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# The Possibility of Knowledge

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ABSTRACT: I focus on two questions: what is knowledge, and how is knowledge possible? The latter is an example of a how-possible question. I argue that how-possible questions are obstacle-dependent and that they need to be dealt with at three different levels, the level of means, of obstacle-removal, and of enabling conditions. At the first of these levels the possibility of knowledge is accounted for by identifying means of knowing, and I argue that the identification of such means also contributes to a proper understanding of what knowledge is.

## 1. Introduction

I'm going to be addressing two questions here. The first, which I will call the 'what' question is: what is knowledge? The second, which I will call the 'how' question is: how is knowledge possible?<sup>1</sup> As well as attempting to give answers to these questions I want to say something about the relationship between them and the proper methodology for answering them. By 'knowledge' I mean propositional knowledge, the knowledge that something is the case. I am going to suggest that the standard approaches to the 'what' and 'how' questions are defective and that the key to answering both questions is the notion of a means of knowing. In brief, my idea is that the way to explain how knowledge is possible is to identify various means by which it is possible and that the identification of the means by which knowledge is possible contributes to a proper understanding of what knowledge fundamentally is.

To bring my proposal into focus, I would like to start by outlining some contrasting approaches. One standard approach to the 'what' question is the analytic approach. This suggests that to ask what knowledge is is to ask what it is to know that something is the case.<sup>2</sup> This is taken to be a question about the truth conditions rather than the meaning of statements of the form 'S knows that p'.<sup>3</sup> Suppose, for example, that I know that the cup into which I'm pouring coffee is chipped. The analytic approach says that a good account of what it is to know this will

be an account of the necessary and sufficient conditions for knowing that the cup is chipped, and that the proper methodology for identifying these conditions is conceptual analysis, conceived of as a form of armchair philosophical reflection. The idea is that by analysing the concept of knowledge into more basic concepts one discovers necessary and sufficient conditions for knowing that the cup is chipped and thereby explains what it is to know that something is the case.

The familiar problem with this approach is that it is actually very difficult to come up with necessary and sufficient conditions for propositional knowledge that are both non-circular and correct.<sup>4</sup> As Williamson points out, there seem to be counterexamples to every existing analysis and it's not clear in any case that a complicated analysis that somehow managed not to succumb to the usual counterexamples would necessarily tell us very much about knowledge is. But if we conclude on this basis that the pursuit of analyses is 'a degenerating research programme' (Williamson 2000: 31) then analytic epistemology leaves us without an answer to the 'what' question.

One reaction to these difficulties has been to argue that the fundamental mistake of analytic epistemology is that it focuses on the concept of knowledge rather than on knowledge. According to Kornblith, for example, 'the subject matter of epistemology is knowledge itself, not our concept of knowledge' (Kornblith 2002: 1) and 'knowledge itself' is a natural kind. This implies that we should go in for a naturalistic rather than an analytic approach to the 'what' question. Specifically, the proposal is that if knowledge is a natural kind then we should expect work in the empirical sciences rather than armchair conceptual analysis to be the key to understanding what it is. But knowledge isn't a natural kind. There are too many disanalogies between knowledge and genuine natural kinds for this to be plausible, and in practice those who try to 'naturalize' epistemology either end up ignoring the what question altogether or answering it on the basis of just the kind of armchair reflection that analytic epistemologists go in for.<sup>5</sup>

If this isn't bad enough, the 'how' question seems no less intractable. One worry is that we can't explain how knowledge is possible if we don't know what knowledge is, so if we can't answer the 'what' question then we can't answer the 'how' question either. The standard approach to the 'how' question is the transcendental approach, according to which the way to explain how knowledge is possible is to identify necessary conditions for its possibility. Yet it is hard to see how this helps. We can see what the problem is by thinking about scepticism. Sceptics ask how knowledge of the external world is possible given that we can't be sure that various sceptical possibilities do not obtain. It is not an answer to this question simply to draw attention to what is necessary for the existence of the kind of knowledge which the sceptic thinks we can't possibly have.<sup>6</sup> For example, it might be true that knowledge requires a knower but this observation leaves us none the wiser as to how knowledge of the external world is possible.

Let's agree, then, that we still don't have satisfactory answers to my two questions. So where do we go from here? We could try defending one or other of the standard approaches against the objections I have been discussing but this is not what I want to do here. As I have already indicated, I believe that a different approach is needed so now would be a good time to spell out what I have in mind. One of the features of my alternative is that addresses the 'how' question first and then moves on to the 'what' question. The significance of doing things in this order should become clearer as I go along. In the meantime, let's start by taking a closer look at the 'how' question, and about what is needed to answer it.

## 2. How is Knowledge Possible?

The first thing to notice is that what I have been calling 'how' questions are really 'how-possible' questions. This is worth pointing out because there are how questions that aren't how-possible questions.<sup>7</sup> Think about the difference between asking how John Major became Prime Minister in 1990 and asking how it was possible for John Major to become Prime Minister in 1990. To ask how Major became Prime Minister is to ask for an account of the stages or steps by

which he became Prime Minister.<sup>8</sup> There is no implication that it is in any way surprising that he became Prime Minister or that there was anything that might have been expected to prevent him from becoming Prime Minister. There is such an implication when one asks how it was possible for Major to become Prime Minister. The implication is that there was some obstacle to such a thing happening, and this is what gives the how-possible question its point. For example, one might think that the fact that Major's social and educational background ought to have made it impossible for him to become Prime Minister.<sup>9</sup> The fact is, however, that he did become Prime Minister. So what one wants to know is not whether it happened, because it did, but how it could have happened, how it was possible.

On this account, how-possible questions are obstacle-dependent in a way that simple how questions are not.<sup>10</sup> One asks how X is possible on the assumption that there is an obstacle to the existence or occurrence of X. What one wants to know is how X is possible despite the obstacle. The most striking how-possible questions are ones in which the obstacle looks like making the existence or occurrence of X not just surprising or difficult but impossible. In such cases the challenge is to explain how something which looks impossible is nevertheless possible. One way of doing this would be to show that the obstacle which was thought to make X impossible isn't genuine. This would be an obstacle-dissipating response to a how-possible question. In effect, this response rebuts the presumption that X isn't possible and thereby deprives the how-possible question of its initial force. Another possibility would be to accept that the obstacle is genuine and to then explain how it can be overcome. This would be an obstacle-overcoming response to a how-possible question.

We can illustrate the distinction between dissipating and overcoming an obstacle by turning from British politics to Prussian epistemology and looking at one of Kant's many how-possible questions in the first Critique. The question is: how is mathematical knowledge possible? What gives this question its bite is the worry that mathematical knowledge can't be

accounted for by reference to certain presupposed basic sources of knowledge. The two presupposed sources are experience and conceptual analysis. Assuming that mathematical truths are necessarily true our knowledge of them can't come from experience; it must be a priori knowledge because experience can only tell us that something is so not that it must be so. Assuming that mathematical truths are synthetic it follows that conceptual analysis can't be the source of our knowledge of them either. So if experience and conceptual analysis are our only sources of knowledge then mathematical knowledge is impossible. Let's call this apparent obstacle to the existence of mathematical knowledge the problem of sources. It is the problem which leads Kant to ask how mathematical knowledge is possible because he doesn't doubt that synthetic a priori mathematical knowledge is possible.

An obstacle-dissipating response to Kant's question would dispute the assumption that neither experience nor conceptual analysis can account for our mathematical knowledge. For example, conceptual analysis can account for it if mathematical truths are analytic rather than synthetic. Alternatively, there is no reason why mathematical knowledge couldn't come from experience if the truths of mathematics aren't necessary or if it is false that experience can't tell us that something must be so. Each of these dissipationist responses to Kant's question amounts to what might be called a presupposed sources solution to the problem of sources; in each case the possibility of mathematical knowledge is accounted for by reference to one of the presupposed sources of knowledge. But this isn't Kant's own preferred solution. His solution is an additional sources solution since it involves the positing of what he calls 'construction in pure intuition' as an additional source of knowledge by reference to which at least the possibility of geometrical knowledge be accounted for.<sup>11</sup> This an obstacle-overcoming rather than an obstacle-dissipating response to a how-possible question because it doesn't dispute the existence of the obstacle which led the question to be asked in the first place; it accepts that the obstacle is, in a way, perfectly genuine and tries to find a way around it.<sup>12</sup>

The only sense in which construction in pure intuition, the use of mental diagrams in geometrical proofs, is an ‘additional’ source of knowledge is that no account was taken of it in the discussion leading up to the raising of the how-possible question. It isn’t additional in the sense that geometers haven’t been using it all along. By identifying construction in intuition as a means of acquiring synthetic a priori geometrical knowledge Kant explains how such knowledge is possible. In general, drawing attention to the means by which something is possible is a means of explaining how it is possible yet the means by which something is possible needn’t be necessary conditions for its possibility. Catching the Eurostar is a means of getting from London to Paris in less than three hours but not a necessary condition for doing this. So if all one needs in order to explain how something is possible is to identify means by which it is possible then there is no need to look for necessary conditions.

But is it plausible that the identification of means of knowing suffices to explain how knowledge is possible? Not if it is unclear how one can acquire the knowledge that is in question by the proposed means. For example, one worry about Kant’s account of geometry is that what is constructed in intuition is always a specific figure whereas the results of construction are supposed to be universally valid propositions. How then, is it possible for construction to deliver knowledge of such propositions? According to Kant there is no problem as long as constructed figures are determined by certain rules of construction which he calls ‘schemata’. As he puts it, the single figure which we draw serves to ‘express’ the concept of a triangle because it is ‘determined by certain universal conditions of construction’.<sup>13</sup>

For present purposes the details of account are much less interesting than its structure. What we can extract from Kant’s discussion is the suggestion that his how-possible question needs to be dealt with at a number of different levels. First there is the level of means, the level at which the possibility of mathematical knowledge is accounted for by identifying means by which it is possible. Second, there is the level of obstacle-removal, the level at which obstacles to the

acquisition of mathematical knowledge by the proposed means are overcome or dissipated. But this still isn't the end of Kant's story. He thinks that even after the problem of accounting for the universality of mathematical knowledge has been solved there is a further question that naturally arises. This further question is: what makes it possible for construction in intuition to occur and to be a source of mathematical knowledge?

This last question concerns the background necessary conditions for the acquisition of mathematical knowledge by constructing figures in intuition. What it seeks is not a way round some specific obstacle but, as it were, a positive explanation of the possibility of acquiring a certain kind of knowledge by certain specified means. We have now reached what can be called the level of enabling conditions.<sup>14</sup> Kant's proposal at this level is that what makes it possible for mental diagrams to deliver knowledge of the geometry of physical space is the fact that physical space is subjective.<sup>15</sup> If space were a 'real existence' in the Newtonian sense it wouldn't be intelligible that intuitive constructions are capable of delivering knowledge of its geometry. That is why, according to Kant, we must be transcendental idealists if we want to understand how geometrical knowledge is possible. So this looks like a third explanatory level in addition to the level of means and that of obstacle-removal.

In fact, the distinction between the second and third levels isn't a sharp one in this case. If space were a real existence then that would be an obstacle to the acquisition of geometrical knowledge by means of construction. This makes it appear that what happens at the level of enabling conditions is much as exercise in obstacle-removal as what happens at the second level. Yet there are other how-possible questions in connection with which there is a sharper distinction between the second and third levels, and I now want to examine one such question. In any case, we shouldn't be reading too much into Kant's account of geometry because it isn't as if we still think about geometry in the way that he thought about it. In particular, if geometrical knowledge isn't synthetic a priori then we don't have Kant's reasons for worrying about how it is possible.



But I now want to show that the basic framework of his discussion can be used to think about a range of different how-possible questions.

As we have seen, sceptics ask how knowledge of the external world is possible given that we can't be sure that various sceptical possibilities do not obtain. Take an ordinary proposition about the external world such as the proposition that the cup into which I am pouring coffee is chipped. How is it possible for me to know that this is the case? The obvious answer would be: by seeing that it is chipped, or feeling that it is chipped, being told by the person sitting opposite me that it is chipped, and so on. Seeing that the cup is chipped, which is a form of what Dretske calls 'epistemic seeing', looks like a means of knowing that it is chipped.<sup>16</sup> But now we come up against the sceptic's obstacle. The sceptic thinks that I can't correctly be said to see that the cup is chipped unless I can eliminate the possibility that I am dreaming, and that I can't possibly eliminate this possibility.<sup>17</sup> This is a version of the problem of sources. The obstacle to the acquisition of perceptual knowledge, to knowing that the cup is chipped by seeing that it is chipped, takes the form of an epistemological requirement that supposedly can't be met. In fact, it is the precisely the obstacle that might have prompted one to ask the how-possible question in the first place.

As usual, we can either try to overcome the obstacle or dissipate it. To overcome the obstacle would be to show that it is possible to eliminate the possibility that one is dreaming.<sup>18</sup> To dissipate the obstacle would be to show that there is no such epistemological requirement on epistemic seeing. This looks like the best bet. When one understands the sceptic's requirement in the way that he understands it one sees that one couldn't possibly meet it, and that is why the only hope of dealing with the apparent obstacle to knowing about the external world by means of the senses is to show that it isn't genuine. One way of doing this would be to argue that we are less certain of the correctness of the sceptic's obstacle-generating epistemological requirement than we are of the knowledge that it purports to undermine, for example the knowledge that the

cup is chipped.<sup>19</sup> Epistemological requirements mustn't have unacceptable consequences, and it is an unacceptable consequence of the sceptic's requirement that it makes it impossible to know such things. To the extent that knowing that one isn't dreaming is a requirement on anything in this area it is a requirement on knowing that one sees that the cup is chipped, not a requirement on seeing that the cup is chipped.

It is controversial whether these attempts at obstacle-dissipation are successful but let's assume for present purposes that they are. So we now have the idea that epistemic seeing is a means of knowing about the external world, though obviously not the only means, together with the suggestion that there isn't a genuine obstacle to knowing about the external world by such means. This is a presupposed sources solution to the problem of sources since perception is a presupposed source of knowledge of the external world. We reach the level of enabling conditions when we ask what makes it possible to see that the cup is chipped and thereby to know that it is chipped. We don't have to ask this question but we can ask it.<sup>20</sup> Here, then, are two Kantian thoughts: in order to see that the cup is chipped I must be able to see the cup, and the cup itself is an object. To see an object I must be able to see some of its spatial properties so the enabling conditions for seeing that the cup is chipped include possession of a capacity for spatial perception. They also include a capacity for categorial thinking on the assumption that one couldn't see that the cup is chipped if one lacked the concept cup and that one couldn't have this concept if one lacked a repertoire of categorial concepts such as substance, unity, plurality and causality.<sup>21</sup>

The identification of these enabling conditions for epistemic seeing isn't an exercise in obstacle-removal in the way that Kant's account of the enabling conditions for the acquisition of geometrical knowledge is an exercise in obstacle-removal. It is true that when a necessary condition for a particular cognitive achievement isn't fulfilled the very fact that it isn't fulfilled becomes an obstacle to that achievement but it still doesn't follow that the point of talking about

enabling conditions must be to deal with some pre-existing obstacle. For example, there is no such obstacle to seeing the cup is chipped that is dissipated or overcome by the observation that it wouldn't be possible to see such a thing without a capacity for spatial perception. The question, 'what makes X possible?', is an explanation-seeking question, and there is more to explaining what makes X possible than showing that there is nothing that makes it impossible.

To sum up, we now have a multi-levels framework for dealing with how-possible questions in epistemology. When we find ourselves faced with a how-possible question which asks how knowledge of a certain kind is possible, we start by identifying means by which it is possible to acquire this kind of knowledge. This is what I have been calling the level of means. Then we set about trying to remove obstacles to acquiring knowledge by the proposed means. This is the obstacle-removing level. Finally, we might ask what makes it possible to acquire knowledge by the suggested means and this takes us to the level of enabling conditions. So how does this way of approaching how-possible questions differ from the transcendental approach? The main difference is in the significance that the two approaches attach to necessary conditions. The transcendental approach tries to explain how knowledge is possible by reference to its necessary conditions and I have already explained why this isn't right. Nobody would think that explaining how it is possible to get from London to Paris in less than three hours is a matter of identifying necessary conditions for getting from London to Paris in less than three hours and it is no more plausible that explaining how it is possible to know that p, where p is a proposition about the external world or other minds or whatever, is matter of identifying necessary conditions for knowing that p. In both cases, means rather than necessary conditions are the first thing we should be looking for.

This is not to deny that necessary conditions have a part to play in a multiple levels framework. Enabling conditions are, after all, necessary conditions but this doesn't mean that a multiple levels explanation of the possibility of knowledge is a transcendental explanation. The

necessary conditions which figure in transcendental explanations are universal in scope. For example, there is the suggestion that the perception of space is a necessary condition for the acquisition of any empirical knowledge, regardless of the specific means by which it is acquired.<sup>22</sup> Yet it seems unlikely that the role of spatial awareness in coming to know that p by hearing that p or reading that p will be anything like its role in coming to know that p by seeing that p. Nevertheless, seeing that p, hearing that p and reading that p are all ways of acquiring empirical knowledge. What this suggests is that the necessary conditions which figure in transcendental explanations are excessively general. The same isn't true of the necessary conditions which figure in multiple levels explanations because these conditions can be means-specific. There is no commitment in this framework to the idea that the background necessary conditions for knowing that p by seeing that p are bound to be the same as the background necessary conditions for knowing that p by hearing that p; they might be but needn't be.

If, as I have been claiming, the transcendental approach to explaining how knowledge is possible isn't the right one why has it been so popular? One explanation is that showing that we know is sometimes confused with explaining how we know. So, for example, if we have experience, and knowledge of the external world is necessary for experience, then it follows that we have knowledge of the external world. But even if this transcendental argument is convincing on its own terms it doesn't explain how we know what it claims we do know; the thesis that knowledge of the external world is necessary doesn't explain how it is possible given all the obstacles that have been thought – mistakenly as it turns out- to make it impossible. That is why, if we are serious about explaining how knowledge is possible a different approach is needed, one which emphasizes means rather than necessary conditions.

### 3. What is Knowledge?

With this discussion of how-possible questions in the background let us now turn to the 'what' question. I want to defend the suggestion that that an effective way of explaining what

knowledge is to identify various means by which it is possible, and that the notion of a means of knowing therefore has as large a part to play in relation to the ‘what’ question as in relation to how-possible questions. A good way of seeing the force of this suggestion would be to note that when we claim to know that something is the case there is a further question to which we are ‘directly exposed’ (Austin 1979: 77). This further question is: how do you know? This is an example of a simple ‘how’ question rather than a how-possible question and, as Austin points out, even simple how questions can be read in several different ways. For example, ‘how do you know that the cup is chipped?’ can mean ‘how did you come to know that the cup is chipped?’ or ‘how are you in a position to know that the cup is chipped?’ or ‘how do you know that the cup is chipped?’.

On the first of these three readings the simple ‘how’ question is concerned with the acquisition of knowledge. Since there are lots different ways of coming to know that the cup is chipped there are lots of different ways of answering the question.<sup>23</sup> Good answers to ‘how did you come to know that the cup is chipped?’ would include ‘by seeing that it is chipped’ and ‘by feeling that it is chipped’. A bad answer, in most circumstances, would be ‘by imagining that it is chipped’. The important point, however, is that there must be an answer to the how-did-you-come-to-know question and that there is an intuitive distinction between good and bad answers to questions of this form. What we are reluctant to accept is that it can be a brute fact that someone knows without there being some specific way in which he came to know. It isn’t possible to ‘just know’ that the cup is chipped, and some ways of coming to know this are better than others.

This proposal is similar in some ways to Williamson’s proposal that that ‘if one knows that A then there is a specific way in which one knows’ (2000: 34) but what I am calling ‘ways of coming to know’ are different from Williamson’s ‘ways of knowing’. Ways of knowing are expressed in language by factive mental state operators (FMSOs).<sup>24</sup> Without going into too much

detail, the basic idea is that if  $\Phi$  is an FMSO then the inference from ‘S  $\Phi$ s that p’ to ‘p’ is deductively valid, as is the inference from ‘S  $\Phi$ s that p’ to ‘S knows that p. In these terms, ‘sees’, ‘regrets’ and ‘remembers’ are all examples of FMSOs and are therefore also all examples of ‘ways of knowing’ in Williamson’s sense. In other words, if I see or regret or remember that the cup is chipped then the cup is chipped and I know that it is chipped. Yet only seeing that the cup is chipped is a way of coming to know that it is chipped, of acquiring this piece of knowledge; it would be distinctly odd to say that I came to know that the cup is chipped by regretting that it is chipped or even by remembering that it is chipped. Ways of coming to know are therefore a sub-class of Williamson’s ‘ways of knowing’, and the present proposal is that what is needed to answer a how-did-you-come-to-know question is reference to a way of coming to know rather than to a mere ‘way of knowing’.

How does this help with the ‘what’ question? Suppose we agree that an account of what propositional knowledge is will need to be an account of what it is for a subject S to know that p. Having rejected the idea that explaining what it is for S to know that p is a matter of coming up with non-circular necessary and sufficient conditions for S to know that p we can now argue as follows: given that if S knows that p there must be some way in which S came to know that p, what it is for S to know that p can be understood by reference to the different ways in which it is possible for someone like S to come to know something like p.<sup>25</sup> Since there might be countless ways of coming to know that p the notion of a way of coming to know that p is open-ended. The claim is that we get a fix on what it is to know that p by identifying good answers to the question ‘how do you know?’ on the first of Austin’s three readings of this question. In other words, we explain what propositional knowledge is by listing some of the ways of acquiring it; for example, we explain what it is to know that the cup is chipped by listing some of the ways of coming to know that the cup is chipped.

Ways of coming to know that p are means of knowing that p so we are now in a position to see why the notion of a means of knowing matters. Whether one is concerned with what it is to know that p, with how one knows that p, or with how it is possible to know that p it is difficult to exaggerate the importance of the notion of a means. Just as we have explained how it is possible to know that p by identifying means of knowing that p so we are now explaining what it is to know that p by identifying means of knowing that p. The identification of means of knowing that p is therefore a means explaining what it is to know that p just as it is a means of explaining how it is possible to know that p. So the position is not that one first tries to figure out what knowledge is and then tries to figure out how it can be acquired. Rather, one figures out what knowledge is by figuring out how it can be acquired.

To get a feel for this proposal consider the question ‘what is cricket?’. An effective way of answering this ‘what’ question would be to describe how cricket is played. Since can one learn what cricket is by learning how it is played it’s no good objecting that one can’t understand how cricket is played unless one already knows what it is. Similarly, it’s no good objecting that one can’t understand how knowledge is acquired unless one already knows what it is. Explaining what knowledge by describing how it is acquired is like explaining what cricket is by describing how it is played.<sup>26</sup> In neither case is an answer to the ‘what’ question presupposed and in neither case can the ‘what’ question be answered by coming up with necessary and sufficient conditions. We wouldn’t try to explain what cricket is by specifying necessary and sufficient conditions for a game to be a game of cricket and we shouldn’t try to explain what knowledge is by specifying necessary and sufficient conditions for a belief to constitute knowledge.

The ‘means’ approach which I have been recommending might need supplementing in various ways. For example, knowledge can be retained and transmitted as well as acquired so a fuller picture of what knowledge is might need to say something about some of the different ways of retaining and transmitting it as well as some of the different ways of acquiring it. It

might also need to be recognized that there are some things that we can't know because the obstacles to knowing them can't be overcome or dissipated. Perhaps some propositions about the distant past are like this. And even in the case of things that we are capable of knowing, some ways of coming to know them might be more basic than others. For example, seeing that the cup is chipped might count as in some sense a more basic way of coming to know that it is chipped than reading in a newspaper that it is chipped.

Finally, more needs to be said about the distinction between good and bad answers to how-did-you-come-to-know questions. A good answer to one such question might be a bad answer to another. For example, 'by constructing a figure in pure intuition' might be a good answer to 'how did you come to know that the internal angles of triangle are equal to two right angles?' but a bad answer to 'how did you come to know that the cup is chipped?'. Acceptable answers to a how-did-you-come-to-know question are determined by the nature and content of the proposition known, and this has a bearing on the distinction between empirical and a priori knowledge. To see that p is to know that p by empirical means. That makes one's knowledge empirical. To know that p by constructing a figure in pure intuition or, if there is such a thing, by rational intuition is to know that p by non-empirical means. That makes one's knowledge a priori. Since means of knowing are the key to the 'what' question and some means of knowing yield empirical knowledge while others yield a priori knowledge one would expect an adequate answer to the what question to take account of the distinction between empirical and a priori knowledge.

But none of this changes the basic picture of knowledge for which I have been trying to make a case. Means of knowing, or of coming to know, remain at the centre of this picture and this is a reflection of the way in which attributions of knowledge are directly exposed to how-did-you-come-to-know questions and, in problematic cases, to how-possible questions. Yet it is armchair reflection rather than empirical science that exposes the links between 'what', 'how',



and how-possible questions and it is armchair reflection rather than empirical science which reveals that all three questions can be answered by drawing on the notion of a means of knowing. Since another name for this kind of armchair reflection is 'philosophical reflection' the methodological moral should be obvious: if we want to know what knowledge is and how it is possible there is no better way of proceeding than to do what I have been doing here: philosophy.<sup>27</sup>

## References

- Austin, J. L. (1979), 'Other Minds', in Philosophical Papers (Oxford: Oxford University Press).
- Baldwin, T. (1990), G. E. Moore (London: Routledge).
- Cassam, Q. (forthcoming), 'Can the Concept of Knowledge be Analysed?'
- Dray, W. (1957), Laws and Explanation in History (Oxford: Oxford University Press).
- Dretske, F. (1969), Seeing and Knowing (London: RKP).
- Gettier, E. (1963), 'Is Justified True Belief Knowledge?', Analysis 23/ 6.
- Goldman, A. (1986), Epistemology and Cognition (Cambridge, Mass.: Harvard University Press).
- Goldman, A. (1992), 'A Causal Theory of Knowing', in Liaisons: Philosophy Meets the Cognitive and Social Sciences (Cambridge, Mass.: The MIT Press).
- Kant, I. (1932), Critique of Pure Reason, trans. Norman Kemp Smith (London: Macmillan).
- Kornblith, H. (1999), 'In Defence of a Naturalized Epistemology', in J. Greco and E. Sosa (eds.) The Blackwell Guide to Epistemology (Oxford: Blackwell Publishers).
- Kornblith, H. (2002), Knowledge and its Place in Nature (Oxford: Oxford University Press).
- Longuenesse, B. (1998), Kant and the Capacity to Judge: Sensibility and Discursivity in the Transcendental Analytic of the Critique of Pure Reason (Princeton: Princeton University Press).
- McDowell, J. (1998), 'Singular Thought and the Extent of Inner Space', in Meaning, Knowledge and Reality (Cambridge, Mass.: Harvard University Press).
- Moore, G. E. (1953), Some Main Problems of Philosophy (London: Allen & Unwin).
- Nozick, R. (1981), Philosophical Explanations (Cambridge, Mass.: Harvard University Press).
- Quine, W. V. (1969), 'Epistemology Naturalized', in Ontological Relativity and Other Essays (New York: Columbia University Press).
- Strawson, P. F. (1997), 'Kant's New Foundations of Metaphysics', in Entity and Identity and Other Essays (Oxford: Oxford University Press).

Stroud, B. (1984), The Significance of Philosophical Scepticism (Oxford: Oxford University Press).

Stroud, B. (2000), 'Scepticism and the Possibility of Knowledge', in Understanding Human Knowledge (Oxford: Oxford University Press).

Williamson, T. (2000), Knowledge and its Limits (Oxford: Oxford University Press).

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<sup>1</sup> The ‘what’ and ‘how’ questions are two of the three questions which Hilary Kornblith describes as being among the central questions of epistemology. The third question is ‘What should we do in order to attain knowledge?’ (Kornblith 1999: 159).

<sup>2</sup> This way of thinking about the ‘what’ question is suggested by Alvin Goldman. See Goldman 1986: 42.

<sup>3</sup> Goldman emphasizes the distinction giving the meaning and giving the truth conditions of ‘S knows that p’ in the concluding paragraphs of ‘A Causal Theory of Knowing’, originally published in 1967 and reprinted in Goldman 1992.

<sup>4</sup> Gettier 1963 provides an early illustration of some of these difficulties. Gettier shows that the traditional justified-true-belief analysis of knowledge is incorrect because truth, belief and justification aren’t sufficient for knowledge. Gettier-style counterexamples to the traditional analysis can be dealt with by beefing up the notion of justification but this threatens circularity. As Williamson points out, ‘if someone insists that knowledge is justified true belief on an understanding of “justified true belief” strong enough to exclude Gettier cases but weak enough to include ordinary empirical knowledge, the problem is likely to be that no standard of justification is supplied independent of knowledge itself’ (2000: 4). This is only a problem for those analytic epistemologists who are looking for a reductive definition of knowledge in terms of more basic concepts.

<sup>5</sup> Quine is someone in the naturalistic tradition who effectively ignores the ‘what’ question. See Quine 1969. In contrast, Kornblith doesn’t ignore it. He claims that knowledge requires reliably produced true belief and that he doesn’t arrive at this conclusion by analysing the concept of knowledge. Yet in claiming that ‘knowledge is, surely, more than just true belief’ (2002: 54) he seems to be relying on some form of armchair reflection; at any rate, it is hard to see how it can be an empirical question whether knowledge is or is not more than just true belief. As for the emphasis on reliability, this is Kornblith’s explanation: ‘If we are to explain why it is that plovers are able to protect their nests, we must appeal to a capacity to recognize features of the environment, and thus the true beliefs that particular plovers acquire will be the product of a stable capacity for the production of true beliefs. The resulting true beliefs are not merely accidentally true; they are produced by a cognitive capacity that is attuned to its environment. In a word, the beliefs are reliably produced. The concept of knowledge which is of interest to us here thus requires reliably produced true belief’ (2002: 58). What is obscure about this passage is the transition from the penultimate sentence to the last sentence. There might be empirical grounds for attributing reliably produced true beliefs to plovers but the further question is whether reliably produced true beliefs constitute knowledge. Kornblith doesn’t explain how this can be established on empirical grounds. If belief, truth and reliability are sufficient for knowledge then attributions of reliably produced true beliefs to plovers are, de facto, attributions of knowledge but

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what, apart from armchair reflection, can tell us that belief, truth and reliability are sufficient for knowledge? Kornblith doesn't say. On the underlying issue of whether knowledge is a natural kind, knowledge doesn't have anything recognizable as a real essence in the way that natural kinds like gold and water have real essences. For Kornblith, however, natural kinds are 'homeostatically clustered properties' (2002: 61) and this is the basis of his identification of knowledge as a natural kind. I don't have the space to go into this here.

<sup>6</sup> This needs to be qualified. Drawing attention to what is necessary for knowledge of the external world might help to defuse scepticism if it can be shown that the necessary conditions do not include the knowledge that the sceptic's possibilities don't obtain. This is what I refer to below as an obstacle-dissipating response to scepticism. The fact remains, however, that necessary conditions per se are not to the point.

<sup>7</sup> William Dray makes this point in Dray 1957: 166. My account of how-possible questions is much indebted to Dray's valuable discussion.

<sup>8</sup> Cf. Dray 1957: 166.

<sup>9</sup> Unlike most modern British Prime Ministers Major didn't attend university. His father was a trapeze artist.

<sup>10</sup> See Dray 1957: 156-69 for a defence of this conception of how-possible questions. Dray's ideas have also been taken up by Robert Nozick and Barry Stroud. See Nozick 1981: 8-10, and Stroud 1984: 144.

<sup>11</sup> Kant describes the role of construction in geometrical proof in the chapter of the first Critique called 'The Discipline of Pure Reason in its Dogmatic Employment'. See, especially, A713/ B741. References in this form are to Kant 1932.

<sup>12</sup> Clearly, the only sense in which Kant accepts that the obstacle is genuine is that mathematical knowledge can't be accounted for if experience and conceptual analysis are its only possible sources. In another sense he doesn't think that the obstacle is genuine because he thinks that it is false that experience and conceptual analysis are the only possible sources of mathematical knowledge. This suggests that the distinction between overcoming and dissipating an obstacle isn't always a sharp one and that overcoming an obstacle can shade off into obstacle-dissipation.

<sup>13</sup> A714/ B742.

<sup>14</sup> For more on the notion of an enabling condition see Dretske 1969: 82-3. Dretskean enabling conditions are empirical whereas Kantian enabling conditions are a priori. An empirical enabling condition is one which can only be discovered by empirical investigation. An a priori condition can be discovered without any empirical investigation.

<sup>15</sup> Subjective in the transcendental idealist sense, according to which space belongs 'only to the form of intuition' (A23/ B38). This is supposed to be compatible with space's being 'empirically real'.

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- <sup>16</sup> There is a detailed account of the notion of epistemic seeing in Dretske 1969. See, especially, chapter 3.
- <sup>17</sup> See Stroud 1984, especially chapter 1, for more on this sceptical argument.
- <sup>18</sup> See McDowell 1998: 238-9 for something along these lines though McDowell is careful not to claim that it is possible to meet the sceptic's requirement on the sceptic's own terms.
- <sup>19</sup> This is a version of what Baldwin calls G. E. Moore's argument from 'differential certainty'. See Baldwin 1990: 269-74 and Moore 1953.
- <sup>20</sup> We don't have to ask it because it's not obvious that an explanation of the possibility of knowledge of the external world which doesn't talk about enabling conditions is incomplete.
- <sup>21</sup> One could see a chipped cup without having the concept cup but seeing that the cup is chipped is a different matter. Williamson uses a different example to make the same point in Williamson 2000: 38. For a defence of the idea that empirical concepts presuppose categorial concepts see Longuenesse 1998.
- <sup>22</sup> See Strawson 1997 for a suggestion along these lines.
- <sup>23</sup> There is a mention of 'ways of coming to know' in Stroud 2000. Stroud remarks that 'there are countless ways of coming to know something about the world around us' (2000: 3) but that what we seek in philosophy isn't just a 'list of sources'. I am more sympathetic to the idea that an open-ended list of sources is precisely what we need if we want to understand 'how we get the knowledge we have – to explain how it is possible' (ibid.).
- <sup>24</sup> See Williamson 2000: 34-39 for more on the notion of a factive mental state operator.
- <sup>25</sup> This is not unlike Williamson's suggestion that 'knowing that A is seeing that A or remembering or... that A, if the list is understood as open-ended, and the concept knows is not identified with the disjunctive concept' (2000: 34). There is much more on Williamson, and on the differences between his approach and mine, in Cassam, forthcoming.
- <sup>26</sup> The analogy isn't perfect. There are lots of ways of acquiring knowledge but it isn't true in the same sense that there are lots of ways of playing cricket.
- <sup>27</sup> Thanks to Bill Brewer, John Campbell, David Charles, Ciara Fairley, Hanna Pickard, Declan Smithies, Timothy Williamson and audiences at Erfurt, Glasgow, Johns Hopkins, Oxford, Northwestern, Nottingham, Stirling, UCL, Utrecht, and Warwick for helpful comments on earlier versions of this material.