure speech of 199d1-8 At any rate, Socrates is clear that the *mismatch* of the bird '7 + 5' and the bird '11' (cf. 195e8-196a7) includes a *mistake* of the bird '11' for the bird '12' (cf. 196b4-6 and 199b3-5).

Church's solution to the perplexity of the birdcage model

The second attempt, I said, is to declare that the previously discussed bits about Theaetetus, whether thoughts, imprints, or birds, are not after all the proper objects of knowledge. These too, we must allow, are mistakable and hence are only partially known by us. Thus there are bits of knowledge about those bits, and these 'second-order' bits are what belong in our birdcage.

This was Church's solution. His original bits were Fregean concepts. Faced with the problem of explaining how we could mistake one concept for another (that is, the problem of explaining how an analysis could be informative), his solution claims that in the same way that there are concepts of things (such as Theaetetus) there are also concepts of concepts: 'a name which denotes a concept must have, besides its denotation, also a sense.' Church rightly called this 'the Fregean solution', for it is a special case of Frege's solution to Socrates' problem, the problem of how we could ever mistake one thing for another.

Socrates' rejection of higher-order bits

Socrates considers the strategy of Church's Fregean solution in terms of higher-order bits. This consideration has nowhere been recognized, to my knowledge, perhaps because Socrates' description of that solution is not particularly flattering:

Will you go on and tell me that there are kinds of knowledge of the kinds of knowledge ... and that he who possesses these kinds of knowledge and has enclosed them in some sort of other ridiculous aviaries or waxen figments, knows them, so long as he possesses them? (Fowler trans., 200b5-c2).

According to Socrates, we will run into the same problem with these second-order bits, if they are what we have or do not have in our cage (that is, if they are the proper objects of knowledge): the problem is that the crucial assumption for the explanation, that we can *mismatch* two of these bits, has not explained how we can *mistake* one of these second-order bits for another.

In this way we will be driven to say that not even these second-order bits are what we have in our cage, but that there are third, fourth, and ever higher orders of bits. Yet *no* order can satisfactorily be said to be held in our cage without the same problem as ever: if we do have it in our cage in a way that permits *mismatching*, how will we be able to *mistake* it for any other bit? Socrates says:

You will be forced to run around and around, endlessly coming upon the same problem, never making any progress (200c3-4).

Summary of Socrates' attack upon explanations of mistake using mismatches

Against each mismatching explanation, Socrates argued that

- 1. Such views allow for 'partial knowledge' of a thing by
 - (a) postulating that there are bits (of whatever sort) about that thing,
 - (b) explaining partial knowledge of a thing as the mind being related somehow to the newly postulated bits about the thing (Socrates tends to speak of this relation as the mind knowing those bits; I have called the bits the 'proper' objects of knowledge), and
 - (c) explaining a mistake of one thing for another as the mind mismatching one of the bits with another.
- 2. Anyone offering such an explanation concedes
 - (a) For any x, if x is mistakable, then x is partially known, and thus x is not the proper object of knowledge (i.e. x is not what the mind is related to in t(b)).

This second point needed by Socrates seems true on the grounds that otherwise the person explaining would not feel the need to offer I(b) as an explanation in the first place.

3. But if one bit is mismatched with another, then one bit has been mistaken for another.

As soon as this third point has been established, Socrates infers using 2(a) that

4. The new bits are not the proper objects of knowledge (i.e. they are not what the mind is related to in 1(b)).

It follows from 1(b) and 4 that the mind is and is not related to these bits. Socrates expresses this contradiction by saying that the mind both knows and does not know these new bits.

Mismatched ways: a 'category' solution

Is there a way to escape the Socratic attack, an explanation of a kind not considered by Plato? One promising-looking explanation, no doubt inspired by Aristotle and likely to be closer to Frege's intent than any of the above 'bit' explanations, finds a way to maintain versions of 1(a) and 1(c), yet it denies 1(b). This explanation, though it looks promising, like the rest appears to fail to escape the crucial problem.

This explanation depends on there being different categories of things: objects and relations of objects.⁶ The knower and the thing known, for example, Theaetetus, are objects. Partial knowledge of Theaetetus is then

⁶ Frege draws this sort of categorical distinction in 'On Concept and Object', Translations, pp. 44-8.

explained by postulating not *bits* about Theaetetus but various *ways* of knowing or thinking about Theaetetus. The ways of knowing are not themselves objects (that was the mistake, it is claimed, of all the 'bit' explanations); rather they are mere relations between two objects, the knower and the known.

Thus this explanation denies 1(b). The mind does not know these ways; these ways are not the 'proper objects' of knowledge; the mind indeed does not stand in any relation to these ways. The mind only knows Theaetetus and other *objects*; it does not know the *ways* of knowing. For the various ways of knowing or thinking about Theaetetus are themselves relations between the knower and the known. According to this explanation it is a category mistake to require that the mind be in some further relation to the relation: there is simply the knower, the thing known, and the various ways of knowing it.

This sort of explanation is free to accept I(c) in one of two ways. Analogously to the wax block model, it might explain a mistake of Socrates for Theaetetus as a mismatching of a way with an object. For instance, suppose an object, namely Theaetetus, comes toward us down the road. Depending on weather visibility, distance to the object, our clarity of eyesight, and any number of other factors, we might think of that object in a number of ways: as Theaetetus, as Socrates, and so on. If we think of this object as Theaetetus, we have correctly matched a way ('as Theaetetus') to an object (the one coming, i.e. Theaetetus). And if we think of this object as Socrates, we have mismatched a way ('as Socrates') to an object (the one coming, i.e. Theaetetus).

On the other hand, analogously to the birdcage model, it might explain a mistake of Socrates for Theaetetus as a mismatch of two ways. For instance, suppose again that an object, namely Theaetetus, is coming down the road. We think of this object in one way—as the one coming—and then look for another way to match up with this given way. If we conclude that the one coming is Theaetetus, we have rightly matched up the two ways, 'as the one coming is Socrates, we have mismatched these two ways, 'as the one coming' and 'as Socrates'. Thus there are two ways to accept 1(c).

In either case, it seems to me, this sort of explanation will have to concede this version of Socrates' 2(a):

For any x, if x is mistakable, then x is related to the mind by some way of knowing.

Why? Well, if we choose to explain mistakes analogously to the wax block model, we must allow that the mind is related in one way—a wrong way of knowing. That wrong way is how it explains the mind's thinking of Theaetetus *as* Socrates. And if we choose to explain mistakes analogously to the birdcage model, we must allow that the mind is related to the object in two ways, as the one coming and as Socrates, two ways which happen to be mismatched. So in either case this explanation will have to consent to 2(a).

Moreover—and this is Socrates' crucial third point—either one of the proposed *mismatches*, whether of way to object (analogous to the wax block model) or of way to way (analogous to the birdcage model), can take place only if one way is *mistaken* for another. In the first case, we are presented with an object, and we come up with a way in which to think of it—but we come up with the wrong way, i.e. we mistook the wrong way for the right. In the second case, we start with one way of thinking of the object (as the one coming) and then come up with another way—the wrong way, as Socrates instead of as Theaetetus, i.e. we mistook the wrong way for the right.

But now, Socrates will point out, we have run into contradiction. Since we have mistaken one way for another, we must think of those ways *in ways*, as we consented at 2(a). So, we are driven to admit, the mind does stand in some relation to its ways of knowing. But this is what we denied, when we vehemently denied 1(b). We began by insisting that the mind is not related *to* the ways (that was the mistake of the 'bit' explanations, we said), it is related *in* ways (to objects). But now we see that we must think of ways *in* ways; we are related to ways, by an intermediate way.

It should now also be clear that a hierarchy of ways will be as vulnerable to Socrates' attack as the already-considered hierarchy of bits. Socrates, I think, can again fairly say that we have come upon the same old problem without making any progress.

A last speculation

As I said at the start, Plato gives himself a giant project in the *Theaetetus*, when he attacks both Protagoras and Heracleitus together. To ask my opening question again, why doesn't he end the dialogue after he successfully refutes those two giants? Once he has cleared the ground of those two, what remains?

Plato's worries about false belief can seem, as I said, anti-climactic and dismal—to us, who make an everyday assumption that thinking is always thinking, though sometimes true, sometimes false. But suppose, as is arguable, that Plato holds the bizarre theory that thinking is the untouched goal, not the daily achievement.⁷ Success and failure would not, in his arithmetic, be calculated as true and false thoughts but as closer or not so close approximations to thought. According to this theory, a false thought would not be a thought at all, but a phoney, a fake, a bogus thought. If I have shown that the problems Plato finds with false belief are a powerful

⁷ Jon Moline comes close to giving such an argument (pp 134-42) Elsewhere I argue that such a supposition gives a solution to otherwise intractable problems of interpretation in the Sophist (Rudebusch, pp 97-119).

challenge to our own explanation, then we may speculate that Plato's failures in the *Theaetetus* to find a way to explain false belief are not a case of philosophical fumbling, but a single-minded strategy to clear the ground in preparation for his own strange theory.⁸

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