SOCRATES AND THE JURY: PARADOXES IN PLATO'S DISTINCTION BETWEEN KNOWLEDGE AND TRUE BELIEF

M. F. Burnyeat and Jonathan Barnes

I—M. F. Burnyeat

Eyes are more accurate witnesses than ears. (Heraclitus)

At the end of the second part of Plato's *Theaetetus* (200D–201C) Socrates undertakes to refute the suggestion that knowledge may be defined as true judgement/belief (*alēthēs doxa*). He reckons that the refutation can be quickly done (201A4–5). We need only consider, by way of counter-example, a jury which reaches the right verdict in a case of violent crime. The jury, not having been present themselves as eyewitnesses to the crime, have to judge the case on the basis of testimony, on the word of others. If they do reach the correct verdict, it is true opinion, but not knowledge.

That is the counter-example, and a very effective one it is. So effective, in fact, that few readers stop long enough with the passage to notice that it is packed with paradox. I count three paradoxes in a single page of the Oxford text. The first is of historical interest only, but the second is of some significance for the interpretation of Plato's thinking about knowledge, while the third paradox points to a general philosophical moral.

I

Paradox number one occurs near the beginning of the passage, when the definition of knowledge as true judgement/belief is being set up for consideration. The definition is Theaetetus' second attempt to explain what knowledge is and was first mooted way back at 187B; but at that stage the discussion digressed to the problem of false judgement (187C ff). Eventually, however, it is concluded that this was the wrong approach: an adequate account of knowledge is a prerequisite for understanding false judgement (200CD). Socrates bids Theaetetus

start again and say what knowledge is (200D). But Theaetetus has nothing further to offer than the definition he tried before, namely, that knowledge is true judgement/belief (200E). Evidently he feels himself that true judgement/belief is not a particularly strong contender for the office of knowledge.

The idea originally came to him by inference: given the outcome of Part I of the dialogue, that knowledge is to be sought not in perception but in the soul's activity of judgement (187A), and given further the obvious consideration that some judgement is false, so that not all judgement can be knowledge, he simply concluded that knowledge is likely (*kinduneuei*) to be true judgement (187B). The definition had no independent backing in its own right. This time, however, Theaetetus offers some grounds for admitting the candidacy of true judgement:

> Making a true judgement is, at any rate, something free of mistakes, and everything that results from it is admirable and good (200E4–6, trans. McDowell).[1]

The first point is straightforward. It is that true judgement meets a condition which has governed the discussion since 152C: any candidate for knowledge must be such as to grasp what is the case and be free from error (cf. also 160D, 186C).[2] Certainly, true judgement/belief, being *true,* satisfies that elementary constraint on a workable definition of knowledge. But what of the second point? Is everything that results from true judgement/belief admirable and good? The results Theaetetus has in mind are, of course, actions, and the beliefs (judgements) from which they result are the beliefs which (help to) explain them. As, for example, Oedipus' killing his father is to be explained, in part, by his belief that the man he met was a curmudgeonly fellow who tried to bully him into giving way. Oedipus' belief was true: was the result admirable and good? How about a tyrant's true belief that his subjects can safely be inflicted with another round of intimidation and expropriation? It is little short of insane to think that everything that results from true judgement/belief is admirable and good.

Perhaps, then, we should take 'resulting from true belief' to mean: resulting from the totality of true beliefs bearing on a given action. If both factual and evaluative beliefs are correct, the action will be admirable and good; if anything goes wrong,

this will be imputable to a false belief somewhere in the totality.[3] Thus all wrong-doing is due to ignorance, e.g. Oedipus' ignorant belief that the man he met was not his father.

The trouble with this suggestion is not so much the surprise of finding the Socratic paradox starkly stated in a late dialogue (cp. e.g. *Soph.* 227D–228E), as that if it was stated here it would not help. To recommend his definition Theaetetus needs a feature which holds of any and every true belief, not just a feature of beliefs that form part of a satisfactory totality. *Nothing* good comes from the tyrant's true belief about what he can get away with. Yet Theaetetus plainly says that *everything* that results from true belief is admirable and good.

I am perfectly sure that Plato did not think this. Nor did he intend Theaetetus to say anything as silly as he actually made him say. He was thinking of the *Meno* and of the well-known passage in that dialogue (96D–97C) in which it is argued that it is not only through the guidance of knowledge that men's actions are done correctly and well. True opinion (*alēthēs doxa*) is no less good a guide for getting action right. True opinions are an admirable possession and their results are uniformly good (97E). This sounds exactly like Theaetetus—but it is not.

The issue in the *Meno* is whether knowledge is the only factor responsible for correct control or guidance of action to the beneficial use of potential goods of mind and body. Earlier (87E–88B) it had been agreed that such attributes as health and wealth, confidence and intelligence, are beneficial when correctly used, harmful when not. The question was then whether knowledge is required for their correct use, as Socrates first supposes (88BE, in keeping with such passages as *Euthyd.* 279A–282A), or whether true belief will serve as well, which is the conclusion he defends later, after the episode with Anytus has intervened. Consideration of the full context shows, as a cursory glance would not, that the later discussion is a return to the original question (see the back-references at 96E, 97B). The true opinions under discussion in the *Meno* are true opinions about the correct use of potential goods of body and mind. That is, they are beliefs about the right thing to do. And these, of course, are a small subclass of true beliefs. Better still, they are the one and only subclass of true beliefs concerning

which it is reasonable to claim that the resulting actions are uniformly admirable and good. (It would not be enough to restrict the claim of good results to evaluative beliefs in general, as opposed to factual beliefs: that way lies paradox again, e.g. if Oedipus was right in believing that bullies should be bashed.) It is the man with correct opinion about what to do who cannot fail to act successfully, for the simple reason that his correct opinion precisely consists in his having the correct answer to the question, what is the right or beneficial thing to do.

I infer that paradox number one is a slip on Plato's part. He took over from the *Meno* a point originally made on behalf of a restricted class of true beliefs and he presented it in the *Theaetetus* as a favourable characteristic of true belief quite generally. One might suppose the difference too obvious to miss, were it not that commentators on the *Theaetetus* seem to have missed it too. They regularly refer the reader to the *Meno,* but to my knowledge not one has signalled the difference between the two dialogues or noticed the paradox which results for the *Theaetetus.* Like Plato himself, as it now appears, they do not stop long enough with the passage to feel the paradoxical oddities of the argument. Let us be warned to go more carefully ourselves when we proceed to paradox number two.

II

Paradox number two arises from the way Socrates develops his counter-example. The data are as follows. Suppose an incident of robbery or assault. Under Athenian law the victim normally does his own prosecuting: provided he is a free citizen, male and sufficiently recovered, he argues out his case with the man he accuses before a large jury of people who were not present at the scene of the crime. There is a water-clock limiting the time for which they may speak (201B2), but scarcely any procedural constraints on the manner in which they may speak. Witnesses may be available to corroborate some of their statements, but the jury must rely substantially on the speeches of the litigants to ascertain the facts of the case.[4] The two parties compose their speech, or get a local logographer to compose one for them, and do the best they can. The question is, How good can this best be?

Socrates employs two contrasts to support his contention that

the jury cannot be expected to end up *knowing* whether the accused is guilty or innocent; the best to be hoped for under such conditions is true opinion, expressed in a just verdict (*dikaiōs,* 201B7). The jury cannot be expected to attain knowledge, first because what they experience is persuasion rather than teaching, and second because they are not eyewitnesses but dependent on testimony. Either contrast would be sufficient on its own to recommend the counter-example. Put them together in the way Socrates does, and the result is paradox.

(1) To make the contrast between teaching and persuasion Socrates emphasizes the familiar, often emphasized point that judicial procedure enforces constraints of time, not of truth.[5] In the short time allowed by the water-clock it is not possible to teach or explain adequately the truth of what happened, only to persuade (201AB), where persuasion is simply the inducing of belief (201B5; cp. *Gorg.* 454E). The important word is 'adequately'.[6] If what is said in court is inadequate, in one way or another, to the truth of what happened, the jury's opinion about what happened, even if it is correct, will suffer from a corresponding inadequacy. For it is what is said in court that gives the jury such grasp as it has of the truth. The jury may believe truly that the accused man is guilty, but their true belief will not be adequately founded. Hence their true belief does not count as knowledge.

It is not necessary to suppose, as some commentators have done, that the jury's conclusion is not based on rational grounds at all,[7] or that 'the rightness of any particular opinion is simply accidental'.[8] Socrates in fact says that if the jury judge their case well, they will be persuaded to the right conclusion (201C2),[9] implying that a good juror (*dikastēs akros,* 201C5–6) arrives at his verdict in a non-accidental way, by rational deliberation. That being so, we may and should suppose a normal law court background to the argument, with speeches as full as the extant orations of reasoning (some of it good, some specious) about evidence, likelihood, testimony and the interpretation of facts. The point is not that no reasoning goes on in court, but rather that there is not time for a fully adequate explanation: an explanation which gives priority to faithfulness to the truth. When the trial is on, the priority is effectiveness. One chooses the most effective means to make one's case. This

does not preclude the jury making up their minds in a rational way, as they are supposed to do (cf. *Apol.* 17A–18A, *Rep.* 408C–409E), from a critical assessment of such reasoning as the pleaders have been able to put before them. But it does mean that their conclusion is not as well-founded as it could be if the proceedings were not governed by the water-clock.

It is true that Socrates may seem, contrary to my interpretation, to emphasize the irrationality of persuasion when he says that with the art of rhetoric you can get people to believe anything you like—persuading them, not teaching (201A8–10). The remark has the sound of a psychological speculation about the omnipotence of persuaders. But Socrates is not Gorgias, who was indeed famous for proclaiming the omnipotence of the art of persuasion.[10] All Socrates need mean is that there is such a thing as getting people to believe something not because it is true but because it is what you wish them to believe,[11] and that this is the function for which the art of rhetoric is cultivated among orators and advocates. It is an art that puts effectiveness before truth and tailors its methods to the circumstances, including shortness of time. It would not follow, nor is it true, that persuasion is a wholly irrational business; only, as before, that correct beliefs induced by rhetorical persuasion are not as well-founded as they could be. It is in this sense that the whole art of rhetoric testifies that true belief is not the same as knowledge (201A4–5).

(2) Suppose, then, the water-clock abolished, so that there is time to explain properly what really happened, to teach the jury rather than persuade them. Would this be bringing them to *know* the truth of the matter? If the contrast between teaching and persuasion has to do with time and method, it would seem that the answer ought to be 'Yes'. But if we bring in Socrates' second contrast, between eyewitnesses and the recipients of testimony, it becomes clear that the answer has to be negative. Socrates claims that what happened when the crime was committed can only be known by someone who was there to see it with his own eyes; it cannot be known in any other way (201B). Obviously, no amount of teaching could put the members of the jury in the same position as an eyewitness who saw for himself something that has to have been seen to be known. In such a case teaching can do no better than persuasion.

It thus appears that the first key contrast, that between teaching and persuasion, is in conflict with the second, between an eyewitness and the juror who relies on testimony. The contrast between teaching and persuasion is most naturally taken to imply that knowledge can be transmitted from one person to another; indeed, a short while back in the dialogue teaching was apparently defined as the transmission of knowledge (198B; cp. *Gorg.* 454E–455A with 453D, *Tim.* 51E).[12] Which in turn suggests that when a fully adequate explanation has been given to someone, his true belief can be sufficiently well-founded to constitute knowledge. Just this, however, is denied by the contrast between eyewitnessing and testimony. Here Socrates asserts that knowledge cannot be transmitted, only belief, implying that in such a case no matter how well-founded a person's true belief may be, if he was not himself an eyewitness to the facts that have been explained to him, it falls short of knowledge.[13] The one contrast invites us to think that knowledge is well-founded true belief, the other that it is not. That is paradox number two.

There is no question but that this paradox must be taken seriously and, if possible, dissolved in a consistent overall interpretation. The difficulty is to decide whether it arises from a tension in Plato's own thinking—his ambivalence towards the idea of one person teaching another is, after all, well known (cf. *Meno* 87BC ff, *Symp.* 175DE, *Rep.* 518BC)—or whether hasty composition (of which we saw evidence in section I) has resulted in the counter-example not being described carefully enough to make the message clear—or perhaps both. Any solution must be to some extent conjectural, but the most economical is to break the apparent connection between teaching and knowledge.

Socrates does not specify what would be involved in an adequate explanation of what happened in a particular event such as the jury has to decide upon (this is one of the points on which the case is badly underdescribed), but the least we can suppose is that the removal of the water-clock would in principle make possible an exhaustive examination of evidence and testimony and a full exploration of the rights and wrongs of the matter, if these are in dispute,[14] with time along the way to pause and clear up doubts and queries that the jury may have.[15] It is hard to see what else could be involved in teaching

the truth about a particular past event like a robbery, yet harder still to imagine that Plato really means to say that about such things there is no teaching at all. For then, not only would it be misleading to have Socrates parade the contrast between teaching and persuasion in this context, but the emphasis on the water-clock as the obstacle to adequate teaching would be entirely otiose. The passage plainly proceeds on the assumption that, but for the water-clock, it would in some appropriate sense be possible, in principle, to teach the truth of what happened at a robbery. But if, as Socrates' second contrast emphatically asserts, knowledge of such a thing requires eyewitnessing, teaching cannot convey knowledge. Once freed from the constraint of the water-clock, the jury may be given very well-founded true belief, but that is not knowledge. Nor, in fact, does the passage claim that teaching does produce knowledge.

This solution gives Plato a consistent line of thought, but one which involves a sharp separation between knowledge and well-founded true belief. Now it has been a matter for surprise to some modern commentators that, once the point is made that the jury lack adequate grounds for their true belief, Part III of the dialogue does not take the (to us) obvious next step of suggesting that true belief becomes knowledge when it is supported by adequate grounds.[16] What Part III adds to true judgement or belief is *logos* in the sense of an explanatory account which answers the question what something is (cf. 203AB, 206E, 208CD): not an account that answers the epistemological question 'Why, on what grounds do you believe that *p*?'. Neither here nor anywhere else in the dialogue does Plato so much as mention the now familiar analysis of knowledge in terms of justified true belief. There is no cause for surprise, however, if we accept the solution just proposed for paradox number two. Part III of the dialogue takes the direction it does because Plato is not at all inclined to think that the jury's true belief could be turned into knowledge by the furnishing of better grounds. And I take it to be one recommendation of the proposed solution that it does in this way serve as a propaedeutic to Part III.

III

We are now ready for paradox number three. If knowledge is not true belief, not even well-founded true belief, it is natural

to think that any positive understanding which the passage has to offer will be found by looking more closely at the contrast between eyewitness and juror. Socrates' statement that an eyewitness can know the truth of what happened has aroused controversy: Does the apparent admission of the possibility of knowing mundane empirical facts signal a new departure in Plato's epistemology?[17] But the controversy has not taken the full measure of Socrates' statement, which is this: *only* an eyewitness can know. How wide a range of things are such that only an eyewitness can know them, Socrates does not say. But even if the claim is restricted to particular historical events, it is really no less paradoxical to make perception a necessary condition of knowing than to hold that what can be perceived and what can be known are different orders of things altogether.[18]

Suppose it is alleged that Alcibiades mutilated the Hermae, and suppose that Socrates was the only eyewitness present. Now consider these two sentences:

(1) Only Socrates knows whether Alcibiades did mutilate the Hermae
(2) Only Socrates knows that Alcibiades did mutilate the Hermae

Sentence (1) is a straightforward announcement that Socrates is in possession of information that no-one else has. Sentence (2) purports to *specify* the information that no-one but Socrates has. It sounds odd, paradoxical, because information specified is information shared. It can very well be true that only Socrates knows that Alcibiades mutilated the Hermae, but as soon as someone speaks that truth, the secret is out and other people know it too. The moment (2) is asserted by one person to another, being understood and not disbelieved, it changes from being true to being false. It is made false by the act of communication.

In case sentence (2) does not sound paradoxical to every ear, try these:

(3) Socrates knows that Alcibiades mutilated the Hermae, but I do not
(4) I know that Alcibiades mutilated the Hermae, but you do not

The paradox is sharper with (3) and (4) for the following reason. In many contexts it is a tacit convention of communication that speaker and hearer are excluded from the scope of statements quantifying over people. For example, 'Nobody knows that I am here' is taken to mean 'Nobody *else* but you and me' —otherwise it would be as absurd as 'I am asleep'. Similarly, if sentence (2) was taken to mean that apart from speaker and hearer, only Socrates knows, then of course it would not sound odd. But there is no disarming (3) and (4) that way, for you and I are explicitly mentioned. To imagine these sentences in use is to imagine that I share a piece of information with you, but that in the very act of sharing I deny that we both have it.

No doubt contexts can be devised in which these sentences do not sound so odd. For example, let (4) be spoken when you are asleep or hopelessly insane, i.e. in a context where normal uptake is not secured. Or let the emphasis in (3) be that Socrates *knows,* really knows (because he knows first-hand), something that I merely believe (because I have been told). This is a response we must reckon with in due course, but for the moment it is enough that special emphasis is needed to remove the oddity. Such is the way with these conversational paradoxes: with ingenuity they can sometimes be disarmed, but we learn more by asking what makes them paradoxical in a normal context of communication. Why is it, for example, that if you do not or will not believe that Alcibiades is guilty, I cannot properly address you with a normally accented token of (4)?

Hintikka, to whom is due the discovery and formulation of the paradoxical character of (3) and (4), suggests that they show that knowledge is essentially transmissible.[19] I do not think they show it, in the sense of furnishing an argument against a contrary position such as we have found in Plato. But they do bring out that, for better or worse, the idea of transmissibility is embedded in the way we ordinarily use the concept of knowledge. And this spells paradox for any philosophical thesis that denies transmissibility, whether it be Socrates' claim here that only an eyewitness can know about the crime,[20] or his claim in the *Meno* (85C with 98A) that the slave will only know the answer to the geometrical problem when he has been thoroughly exercised in the proof, or another claim in the *Meno* (97B) that a man does not know the road to Larissa unless he

has travelled there himself, or for that matter the familiar modern sceptical claim that only I can know what my feelings and sensations are. There is a whole family of philosophical positions which seek to restrict knowledge, or certain sorts of knowledge, to those who have acquired the truth by a privileged route. All of them run counter to the ordinary assumption that in normal contexts of communication knowledge spoken is knowledge handed on to another.

It helps, I think, to recall the *Meno* again in this connection because there we have two examples, not just one, and the privileged route to knowledge is different in the two cases: in the geometrical example the route lies through reasoning, in the example of the road to Larissa it is literally a matter of travelling along it. Some commentators have generalized in the wrong way from the road to Larissa and the eyewitness example in the *Theaetetus*. They have taken the message to be that something analogous to perceptual acquaintance is for Plato a requirement of mathematical knowledge as well, indeed a requirement of knowledge quite generally.[21] Others have accused Plato of confusing propositional knowledge with something called 'knowledge by acquaintance'.[22] But the position indicated in the *Meno* is that for any case of knowledge there is some privileged route by which alone it is to be acquired, not that there is some one privileged route by which all knowledge whatsoever is to be acquired. I suggest that the characteristic Platonic thought is that to know a mathematical proposition, say, one must have good mathematical grounds for it, to know a proposition stating a perceivable fact (if, or alternatively, in the sense in which Plato will allow that knowledge of such a thing is possible) one must have good perceptual grounds for it, and so on: each type of proposition can only be known on the basis of reasons appropriate to its subject matter. If that is the thought, then of course it is not better grounds that the jury would need for knowledge, but grounds of a different sort: of a sort which indeed neither teaching nor *a fortiori* persuasion could supply.

This way of thinking is not just a Platonic idiosyncracy. It is only too easy, when doing epistemology, to fall into speaking of *the* grounds on which we know, say, propositions in mathematics or propositions about the past or propositions about other

minds—as if each class of proposition had to be known by way of grounds or evidence appropriate to itself. A different but related response is to say that, while indeed we may come to know a mathematical proposition on somebody's say-so, this is not in the strictest or fullest sense *mathematical knowledge,* for which one must master a mathematical proof of the proposition concerned.[23] I think that this response deserves respect, but that when we have seen how revisionary a thoroughgoing Platonic account of knowledge will be, we shall incline to reformulate in other terms the thought by which it is inspired.

For consider: it is clearly both possible and often actually the case that a person who does not himself command the 'appropriate' reasons for believing a true proposition *p* may yet believe that someone else does; and moreover this belief of his may be both true and supported by excellent reasons of a type appropriate to *his* belief, even if they are not reasons that would be appropriate support for the original proposition *p*. True belief justified by the word of a reliable witness or authority is a special case of this general pattern. (Just how special a case it is comes out if we ask the question, How many persons does one know to be reliable or authoritative on grounds which do not themselves involve the testimony of others? Much more common is true belief justified by the word of another and nothing more.)[24] An example not relying on testimony might be this: I deduce from a scientist's papers that he has discovered that a certain virus causes paralysis, and I am able to deduce it with reasonable certainty even though, because the scientist tried to conceal his discovery from the military establishment he was working for, the papers themselves contain neither the assertion nor the proof of the fact that the virus causes paralysis. Here I come to know what the scientist knows but not in the way he did and not by relying on his say-so.

Now, if person *A* knows that person *B* knows that *p,* while it does not directly follow that *A* knows that *p,* nevertheless *A* himself, since he knows that *B* knows that *p,* can deduce *p* (via the definition of knowledge) and can claim to know this conclusion on the strength of having deduced it from a premise he knows to be true.[25] It would be most implausible to deny his entitlement to do so. The Platonist must rather deny (an argument at *Charmides* 171AC does deny) that *A* can ever

know that *B* knows that *p* unless he knows *p* in the same sort of way as *B* does. For instance, I cannot know that Socrates knows that Alcibiades mutilated the Hermae unless I too was an eyewitness to the fact, I cannot know that the scientist knows the virus causes paralysis unless I have repeated his research or done as good myself. Another example: earlier in the dialogue (147D) we are told that Theodorus proved to Theaetetus that the side of a square with area three square feet is incommensurable with unity (in our terms that $\sqrt{3}$ is an irrational number), but mathematically incompetent readers must accept that they do not know that Theodorus and Theaetetus knew this result.

If these are the consequences of Plato's presentation of the jury example, perhaps his view is not quite the triumph of common sense that some would like to be. Once the message is seen in general terms, as ruling out knowledge gained through testimony and other 'indirect' procedures, it becomes clear that it would be nearly as revisionary of what ordinarily passes for knowledge as his earlier inclination to restrict genuine knowledge to eternal, immutable truths. It is not just that we would have to give up a whole range of our beliefs about what we know. I have argued that the assumption of the transmissibility of knowledge is at work in the very language with which we operate the concept of knowledge. It is part of the fabric of our conceptual scheme.[26]

None of this, I should emphasize, is proof that Plato is wrong. I have been concerned merely to point out the paradoxical commitments of his epistemological position and to note its kinship with sceptical claims of the same general pattern. It is not a principle of Plato's methodology, as it is of Aristotle's, to respect ordinary language and common opinion. Nor have I tried to provide an anti-Platonic account to explain when and why one is justified in claiming knowledge on the basis of another person's word. Plato's jury example would not be the highly effective counter-example it is if an eyewitness who told what he knew invariably made others know it too. So what are the conditions for success? It may be that no general account is possible.[27] If it is possible, I am sure it is harder than one would suppose from the cursory treatment which is all the topic usually gets in general epistemology. Having no answers, I propose to return to the *Theaetetus,* to

sketch an alternative approach to our passage which, *if* we were to accept it, would remove paradox number three and go some way towards reconciling Socrates and the common man.

IV

Our interest in knowledge is essentially an interest in getting the truth. The concern with reliability is derivative from that. Justification, adequate grounds, well-founded belief, and like notions are not always central, but when they are it is because it matters that we should get to the truth, not because it matters how we get to it. That is the fundamental reason for the paradoxes you run into if you make it a condition on knowledge that the truth be got by a privileged route or on grounds of some one appropriate type. Truth itself is accessible in many ways, so therefore is knowledge.

However, besides our interest in getting the truth, we have also an interest in understanding it. And here conditions of appropriateness are in order. Understanding is only to be attained on the basis of explanatory premises or principles appropriate to the subject matter. What is more, understanding is not transmissible in the same sense as knowledge is. It is not the case that in normal contexts of communication the expression of understanding imparts understanding to one's hearer as the expression of knowledge can and often does impart knowledge.[28] Hence the notion of understanding yields no counterpart to the Hintikka paradoxes. It is one thing to know that $\sqrt{3}$ is irrational, another to understand that truth, and whereas in the right circumstances I can come to know it simply by being told, having it explained to me will not in the same way suffice to produce understanding. I need, as we say, to see it for myself—not necessarily in some perceptual or quasi-perceptual mode, but in whatever manner is appropriate to the thing I have to understand.

Much of what Plato says about knowledge and its relation to true opinion falls into place if we read him, not as misdescribing the concept which philosophers now analyze in terms of justified true belief, but as elaborating a richer concept of knowledge tantamount to understanding.[29] (a) If knowledge (*epistēmē*) is understanding, in many fields that does arguably require that

one master for oneself a proof or explanation; and here it is well to note that the *Meno*'s leading condition on knowledge, *aitias logismos* (98A), is Greek for working out the explanation of something, *not* for assembling a justification for believing it, which the slave already has at a stage when Plato denies he has knowledge (85C). (b) If proof or explanation is something one must work at for oneself, it is natural that the notion of teaching should be problematic for Plato. It is natural that he should vacillate between the view that a good teacher will get his pupil to see things for himself, so that even more or less Socratic methods can be subsumed under teaching (*Symp.* 201DE, *Soph.* 229A–231B; cp. also the mathematics lesson at *Theaet.* 147D-148B), and the *Meno* view that at least in morals and mathematics teaching does not produce knowledge, so that if there is an honest job for teaching to do, it is in the transmission of practical skills, not of theoretical knowledge (89D ff). (c) If, as Plato thinks, proof or explanation rests ultimately on definition, we can see why he should so often insist that definitional knowledge (knowledge of Forms) is a prerequisite for knowing anything else. It is not that without a definition you cannot be certain of anything or be justified in believing it, but that you will not have an adequate understanding of e.g. something's being beautiful or becoming two (*Phdo* 100B ff), or even of a mathematical theorem for which you have an acceptable proof (*Rep.* 533BE). The epistemic ideal for which the *Republic* aims is most frequently described not in terms of certainty but in terms of clarity, the total clarity of a synoptic understanding of all the sciences.

Now, I do not suggest that we should read the Jury passage in terms of understanding rather than knowledge. On the contrary, the emphasis is on truth, not on understanding such things as why Alcibiades acted as he did. Seeing for oneself here is literally seeing, and where a particular perceptible event is concerned, nothing more elaborate is required. But things change dramatically when we move on to Part III of the dialogue and consider the proposal, essentially Plato's own proposal,[30] that what needs to be added to true judgement/belief is an explanatory account (*logos*), going right back to the 'elements' which define the thing in question. I suggest that Part III of the dialogue will make much better sense to us if we read it

in terms of systematic understanding, rather than knowledge as knowledge is nowadays discussed in philosophy. An obvious example is the case of the wagon at 207AC: no extra increment of certainty, no further assurance that it is in truth a wagon (and not e.g. a cardboard mock-up), is achieved by being able to enumerate all the constituent parts of a wagon. What is added to correct belief is an understanding of what a wagon is. I would argue that the same holds for Aristotle's analysis of 'scientific knowledge' (*epistēmē*) in the *Posterior Analytics*,[31] where the leading conditions on the analyzandum have to do with mastering an explanation of the truth deriving from principles proprietary to and appropriate to the subject matter (*An.Post.* I.2). But that is another story, for another occasion. All I claim here is that the tensions and paradoxes of the brief passage we have examined are indicative of the direction in which Plato's thought is moving. In the end, what he really wants to talk about, as Aristotle saw, is not knowledge simply, but understanding.

It might be no bad thing if occasionally we took a leaf from Plato's book. It is largely for historical reasons that so much epistemology has been dominated by the concept of justification, beginning with the challenge of scepticism in Hellenistic philosophy after Aristotle. There is no internal reason why epistemology should not encourage a broader view and attempt to reconstitute a richer notion of knowledge as understanding. At the very least it would direct attention away from the simple perceptual example. For while first hand appreciation may define a sense of 'know' in which, sometimes, I alone know what my feelings or my perceptual experience is (roughly, I know from the inside what it is like to be in the state that others are merely justified in believing me to be in), I do not think there is any defensible concept of knowledge such that only an eyewitness can know that Alcibiades mutilated the Hermae. If sentence (3) can be spoken to convey that view of the matter, (p. 181 above), all we hear is the accents of (strictly Platonic) prejudice.[32]

NOTES

[1] John McDowell, *Plato-Theaetetus* (Oxford 1973). "At any rate" (*ge pou*) concedes that the grounds are still not compelling.

[2] Thus *anamartēton* has its 'aseptic' use (as at *Charm.* 171D, *Rep.* 340D, *Theaet.* 146A) and does not mean 'infallible'.

[3] The suggestion comes from Martha Nussbaum. About any more complicated rescue suggestion we must ask whether it is not too complicated to lie behind the text.

[4] Robert J. Bonner, *Evidence in Athenian Courts* (Chicago 1905), 30: "In Athens the jury looked to the speaker for the facts, and to the witnesses for the corroboration; with us the jury looks to the witnesses for the facts, and to the lawyers for an outline of the case and explanations of the evidence".

[5] Cp. *Apol.* 19A, 37AB, *Gorg.* 455A, *Theaet.* 172E.

[6] *hikanōs,* omitted in McDowell's translation. The fiendish syntax of the sentence 201A10–B3 (*toutois* governed by *genomenōn*) should be endured as it stands in the OCT, not eased (with McDowell, following Diès [Budé edition, Paris 1924] by textual adjustment to fit Y's *aposteroumenoi* (*biazomenoi* corr. Diès, *toutous* T); see W. F. Hicken, 'The Y Tradition of the Theaetetus', *Class. Quart.* N.S. 17 (1967), 98–102. I guess that the clue to the convolutedness of Plato's expression is the double indefinite reference *tinas . . . tines*: he wants us to imagine in quite general terms one lot of people *A* and another lot *B,* who were not present when certain parties *C* were being robbed or assaulted—could *A* be such clever teachers as to be able in a short time to teach *B* adequately the truth of what happened to *C*? In the case where the victim writes his own speech, $A = C$. But the preceding allusions to the art of rhetoric and advocacy suggest that Plato has chiefly in mind the case where the speech is composed by a professional logographer.

[7] F. M. Cornford, *Plato's Theory of Knowledge* (London 1935), 140-2, taking his cue from *Timaeus* 51DE. But *alogos* there, as a distinguishing mark of true opinion in contrast to understanding (*nous*), does not mean "not based on rational grounds" *tout court,* but 'not based on an explanatory account": see below.

[8] H. F. Cherniss, 'The Philosophical Economy of the Theory of Ideas', in R. E. Allen, ed., *Studies in Plato's Metaphysics* (London 1965), 6.

[9] Rendered tautologous by Cornford's translation "If they find the right verdict, their conviction is correct", and close to tautologous by McDowell's "What they have been persuaded of is correct, given that they have reached a good verdict". *Dikazein* standardly refers to the whole task of the *dikastēs.* Do the job well, e.g. weigh the testimony with sense and acuteness (cf. 201B8–C1), and you will reach the correct verdict—the point is trivialized if doing it well is just the same thing as reaching the correct verdict.

[10] Gorgias, *Helen* 8ff; Plat. *Gorg.* 452E, 456AC. By contrast, Plato inclined to think there is at least one class of person immune to persuasion, namely, those with knowledge and understanding (*Meno* 97C-98A, *Tim.* 51E).

[11] I take this suggestion from McDowell, *op. cit.*, 228, perhaps without his authorization, since for the sentence at 201A8-10 he appears to accept the Gorgias-type interpretation (p. 227).

[12] I say 'apparently' because all it really is is a passing remark about ordinary language to the effect that, if *A* transmits to *B* the ability to handle numbers, we call it teaching, i.e. there are circumstances such that, if *A* brings *B* to know certain things, he is said to teach him. There is no comment, either here or in the summary dictum at *Tim.* 51E, on the converse but (unfortunately) false implication propounded in the much earlier *Gorgias,* that if *A* teaches *B, B* comes to know something.

[13] So far as I am aware, the only writer to have noticed that the eyewitness/juror contrast separates knowledge from well-founded true belief is Manley Thompson, 'Who Knows?', *Journal of Philosophy* 67 (1970), 856–869. Thompson defends the separation for the case considered, but on grounds pertaining to modern (post-eighteenth century) notions of trial by jury. The reason Plato's jury contains no eyewitnesses is simply that none of them were there, not because they would on principle be disqualified from serving if they had been (Bonner, *op. cit.*, 84–5); although, interestingly enough, Plato *Laws* 937A recommends disqualification for those who have actually appeared as witnesses. Harping on the jurors' lack of first-hand knowledge is a commonplace of ancient rhetoric (e.g. *Dissoi Logoi* 4, 8, Antisthenes, *Ajax,* Isocrates, *Antidosis* 52–4); not so the epistemological moral Plato draws from it.

[14] The Athenian jury decides questions of law as well as fact, and in matters not covered by existing legislation they are enjoined to use their sense of justice: A. R. W. Harrison, *The Law of Athens* II (Oxford 1971), 48, 134–5.

[15] Jurymen can put questions to the litigants: Bonner, *op. cit.*, 58.

[16] E.g. Winifred H. Hicken, 'Knowledge and Forms in Plato's *Theaetetus*', in R. E. Allen, *op. cit.*, 187; W. G. Runciman, *Plato's Later Epistemology* (Cambridge 1962), 38.

[17] 'No': Diès, *op. cit.*, 141, Cornford, *op. cit.*, 142, Jaakko Hintikka, *Knowledge and the Known* (Dordrecht & Boston 1974), 27, 63–4. 'Yes': Runciman, *op. cit.*, 37–8, Gilbert Ryle, *Plato's Progress* (Cambridge 1966), 15, McDowell, *op. cit.*, 227–8. 'Uncertain': Richard Robinson, *Essays in Greek Philosophy* (Oxford 1969), 41. But whichever side one takes on this question, it is just a mistake to think that 201B7–8 is incompatible with the result of Part I of the dialogue that knowledge is not perception: Jürgen Sprute, *Der Begriff der Doxa in der platonischen Philosophie* (Göttingen 1962), 60–1. Socrates does not say or suggest that the eyewitness' perception *is* knowledge, only that it is a necessary condition for knowledge,

[18] Assuming that this was Plato's view in the middle period dialogues, an assumption generally agreed on both sides of the controversy. We need not here raise the question how far it is an accurate portrayal of the thought of those dialogues, but see the sensible remarks of I. M. Crombie, *An Examination of Plato's Doctrines* (London & New York 1962–3), I, 54ff, II, 128ff.

[19] Jaakko Hintikka, *Knowledge and Belief: An Introduction to the Logic of the Two Notions* (Ithaca & London 1962), chap. 4.

[20] Compare also the proverbial saying cited 200E, to the effect that the river itself will show (to those who step in) whether it is of fordable depth; i.e. don't ask the guide, you must try it for yourself.

[21] E.g. R. S. Bluck, '"Knowledge by Acquaintance" in Plato's *Theaetetus*', *Mind* 72 (1963), 259–263, Hintikka, *Knowledge and the Known, op. cit.*, chap. 3, 58ff with chap. 1.

[22] Esp. Runciman, *op. cit.*, chap. II, *passim*.

[23] For discussion, see B. A. O. Williams, 'Knowledge and Reasons', in G. H. von Wright, ed., *Problems in the Theory of Knowledge* (Hague 1972), 1–11 (an essay to which my thinking in this paper is much indebted), Mark Steiner, *Mathematical Knowledge* (Ithaca & London 1975), chap. 3.

[24] See C. A. J. Coady, 'Testimony and Observation', *Am.Phil.Quart. 10* (1973), 149–155, 'Collingwood and Historical Testimony', *Philosophy 50* (1975), 409–424; also Williams, *op. cit.*

[25] In Hintikka's terms, *Knowledge and Belief, op cit.*, p. 60, '$KaKbp \rightarrow Kap$' is self-sustaining.

[26] Philosophers should be more impressed than they are by the fact that there is such a speech-act as letting someone know what is the case (telling him that p). For some discussion of this notion, see Michael Welbourne, 'The Transmission of Knowledge', *Phil.Quart. 29* (1979), 1–9.

[27] Such is the moral we might draw from the papers of Coady and Welbourne cited above.

[28] There is no such speech-act as letting someone understand.

[29] Cp. Julius M. E. Moravcsik, 'Understanding and Knowledge in Plato's Philosophy', *Neue Hefte für Philosophie 15/16* (1979), 53–69. That we once had such a concept is clear from Locke's use of the term 'knowledge' in *An Essay concerning Human Understanding* I. iii. 24, a passage Plato would find entirely sympathetic (I owe the reference to Tony Coady).

[30] See my 'The Material and Sources of Plato's Dream', *Phronesis 15* (1970), 101–122.

[31] See my 'Aristotle on Understanding Knowledge', in E. Berti, ed., *Aristotle on Science: 'The Posterior Analytics'* (Atti dell' VIII Symposium Aristotelicum) (Padua & New York 1980), which includes a sketch of the corresponding interpretation of *Theaet.* 201C–208B.

[32] I am grateful for discussion of earlier drafts in London and Cambridge, and for helpful criticisms from my fellow-symposiast and from Tony Coady, James Dybikowski, Frank Lewis (who showed me his forthcoming paper 'Knowledge and the Eyewitness: Plato *Theaetetus* 201AC'), and Richard Sorabji.

SOCRATES AND THE JURY: PARADOXES IN PLATO'S DISTINCTION BETWEEN KNOWLEDGE AND TRUE BELIEF

M. F. Burnyeat and Jonathan Barnes

II—Jonathan Barnes

I

From one page of the *Theaetetus,* 200D–201C, Myles Burnyeat has conjured three paradoxes. Two of the paradoxes are summoned up from a single subordinate clause; for they turn on the reference Plato makes to 'things which it's possible to know only if one has seen them and not otherwise' (201B7–8). Little matter for such magic.

Microscopical scrutiny of Plato's words is a prerequisite for understanding Plato's thought; but a critic might wonder if Burnyeat's magical prowess is not misdirected—isn't he pulling rabbits out of a straw hat? For the paradoxes or confusions which Burnyeat finds in the text are trifling in the following sense: strike out the offending words, and you leave the argument of 200D–201C unimpaired—the point of the passage is to show that knowledge is not the same thing as true belief, and the phrases which worry Burnyeat are not essential to the proof.[1]

No philosopher is required to stand by every word he has written; we are all frequently and forgivably careless. Having scrutinised every word of a text, an honourable interpreter will be prepared to ignore or discount some of them. 'Don't niggle' is an important Principle of Interpretation: it is not a matter of morality, or even of common decency (why should we care about being fair or unfair to Plato?); it is a principle of understanding: we can only grasp what an author means if we suppress a part of what he says.

Then why not suppress the lines over which Burnyeat has waved his wand? If our only interest were to understand the arguments of the *Theaetetus,* then suppression would be the proper policy. But Burnyeat's second and third paradoxes have

a claim on our attention if we are concerned with larger questions about Plato's epistemology; and the paradoxes have some philosophical interest of their own.

II

What does Plato means by 'things which it's possible to know only if one has seen them'? Since 'know' in this passage is compared to 'truly believe', he cannot mean, e.g., that you don't really know Naples, or poverty, until you've seen them. Rather, he means that you don't know *that p* unless you have seen—what? I suppose that he has in mind thoughts of the following type: unless you saw Alcibiades unmanning the Herms, you can't actually know that he did so; you won't know that the mortal moon hath suffered her eclipse unless you observe the eclipse; if you didn't have your glasses on Eclipse as he flashed past the post, then you can't know for a fact that he won the Derby. We might represent the general form of such thoughts as follows:

(1) If *x* knows that *p* then *x* has seen that *p*[2]

And Plato is apparently maintaining at 201B7–8 that there is a class of propositions each of whose members satisfies condition (1).

Condition (1) makes having seen that *p* necessary for knowing that *p*; it does not make having seen that *p* sufficient for knowing that *p*. Hence, as Burnyeat observes, Plato's suggestion that some truths satisfy (1) does not conflict with his argument in the first part of the *Theaetetus* that knowledge and perception are always distinct.[3] Can we be more specific about the relationship which holds between seeing and knowing where condition (1) applies? Seeing is a route to knowledge, a path along which any would-be knower must travel: perhaps seeing provides the knower with reasons or grounds for his belief; perhaps seeing is a cause of knowing. Plato's brief clause gives no hint about the precise relation he had in mind, if he had anything in mind at all.

It is important to notice that condition (1) is quite different from:

(2) If *x* knows that *p*, then someone has seen that *p*

Both (1) and (2) might loosely be expressed by saying that 'knowledge presupposes seeing'; but whereas (1) holds that anyone who knows must *himself* have seen, (2) maintains only that if anyone knows, then *someone*—not necessarily himself—must have seen. Any truth that satisfies condition (1) satisfies condition (2); but the converse does not hold.

III

The general form exemplified by condition (1) may be put like this:

(3) If x knows that p, then x has Φ-ed that p

where 'Φ' holds place for a verb expressing a propositional attitude. Such verbs as 'perceive', 'intuit', 'prove', suggest themselves as relevant replacements for 'Φ': there are philosophers who hold that you cannot know moral propositions unless you have intuited their truth; in the *Meno,* Plato may perhaps mean to imply that you cannot know a mathematical theorem unless you have proved it;[4] other examples, of greater or less plausibility, may readily be assembled.

In any instance of (3) the verb substituted for 'Φ' will pick out a particular route to knowledge: I shall say that it determines an 'epistemic category'. Epistemic categories are classes of true propositions; a truth belongs to the epistemic category C^E (*see*) if and only if it satisfies condition (1). In general, a category C^E (Φ_i) contains all and only those truths which satisfy:

(4) If x knows that p, then x has Φ_i-ed that p

Plato's point at *Theaet* 201B7–8 amounts to the claim that the category C^E (*see*) is non-empty; in the *Meno* he perhaps suggests that C^E (*prove*) is also non-empty[5]. According to Burnyeat, 'the characteristic Platonic thought' is that every truth—or at least every knowable truth—belongs to some interesting[6] $C^E(\Phi_i)$. Plato never states, or even implies, a thesis of that scope and generality; and I am not sure how the thought is characteristic of him. But some philosophers surely have entertained the thought: Aristotle sometimes imagines that every knowable truth belongs either to C^E (*prove*) or to C^E (*induce*); Locke, I think, held that every knowable truth belongs either to C^E

(*intuit*) or to C^E (*demonstrate*) or to C^E (*perceive*); and other historical examples of epistemic categorisation are easy to produce.[7]

Note that nothing prevents a truth from belonging to more than one epistemic category: although some categories are mutually exclusive (Locke's C^E (*intuit*) and C^E (*demonstrate*) are examples), others are linked by ties of entailment—thus any member of C^E (*see*) must be a member of C^E (*perceive*) as well. But I am not concerned to develop the theory of epistemic categories.

IV

Condition (1), and the general formula (3), are not parthenogenetically puzzling: they breed problems only when coupled with certain other theses about the nature of knowledge. Those theses relate to teaching and the transmission of knowledge.

Under what conditions does x teach y that p? A teacher teaches only if a pupil learns; and learning is the acquisition of knowledge; thus it is plausible to assert:

(5) If x teaches y that p, then x brings it about that y knows that p

Plato says that 'it is clear to everyone that a man is not taught anything else but knowledge' (*Meno* 87C2); and I take that to be a lax formulation of thesis (5).[8]

Burnyeat advises Plato, and us, to break the connexion between teaching and knowledge, i.e. to reject (5). Plato may seem to reject (5) at *Sophist* 229A–231B; for there *didaskalikē* is defined as the purification of the soul from *amathia*, and it is maintained that the highest kind of teaching is a matter of removing false beliefs rather than of instilling knowledge. But that passage is not in conflict with thesis (5); for it is concerned with cases of teaching which are not cases of teaching that p.[9] I am inclined to think that (5) is Platonic, and that it is true; but the point is not of much importance to my argument: what follows turns on the notion of imparting knowledge, and it does not greatly matter if teaching that p does not entail imparting knowledge that p.[10]

Suppose, then, that x teaches y that p, or that x imparts to y the knowledge that p. And suppose that the imparted truth

belongs to the category C^E (Φ_i). Then it follows, by (3), that *y* has Φ_i-*ed* that *p*. For example, if Socrates taught the young Ctesippus that Alcibiades mutilated the Herms, then the young Ctesippus saw Alcibiades at his nefarious work. (I assume, for the sake of illustration, that the truth in question belongs to C^E (*see*).) It does not follow that Socrates brought it about that Ctesippus saw the deed; but it does not follow that Ctesippus saw the deed.

V

I used to think I was taught at school that the Duke of Uxbridge lost a leg at the battle of Waterloo. If any truth belongs to the category C^E (*perceive*), then it is plausible to think that the truth about Uxbridge will belong there. But I did not perceive, and cannot now come to perceive, the Duke's grisly amputation. Consequently, I do not know—and was not after all taught—that the Duke of Uxbridge lost a leg at Waterloo. And in general, indefinitely many particular historical facts which we all suppose we have been taught to know, actually evade our knowledge: their membership of C^E (*perceive*) prevents us now from being taught them.

It is not being suggested that membership of any C^E (Φ_i) precludes teachability; for a pupil may already have Φ_i-ed that *p*, or his teacher may have the capacity to get him to Φ_i that *p*. It is not being suggested that membership of C^E (*perceive*) or of C^E (*see*) invariably precludes teachability: it is often possible to bring it about that *y* sees that *p*—Socrates might have been able to conduct Ctesippus to the scene of Alcibiades' crime, and it is only our lack of a time machine which stops us from witnessing the carnage of 1815.[11] Nor, finally, is it being supposed that all truths, or even all knowable truths, can be taught: Plato once held, or toyed with holding, the view that knowledge is in every case teachable (see *Meno* 87C); but that large and false proposition is not in question here.

Rather the point is simply this: there is no truth, *p*, such that (i) *p* belongs to C^E (*perceive*), and (ii) both (a) *x* can teach *y* that *p*, and (b) *y* cannot perceive that *p*. Sextus Empiricus reports it as a commonplace that 'perceptibles *qua* perceptibles are grasped by us without teaching (*adidaktōs*)' (*M* X.301; cf. VIII.

203–5, 280). The commonplace perhaps amounts to this: there are truths in C^E (*perceive*), and those truths cannot be taught or imparted. The conclusion is a severely sceptical attitude to the past.

But should we, or Plato, be fazed? In the *Theaetetus* Plato appears to imply that some truths satisfy both (i) and (ii). That is certainly a mistake; but I take it to be only a minor slip. On mature reflection, Plato would have denied that any knowable truths belong to C^E (*perceive*); for despite *Theaet* 200D–201C and *Meno* 97B, it was generally his firm conviction that there could be no knowledge of perceptual unreality. That, of course, makes Plato an historical sceptic; but his historical scepticism is merely a corollary of his general scepticism with regard to the phenomenal world.

Non-sceptics need only hold that the great mass of historical truths is not in C^E (*perceive*); but they may prefer to subscribe to the view of the reflective Plato—though not, of course, to his reasons. After all, is there any argument for thinking that C^E (*perceive*) possesses members? A good empiricist will maintain that certain fundamental truths satisfy condition (2) or a generalisation thereof; he is not committed to holding that any truths satisfy condition (1). I am inclined to suspect that only a failure to distinguish between (1) and (2) could give plausibility to the view that C^E (*perceive*) is populous.

VI

Thesis (5) underlies Burnyeat's second paradox; his third paradox rests on another thesis about the transmission of knowledge[12] which can be formulated as follows:

(6) If y knows that x knows that p, then y knows that p

Principle (6) has been discussed by Hintikka; let me begin by making three comments on the principle itself.

First, principle (6) is not presented by Hintikka as a truth of logic: if y knows that x knows that p, it does not follow that y knows that p. Rather, it is a truth of logic that if y knows that x knows that p, then y 'virtually' knows that p: knowing that x knows that p, y need make only the simplest of inferences in order to know that p; for if y knows that x

knows that *p*, and *y* infers that *p* from the fact that *x* knows that *p*, then *y* knows that *p*. I prefer true to untrue principles; let us therefore replace (6) by:

(7) If *y* knows that *x* knows that *p*, then if *y* infers that *p* from the fact that *x* knows that *p*, then *y* knows that *p*

Principle (7) states the truth which (6) glances at.

Secondly, principle (7) has, so far as I can see, nothing whatsoever to do with the theory of speech acts. Hintikka compares the principle with Austin's notorious account of the use of 'I know';[13] and Burnyeat urges us to pay more attention to the fact that there is a speech act of 'letting someone know something'. But Austin's account is misconceived[14] (nor does Hintikka subscribe to it); epistemic speech acts would have no bearing upon (7) even if there were any; and I cannot myself see that there is such a speech act as letting someone know something.[15]

It would be absurd to suggest that, in saying 'I know that *p*', I am thereby letting you know that *p*—or even that I am thereby letting you know that I know that *p*. For I may not know that *p* (they sing 'I know that my Redeemer liveth'; but they don't know anything of the sort); and even if I do know that *p*, my mere saying so is quite insufficient, even in the most felicitous circumstances, to let you know that *p* (you may not believe me; you may have no reason to treat me as an authority). But if 'I know that *p*' does not perform the speech act of letting someone know something, no other formula is likely to do so, and there is no such speech act. (Burnyeat rightly observes that there is no such speech act as giving someone to understand something: were there a speech act of letting you know, there would be a speech act of getting you to understand.)

Thirdly, principle (7) says nothing explicitly about the transmission of knowledge. But a connexion of sorts can be made. Teaching often involves the teacher in exhibiting his own knowledge: the pupil recognises that the teacher possesses knowledge, and the transmission of that knowledge is thereby effected. Thus *x* exhibits to *y* the fact that *x* knows that *p*; *y* then comes to know that *x* knows that *p*; and, by applying principle (7), *y* may himself come to know that *p*.

Burnyeat says that 'information specified is information shared', and that 'in normal contexts of communication knowledge spoken is knowledge handed on to another'. He means

that if x knows that p and x says to y that p,[16] then (normally) y thereby comes to know that p. Now I think that that is quite false—it is a lot harder to acquire knowledge than Burnyeat imagines. No doubt we all do pick up beliefs in that second hand fashion, and I fear that we often suppose that such scavenging yields knowledge. But that is only a sign of our colossal credulity: the method Burnyeat describes is a rotten way of acquiring beliefs, and it is no way at all of acquiring knowledge. If x knows that y knows that p, then by principle (7) y may come to know that p; but y is a gullible fool if he thinks that if x says that p, then x knows that p.

VII

Take again the true proposition that Alcibiades mutilated the Herms, and suppose it to belong to C^E (*see*). If Ctesippus knows that Socrates knows that Alcibiades mutilated the Herms, and if Ctesippus thence infers that Alcibiades did mutilate the Herms, then it follows that Ctesippus has seen Alcibiades at his emasculatory task. In general, if p belongs to C^E (Φ_i), then if y both knows that x knows that p and infers thence that p, then y has Φ_i-ed that p.

Now y's capacity to infer that p from the proposition that x knows that p can hardly be thought to depend on any Φ_i-ing that y may have performed: if I think that you know that p, I may easily infer that p without indulging in any surreptitious Φ_i-ing. Hence if I have not Φ_i-ed that p, I do not know that you know that p.

But surely we do often know that others know things, without ourselves needing to perform the appropriate Φ_i-ing. I know—I think I know—that Euclid knew that Pythagoras' Theorem is true. I myself have never proved Pythagoras' Theorem. But Pythagoras' Theorem presumably belongs to C^E (*prove*) if it belongs to any C^E (Φ_i) at all. (If my mathematical ignorance is unusually impressive, take Gödel's Theorem instead.) I know—I think I know—that Thales knew that there was an eclipse of the sun in 585B.C. I didn't observe the eclipse. But the truth about the eclipse presumably belongs to C^E (*see*) if it belongs to any C^E (Φ_i) at all.

Thus principle (7), when coupled with some notions about epistemic categories, leads to unpalatably sceptical conclusions —conclusions far less palatable than those reached at the end of Section V. A strict Heraclitean, who believes that we must 'seek for ourselves' and who supposes that 'polymathy does not teach *nous*',[17] might accept them. But they represent an advanced form of scepticism.

I do not hold with Burnyeat that the conclusions threaten to rend the 'fabric of our conceptual scheme'; for they do not require us to abandon principle (7)—which is, I suppose, the only relevant part of that fabric. Rather, they enjoin an unusually sceptical attitude towards other men's cognitive attainments. Nor do I think that they present us with a very pressing worry: we can reject them by denying that any truths belong to any interesting C^E (Φ_i). And there are no arguments for thinking that any interesting C^E (Φ_i) is non-empty.

VIII

At this stage a cynic might be forgiven for wondering what all the commotion is about: epistemic categories no doubt lead to perplexity; but let us abandon them—they have no claim on our allegiance. The cynic has a point: there is no serious philosophical puzzlement here. But I do not think that the commotion is factitious: if many eminent philosophers have paid homage to epistemic categorisation and have bowed before an untitled usurper, then there is point in revealing the consequences of their allegiance and in denouncing the usurpation. Moreover, Burnyeat's closing paragraphs indicate a further development of our topic which promises to give it more philosophical substance: I refer to his suggestion that we replace the notion of knowledge, as it has thus far appeared in the argument, by the notion of understanding.

I think that Burnyeat can be represented as making three points about understanding: first, that principle (7) is false when it is translated into the language of understanding; secondly, that many—perhaps all—truths do indeed belong to interesting categories of understanding; thirdly, that Plato's discussion of *epistēmē* gropes for the concept of understanding

and that Aristotle's discussion of *epistēmē* firmly grasps that concept.

To state Burnyeat's points more precisely we need the locution '*x* understands that *p*'. Burnyeat connects understanding with explanation, and he implies a semitechnical sense for '*x* understands that *p*':[18] I take the phrase to mean '*x* knows why *p*'; and I construe that, in the present circumstances, to mean 'for some *q*, *x* knows that (*p* because *q*)'. (If that account of understanding is correct, then knowledge should not be contrasted with understanding; rather, understanding is a species of knowledge—it is causal knowledge, 'knowledge why'.[19])

IX

Principle (7) translates into:

(8) If *y* understands that *x* understands that *p*, then if *y* infers that *p* from the fact that *x* understands that *p*, then *y* understands that *p*

Burnyeat holds that (8) is false: is it? Certainly, if I merely know that you understand that *p*, I cannot acquire understanding by any elementary inference; for I may know that you know why *p* without myself being able to tell why *p*. More precisely, from:

(9) *y* knows that, for some *q*, *x* knows that (*p* because *q*)

we cannot infer:

(10) for some *q*, *y* knows that *x* knows that (*p* because *q*)

knowing that *x* understands that *p*, *y* can by inference acquire knowledge that *p*; but he may not be in a position so to acquire understanding that *p*.

But what if *y* does not merely know, but actually understands that *x* understands that *p*? If *y* knows why *x* knows why *p*, is *y* not in a position to infer why *p*? No. I know why Gödel knew why Gödel's Theorem is true; for I know that it is because Gödel proved his theorem that he knew why it is true. But I do not know, and cannot infer from my understanding of Gödel's understanding, why his theorem is true; for I cannot myself form or follow a proof of Gödel's Theorem.

For such reasons, I agree with Burnyeat that (8) is not true;

of course, that (8) is not true does not mean that understanding cannot be transmitted.

X

Corresponding to condition (3) we have:

(11) If x understands that p, then x has Φ-ed that p

A category of understanding, $C^U(\Phi_i)$, will thus be a class containing all and only those truths which satisfy the appropriate instantiation of (11). C^U (*prove*), for example, will consist of all and only those truths which satisfy:

(12) If x understands that p, then x has proved that p

Do all truths, or all understandable truths, belong to some interesting $C^U(\Phi_i)$?

Burnyeat observes that 'understanding is only to be attained on the basis of premises or principles appropriate to the subject matter to be explained or illuminated'; and he connects appropriateness with the notion of a 'privileged route' to understanding. Now if x understands that p, then he knows that (p because q); and 'q' will express appropriate premisses or principles. But that requirement of appropriateness is a condition on the content of x's understanding, not on the way in which x arrived at his understanding: 'q' must be appropriate to 'p'; but it does not follow that x's understanding that p must result from some appropriate Φ_i-ing.

Burnyeat asserts that 'having (something) explained to me will not . . . suffice to produce understanding. I need, as we say, to see it for myself . . .'. But why? Suppose that x understands that p, and explains the fact to y. We may imagine x exhibiting his understanding in such a way that y comes to know that x knows that (p because q). Surely y may thence infer that (p because q); and surely y thereby comes to understand that p. Explaining something to someone simply is getting him to understand it. Explaining is a matter of transmitting causal knowledge; and if knowledge in general can be transmitted, I do not see why causal knowledge in particular should be non-transferable.

XI

What. finally, of Burnyeat's suggestion that Plato groped for and Aristotle grasped the notion of understanding? It is true, I think, that Plato and Aristotle, in their discussions of *epistēmē,* were not engaging in quite the pursuit we know as epistemology: epistemological speculation was an invention of the Hellenistic philosophers. It is true, too, that Plato and Aristotle were mightily concerned with scientific explanation, with the explanation of phenomena and with the problems which such explanation poses. But should we say that *epistēmē* in Aristotle's system is not knowledge but understanding? or that the end of the *Theaetetus* points towards Aristotle's view?

Aristotle explicitly associates *epistēmē* with a grasp of *aitiai,* of causes or explanations: I have *epistēmē* that *p* only if, for some *q,* I know that (*p* because *q*).[20] Plato too more than once connects *aitia* and *epistēmē*: the famous *mot* in the *Meno,* that to become *epistēmē* true belief must be tied down with an *aitias logismos,* is the ancestor of Aristotle's formal requirement.[21] But it by no means follows that we should translate *'epistēmē'* by 'understanding'.[22]

Indeed, there is one good reason against that translation: the verb *'epistasthai',* and its cognates *'epistēmē'* and *'epistēmōn',* are not philosophical neologisms; they occur frequently in Greek literature from Homer onwards, and they are there correctly translated by 'know' and its cognates. (At all events, I have found no text which invites the translation 'understand'.) Both Plato and Aristotle talk of *epistēmē* without special qualification or apology; they give no indication that they intend the term in a novel or restricted sense: we are obliged to conclude that they thought they were investigating the ordinary concept of knowledge.

What then, are we to say about the connexion between *aitia* and *epistēmē*? You may say, if you like, that Aristotle identifies *epistēmē* with understanding; but in doing so, he is identifying knowledge with understanding. If Aristotle has grasped the concept of understanding, that is not because he is investigating that concept rather than the concept of knowledge: on the contrary, his analysis of the notion of knowledge in effect identifies it with understanding. That identification is evidently

mistaken. I fear that Aristotle's account of knowledge is muddled. The sad fact is that both Plato and Aristotle made a number of mistakes about knowledge; as a result, they were led to believe that only certain special types of proposition could be known; and that in turn led to Aristotle's misidentification of knowledge with understanding. Plato and Aristotle may have wise things to tell us about scientific explanation: they are poor guides in epistemology.[23]

NOTES

[1] Burnyeat himself calls his first paradox 'a slip on Plato's part': strictly speaking, it isn't even a slip by Plato—for Plato does not endorse Theaetetus' remarks at 200E4–6. I have nothing to add to Burnyeat's discussion of these lines.

[2] That is not quite accurate: rather than '. . . x has seen that p', we should perhaps have '. . . x has seen sp', where sp is the state of affairs described by 'p'. In the larger context of the *Theaetetus* that subtlety may be of some moment; for on the most plausible interpretation of 184B–187A, Plato is out to deny that it is possible to perceive *that p*. But for present purposes the subtlety may be ignored; indeed, if it is insisted upon, the generalisation offered in Section III will not work.

[3] 'But surely "x has seen that p" entails "x knows that p"? How then can Plato maintain that seeing is never sufficient for knowing?' The subtlety mentioned in n.2 is relevant here: it is, I think, precisely because 'x has seen sp' does not mean 'x has seen that p' that Plato can maintain that seeing does not suffice for knowing; the mind must, as it were, propositionalise the *data* of sight before knowledge can be produced.

[4] *Meno* 85C with 98A; but 85C says nothing about proof, and 98A is not linked specifically to mathematical propositions. In both passages Plato is less concerned with condition (3) than with the claim (surely false) that knowledge is *more durable* than true belief.

[5] The example of the road to Larissa, *Meno* 97AB, is usually taken as an illustration of condition (1). But all that Plato actually says is that if you have not travelled along the E92 you will not know it (i.e. know that the E92 leads to Larissa?); and that does not precisely fit any instance of (3). Or would Plato allow that an aerial view of the E92 was as good as a journey along it?

[6] I add 'interesting' to rule out trivialisation (e.g. by making 'Φ_i' a complex disjunction).

[7] As Burnyeat in effect points out, we should distinguish carefully between:

(i) Every knowable truth belongs to some C^E (Φ_i).

and

(ii) There is some C^E (Φ_i) to which every knowable truth belongs.

I do not know of anyone who has embraced (ii) for any interesting C^E (Φ_i).

[8] See also *Theaet* 198B, *Gorg* 454E, *Tim* 51E (all cited by Burnyeat, who thinks, however, that only *Gorg* 454E actually propounds (5)), *Prot* 319B, *Pol* 304C; cf. Aristotle, *Top* 184a1–8, *Rhet* 1355a25.

[9] Not all teaching is teaching that *p*; some teaching, e.g., consists in the imparting of practical skills, of 'knowhow'.

[10] Perhaps 'teach' can be used conatively (so that 'I taught him that *p*' implies only 'I tried to get him to know that *p*'); perhaps 'teach' can be used generously (so that 'I taught him that *p*' implies only 'I got him to believe (truly?) that *p*'—in which case learning need be no more than the acquisition of (true) beliefs). I prefer the stricter usage; but I shall not go to the stake for it.

[11] 'Here Socrates asserts that knowledge cannot be transmitted, only belief' (Burnyeat). Not exactly: (a) Socrates asserts no such thing—at most, he implies it; (b) what he implies is that when *p* is in C^E (*see*) knowledge that *p* can be transmitted to *y* only if *y* already has seen or can be brought to have seen that *p*.

[12] Burnyeat spends more time on Hintikka's 'conversational paradoxes' than on principle (6); but I don't think I misrepresent his argument by basing it on the rock of a principle instead of on the shifting sands of conversation. Conversational paradoxes may (to change the metaphor) be surface signs of philosophical malaise: therapy should get beneath the skin.

[13] J. L. Austin, 'Other Minds', in his *Philosophical Papers* (Oxford, 1961), esp. pp. 66–71.

[14] See e.g. J. Harrison, 'Knowing and Promising', *Mind* 71, 1962, 443–57. —Note that, according to Austin, *op. cit.* p. 67, the speech act associated with 'I know' is that of giving my word or lending my authority; Austin does not talk here of letting someone know (but see n.15).

[15] Austin counts 'inform', 'appraise' and 'tell' among his Expositives (*How to do things with words* (Oxford, 1962), p. 161), and it might be thought that 'let know' has a place alongside them. But I doubt if those verbs should be in Austin's list at all; they should certainly not be there if e.g., '*x* tells *y* that *p*' is taken to imply '*x* brings it about that *y* knows that *p*'.

[16] Or perhaps '. . . that *x* knows that *p*' or '. . . that *z* knows that *p*'.

[17] See J. Barnes, *The Presocratic Philosophers* (London, 1979), vol. I. pp. 145–6.

[18] The standard modern usage of this phrase ('I understand that Ryle rejected a knighthood') should be forgotten here.

[19] In particular, understanding is a species of 'knowledge that *p*'—the case in which '*p*' has the form '*q* because *r*'.

[20] See e.g. *APst* 71b12.

[21] *Meno* 98A; cf. esp. *Phaedo* 97D: Socrates hoped that Anaxagoras would be his 'teacher about the things that are'; he expected that Anaxagoras would (i) give him *epistēmē*, and [ii] explain the *aitiai* of 'the things that are'. Cf. Aristotle, *Met.* 982a29.

[22] In *Aristotle's Posterior Analytics* (Oxford, 1975), I do translate '*epistēmē*', etc. by 'understanding', etc.; but 'understand' is there employed as a term of art, and means precisely the same as 'know'.

[23] With great generosity, Myles Burnyeat read through a draft of my reply to his paper: I am most grateful for his many helpful comments.