

which includes his rather charming autobiography and replies to the essays, is *The Philosophy of G.E. Moore*, edited by P.A. Schilpp (Open Court, 1968).

"Proof of an External World"¹

In the Preface to the second edition of Kant's *Critique of Pure Reason* some words occur, which, in Professor Kemp Smith's translation, are rendered as follows:²

It still remains a scandal to philosophy ... that the existence of things outside of us ... must be accepted merely on *faith*, and that, if anyone thinks good to doubt their existence, we are unable to counter his doubts by any satisfactory proof.³

It seems clear from these words that Kant thought it a matter of some importance to give a proof of 'the existence of things outside of us' or perhaps rather (for it seems to me possible that the force of the German words is better rendered in this way) of 'the existence of *the* things outside of us'; for had he not thought it important that a proof should be given, he would scarcely have called it a 'scandal' that no proof had been given. And it seems clear also that he thought that the giving of such a proof was a task which fell properly within the province of philosophy; for, if it did not, the fact that no proof had been given could not possibly be a scandal to *philosophy*.

Now, even if Kant was mistaken in both of these two opinions there seems to me to be no doubt whatever that it is of some importance and also a matter which falls properly within the province of philosophy, to discuss the question what sort of proof, if any, can be given of 'the existence of things outside of us'. And to discuss this question was my object when I began to write the present lecture. But I may say at once that, as you will find, I have only, at most, succeeded in saying a very small part of what ought to be said about it.

The words 'it ... remains a scandal to philosophy ... that we are unable ...' would, taken strictly, imply that, at the moment at which he wrote them, Kant himself was unable to produce a satisfactory proof of the point in question. But I think it is unquestionable that Kant himself did not think that he personally was at the time unable to produce such a proof. On the contrary, in the immediately preceding sentence, he has declared that he has, in the second edition of his *Critique*, to which he is now writing the Preface, given a 'rigorous proof' of this very thing; and has added that he believes this proof of his to be 'the only possible proof'. It is true that in this preceding sentence he does not describe the proof which he has given as a proof of 'the existence of things outside of us' or of 'the existence of the things outside of us', but describes it instead as a proof of 'the objective reality of outer intuition'. But the context leaves no doubt that he is using these two phrases, 'the objective reality of outer intuition' and 'the existence of things (or 'the things') outside of us', in such a way that whatever is a proof of the first is also necessarily a proof of the second. We must, therefore, suppose that when he speaks as if *we* are unable to give a satisfactory proof, he does not mean to say that he himself, as well as others, is *at the moment* unable; but rather that, until he discovered the proof which he has given, both he himself and everybody else *were* unable. Of course, if he is right in thinking that he has given a satisfactory proof, the state of things which he describes came to an end as soon as his proof was published. As soon as that happened, anyone who read it was able to give a satisfactory proof by simply repeating that which Kant had given, and the 'scandal' to philosophy had been removed once for all.

If, therefore, it were certain that the proof of the point in question given by Kant in the second edition is a satisfactory proof, it would be certain that at least one satisfactory proof can be given; and all that would remain of the question which I said I proposed to discuss would be, firstly, the question as to what *sort* of a proof this of Kant's is, and secondly the question whether (contrary to Kant's own opinion) there may not perhaps be other proofs, of the same or of a different sort, which are also satisfactory. But I think it is by no means certain that Kant's proof is satisfactory. I think it is by no means certain that he did succeed in removing once for all the state of affairs which he considered to be a scandal to philosophy. And I think, therefore, that the question whether it is possible to give *any* satisfactory proof of the point in question still deserves discussion.

But what is the point in question? I think it must be owned that the expression 'things outside of us' is rather an odd expression, and an expression the meaning of which is certainly not perfectly clear. It would have sounded less odd if, instead of 'things outside of us' I had said 'external things', and perhaps also the meaning of this expression would have seemed to be clearer; and I think we make the meaning of 'external things' clearer still if we explain that this phrase has been regularly used by philosophers as short for 'things external to *our minds*'. The fact is that there has been a long philosophical tradition, in accordance with which the three expressions 'external things', 'things external to *us*', and 'things external to *our minds*' have been used as equivalent to one another, and have, each of them, been used as if they needed no explanation. The origin of this usage I do not know. It occurs already in Descartes; and since he uses the expressions as if they needed no explanation, they had presumably been used with the same meaning before. Of the three, it seems to me that the expression 'external to *our minds*' is the clearest, since it at least makes clear that what is meant is not 'external to *our bodies*'; whereas both the other expressions might be taken to mean this: and indeed there has been a good deal of confusion, even among philosophers, as to the relation of the two conceptions 'external things' and 'things external to *our bodies*'. But even the expression 'things external to our minds' seems to me to be

far from perfectly clear; and if I am to make really clear what I mean by 'proof of the existence of things outside of us', I cannot do it by merely saying that by 'outside of us' I mean 'external to our minds'.

There is a passage (*Kritik der reinen Vernunft*, A373)⁴ in which Kant himself says that the expression 'outside of us' 'carries with it an unavoidable ambiguity'. He says that 'sometimes it means something which exists *as a thing in itself* distinct from us, and sometimes something which merely belongs to external *appearance*'; he calls things which are 'outside of us' in the first of these two senses 'objects which might be called external in the transcendental sense', and things which are so in the second '*empirically external* objects'; and he says finally that, in order to remove all uncertainty as to the latter conception, he will distinguish empirically external objects from objects which might be called 'external' in the transcendental sense, 'by calling them outright things which are *to be met with in space*'.

I think that this last phrase of Kant's, 'things which are to be met with in space', does indicate fairly clearly what sort of things it is with regard to which I wish to inquire what sort of proof, if any, can be given that there are any things of that sort. My body, the bodies of other men, the bodies of animals, plants of all sorts, stones, mountains, the sun, the moon, stars, and planets, houses and other buildings, manufactured articles of all sorts—chairs, tables, pieces of paper, etc., are all of them 'things which are to be met with in space'. In short, all things of the sort that philosophers have been used to call 'physical objects', 'material things', or 'bodies' obviously come under this head. But the phrase 'things that are to be met with in space' can be naturally understood as applying also in cases where the names 'physical object', 'material thing', or 'body' can hardly be applied. For instance, shadows are sometimes to be met with in space, although they could hardly be properly called 'physical objects', 'material things', or 'bodies'; and although in one usage of the term 'thing' it would not be proper to call a shadow a 'thing', yet the phrase 'things which are to be met with in space' can be naturally understood as synonymous

1 This paper was first published in 1939 in the *Proceedings of the British Academy* (Volume 25, pp. 273–300). It is reprinted here by kind permission of Dr. Thomas Baldwin, Literary Executor to G.E. Moore.

2 The introduction to the second (or 'B') edition of the *Critique of Pure Reason* appears as a reading in this chapter. More information about Kant appears in the notes to that selection.

3 [Author's note] B xxxix, note: Kemp Smith, p.34. The German words are 'so bleibt es immer ein Skandal der Philosophie ..., das Dasein der Dinge ausser uns ..., bloss auf *Glauben* annehmen zu müssen, und wenn es jemand einfällt es zu bezweifeln, ihm keinen genugtuenden Beweis entgegenstellen zu können'.

4 *Critique of Pure Reason*, first ("A") edition, page 373 (of the original German).

with 'whatever can be met with in space', and this is an expression which can quite properly be understood to include shadows. I wish the phrase 'things which are to be met with in space' to be understood in this wide sense; so that if a proof can be found that there ever have been as many as two different shadows it will follow at once that there have been at least two 'things which were to be met with in space', and this proof will be as good a proof of the point in question as would be a proof that there have been at least two 'physical objects' of no matter what sort.

The phrase 'things which are to be met with in space' can, therefore, be naturally understood as having a very wide meaning—a meaning even wider than that of 'physical object' or 'body', wide as is the meaning of these latter expressions. But wide as is its meaning, it is not, in one respect, so wide as that of another phrase which Kant uses as if it were equivalent to this one; and a comparison between the two will, I think, serve to make still clearer what sort of things it is with regard to which I wish to ask what proof, if any, can be given that there are such things.

The other phrase which Kant uses as if it were equivalent to 'things which are to be met with in space' is used by him in the sentence immediately preceding that previously quoted in which he declares that the expression 'things outside of us' 'carries with it an unavoidable ambiguity' (A373). In this preceding sentence he says that an 'empirical object' 'is called *external*, if it is presented (*vorgestellt*) in space'. He treats, therefore, the phrase 'presented in space' as if it were equivalent to 'to be met with in space'. But it is easy to find examples of 'things', of which it can hardly be denied that they are 'presented in space', but of which it could, quite naturally, be emphatically denied that they are 'to be met with in space'. Consider, for instance, the following description of one set of circumstances under which what some psychologists have called a 'negative after-image' and others a 'negative after-sensation' can be obtained. 'If, after looking steadfastly at a white patch on a black ground, the eye be turned to a white ground, a grey patch is seen for some little time' (Foster's *Text-book of Physiology*, IV, iii, 3, p.1266; quoted in Stout's *Manual of Psychology*, 3rd edition, p. 280). Upon reading these words recently, I took the trouble to cut

out of a piece of white paper a four-pointed star, to place it on a black ground, to 'look steadfastly' at it, and then to turn my eyes to a white sheet of paper: and I did find that I saw a grey patch for some little time—I not only saw a grey patch, but I saw it on the white ground, and also this grey patch was of roughly the same shape as the white four-pointed star at which I had 'looked steadfastly' just before—it also was a four-pointed star. I repeated this simple experiment successfully several times. Now each of those grey four-pointed stars, one of which I saw in each experiment, was what is called an 'after-image' or 'after-sensation'; and can anybody deny that each of these after-images can be quite properly said to have been 'presented in space'? I saw each of them on a real white background, and, if so, each of them was 'presented' on a real white background. But though they were 'presented in space' everybody, I think, would feel that it was gravely misleading to say that they were 'to be met with in space'. The white star at which I 'looked steadfastly', the black ground on which I saw it, and the white ground on which I saw the after-images, were, of course, 'to be met with in space': they were, in fact, 'physical objects' or surfaces of physical objects. But one important difference between them, on the one hand, and the grey after-images, on the other, can be quite naturally expressed by saying that the latter were *not* 'to be met with in space'. And one reason why this is so is, I think, plain. To say that so and so was at a given time 'to be met with in space' naturally suggests that there are conditions such that *any one* who fulfilled them might, conceivably, have 'perceived' the 'thing' in question—might have seen it, if it was a visible object, have felt it, if it was a tangible one, have heard it, if it was a sound, have smelt it, if it was a smell. When I say that the white four-pointed paper star, at which I looked steadfastly, was a 'physical object' and was 'to be met with in space', I am implying that *anyone*, who had been in the room at the time, and who had normal eyesight and a normal sense of touch, might have seen and felt it. But, in the case of those grey after-images which I saw, it is not conceivable that anyone besides myself should have seen any one of them. It is, of course, quite conceivable that other people, if they had been in the room with me at the time, and had

carried out the same experiment which I carried out, would have seen grey after-images *very like* one of those which I saw: there is no absurdity in supposing even that they might have seen after-images *exactly* like one of those which I saw. But there is an absurdity in supposing that any one of the after-images which I saw could also have been seen by anyone else: in supposing that two different people can ever see the very same after-image. One reason, then, why we should say that none of those grey after-images which I saw was 'to be met with in space', although each of them was certainly 'presented in space' to me, is simply that none of them could conceivably have been seen by anyone else. It is natural so to understand the phrase 'to be met with in space', that to say of anything which a man perceived that it was to be met with in space is to say that it might have been perceived by *others* as well as by the man in question.

Negative after-images of the kind described are, therefore, one example of 'things' which, though they must be allowed to be 'presented in space', are nevertheless *not* 'to be met with in space', and are *not* 'external to our minds' in the sense with which we shall be concerned. And two other important examples may be given.

The first is this. It is well known that people sometimes see things double, an occurrence which has also been described by psychologists by saying that they have a 'double image', or two 'images', of some object at which they are looking. In such cases it would certainly be quite natural to say that each of the two 'images' is 'presented in space': they are seen, one in one place, and the other in another, in just the same sense in which each of those grey after-images which I saw was seen at a particular place on the white background at which I was looking. But it would be utterly unnatural to say that, when I have a double image, each of the two images is 'to be met with in space'. On the contrary it is quite certain that *both* of them are not 'to be met with in space'. If both were, it would follow that somebody else might see the *very same* two images which I see; and, though there is no absurdity in supposing that another person might see a pair of images exactly similar to a pair which I see, there is an absurdity in supposing that anyone else might see the *same identical pair*. In every case, then,

in which anyone sees anything double, we have an example of at least one 'thing' which, though 'presented in space' is certainly not 'to be met with in space'.

And the second important example is this. Bodily pains can, in general, be quite properly said to be 'presented in space'. When I have a toothache, I feel it *in* a particular region of my jaw or *in* a particular tooth; when I make a cut on my finger smart by putting iodine on it, I feel the pain in a particular place in my finger; and a man whose leg has been amputated may feel a pain *in* a place where his foot might have been if he had not lost it. It is certainly perfectly natural to understand the phrase 'presented in space' in such a way that if, in the sense illustrated, a pain is felt *in* a particular place, that pain is 'presented in space'. And yet of pains it would be quite unnatural to say that they are 'to be met with in space', for the same reason as in the case of after-images or double images. It is quite conceivable that another person should feel a pain exactly like one which I feel, but there is an absurdity in supposing that he could feel *numerically the same*⁵ pain which I feel. And pains are in fact a typical example of the sort of 'things' of which philosophers say that they are *not* 'external' to our minds, but 'within' them. Of any pain which I feel they would say that it is necessarily *not* external to my mind but *in* it.

And finally it is, I think, worth while to mention one other class of 'things', which are certainly not 'external' objects and certainly not 'to be met with in space', in the sense with which I am concerned, but which yet some philosophers would be inclined to say are 'presented in space', though they are not 'presented in space' in quite the same sense in which pains, double images, and negative after-images of the sort I described are so. If you look at an electric light and then close your eyes, it sometimes happens that you see, for some little time, against the dark background which you usually see when your eyes are shut, a bright patch similar in shape to the light at which you have just been looking. Such a bright patch, if you see one, is another example of what some psychologists have called 'after-images' and others 'after-sensations'; but, unlike the negative

5 One and the same, self-identical with.

after-images of which I spoke before, it is seen when your eyes are shut. Of such an after-image, seen with closed eyes, some philosophers might be inclined to say that this image too was 'presented in space', although it is certainly not 'to be met with in space'. They would be inclined to say that it is 'presented in space', because it certainly is presented as at some little distance from the person who is seeing it: and how can a thing be presented as at some little distance from me, without being 'presented in space'? Yet there is an important difference between such after-images, seen with closed eyes, and after-images of the sort I previously described—a difference which might lead other philosophers to deny that these after-images, seen with closed eyes, are 'presented in space' at all. It is a difference which can be expressed by saying that when your eyes are shut, you are not seeing any part of *physical* space at all—of the space which is referred to when we talk of 'things which are to be met with in space'. An after-image seen with closed eyes certainly is presented in a space, but it may be questioned whether it is proper to say that it is presented in *space*.

It is clear, then, I think, that by no means everything which can naturally be said to be 'presented in space' can also be naturally said to be 'a thing which is to be met with in space'. Some of the 'things', which are presented in space, are very emphatically *not* to be met with in space: or, to use another phrase, which may be used to convey the same notion, they are emphatically *not* 'physical realities' at all. The conception 'presented in space' is therefore, in one respect, much wider than the conception 'to be met with in space': many 'things' fall under the first conception which do not fall under the second—many after-images, one at least of the pair of 'images' seen whenever anyone sees double, and most bodily pains, are 'presented in space', though none of them are to be met with in space. From the fact that a 'thing' is presented in space, it by no means follows that it is to be met with in space. But just as the first conception is, in one respect, wider than the second, so, in another, the second is wider than the first. For there are many 'things' to be met with in space, of which it is not true that they are presented in space. From the fact that a 'thing' is to be met with in space, it by

no means follows that it is presented in space. I have taken 'to be met with in space' to imply, as I think it naturally may, that a 'thing' *might be* perceived; but from the fact that a thing *might be* perceived, it does not follow that it is perceived; and if it is not actually perceived, then it will not be presented in space. It is characteristic of the sorts of 'things', including shadows, which I have described as 'to be met with in space', that there is no absurdity in supposing with regard to any one of them which is, at a given time, perceived, both (1) that it might have existed at that very time, without being perceived; (2) that it might have existed at another time, without being perceived at that other time; and (3) that during the whole period of its existence, it need not have been perceived at any time at all. There is, therefore, no absurdity in supposing that many things, which were at one time to be met with in space, never were 'presented' at any time at all, and that many things which *are* to be met with in space now, are not now 'presented' and also never were and never will be. To use a Kantian phrase, the conception of 'things which are to be met with in space', embraces not only objects of actual experience, but also objects of *possible* experience; and from the fact that a thing is or was an object of *possible* experience, it by no means follows that it either was or is or will be 'presented' at all.

I hope that what I have now said may have served to make clear enough what sorts of 'things' I was originally referring to as 'things outside us' or 'things external to our minds'. I said that I thought that Kant's phrase 'things that are to be met with in space' indicated fairly clearly the sorts of 'things' in question; and I have tried to make the range clearer still, by pointing out that this phrase only serves the purpose, if (a) you understand it in a sense, in which many 'things', e.g., after-images, double images, bodily pains, which might be said to be 'presented in space', are nevertheless *not* to be reckoned as 'things that are to be met with in space', and (b) you realise clearly that there is no contradiction in supposing that there have been and are 'to be met with in space' things which never have been, are not now, and never will be perceived, nor in supposing that among those of them which have at some time been perceived many existed at times at which they were not being perceived. I

think it will now be clear to everyone that, since I do not reckon as 'external things' after-images, double images, and bodily pains, I also should not reckon as 'external things', any of the 'images' which we often 'see with the mind's eye' when we are awake, nor any of those which we see when we are asleep and dreaming; and also that I was so using the expression 'external' that from the fact that a man was at a given time having a visual hallucination, it will follow that he was seeing at that time something which was *not* 'external' to his mind, and from the fact that he was at a given time having an auditory hallucination, it will follow that he was at the time hearing a sound which was *not* 'external' to his mind. But I certainly have not made my use of these phrases, 'external to our minds' and 'to be met with in space', so clear that in the case of every kind of 'thing' which might be suggested, you would be able to tell at once whether I should or should not reckon it as 'external to our minds' and 'to be met with in space'. For instance, I have said nothing which makes it quite clear whether a reflection which I see in a looking-glass is or is not to be regarded as 'a thing that is to be met with in space' and 'external to our minds', nor have I said anything which makes it quite clear whether the sky is or is not to be so regarded. In the case of the sky, everyone, I think, would feel that it was quite inappropriate to talk of it as 'a thing that is to be met with in space'; and most people, I think, would feel a strong reluctance to affirm, without qualification, that reflections which people see in looking-glasses are 'to be met with in space'. And yet neither the sky nor reflections seen in mirrors are in the same position as bodily pains or after-images in the respect which I have emphasised as a reason for saying of these latter that they are *not* to be met with in space—namely that there is an absurdity in supposing that *the very same* pain which I feel could be felt by someone else or that *the very same* after-image which I see could be seen by someone else. In the case of reflections in mirrors we should quite naturally, in certain circumstances, use language which implies that another person may see the same reflection which we see. We might quite naturally say to a friend: 'Do you see that reddish reflection in the water there? I can't make out what it's a reflection of', just as we might say, pointing to

a distant hill-side: 'Do you see that white speck on the hill over there? I can't make out what it is'. And in the case of the sky, it is quite obviously *not* absurd to say that other people see it as well as I.

It must, therefore, be admitted that I have not made my use of the phrase 'things to be met with in space', nor therefore that of 'external to our minds', which the former was used to explain, so clear that in the case of every kind of 'thing' which may be mentioned, there will be no doubt whatever as to whether things of that kind are or are not 'to be met with in space' or 'external to our minds'. But this lack of a clear-cut definition of the expression 'things that are to be met with in space', does not, so far as I can see, matter for my present purpose. For my present purpose it is, I think, sufficient if I make clear, in the case of many kinds of things, that I am so using the phrase 'things that are to be met with in space', that, in the case of each of these kinds, from the proposition that there are things of that kind it *follows* that there are things to be met with in space. And I have, in fact, given a list (though by no means an exhaustive one) of kinds of things which are related to my use of the expression 'things that are to be met with in space' in this way. I mentioned among others the bodies of men and of animals, plants, stars, houses, chairs, and shadows; and I want now to emphasise that I am so using 'things to be met with in space' that, in the case of each of these kinds of 'things', from the proposition that there are 'things' of that kind it *follows* that there are things to be met with in space: e.g., from the proposition that there are plants or that plants exist it *follows* that there are things to be met with in space, from the proposition that shadows exist, it *follows* that there are things to be met with in space, and so on, in the case of all the kinds of 'things' which I mentioned in my first list. That this should be clear is sufficient for my purpose, because, if it is clear, then it will also be clear that, as I implied before, if you have proved that two plants exist, or that a plant and a dog exist, or that a dog and a shadow exist, etc., etc., you will *ipso facto*⁶ have proved that there are things to be met with in space: you will not require *also* to give a separate proof that

6 "By that very fact," "by the fact itself."

from the proposition that there are plants it *does* follow that there are things to be met with in space.

Now with regard to the expression 'things that are to be met with in space' I think it will readily be believed that I may be using it in a sense such that no proof is required that from 'plants exist' there follows 'there are things to be met with in space'; but with regard to the phrase 'things external to our minds' I think the case is different. People may be inclined to say: 'I can see quite clearly that from the proposition "At least two dogs exist at the present moment" there follows the proposition "At least two things are to be met with in space at the present moment"', so that if you can prove that there are two dogs in existence at the present moment you will *ipso facto* have proved that two things at least are to be met with in space at the present moment. I can see that you do not also require a separate proof that from "Two dogs exist" "Two things are to be met with in space" *does* follow; it is quite obvious that there couldn't be a dog which wasn't to be met with in space. But it is not by any means so clear to me that if you can prove that there are two dogs or two shadows, you will *ipso facto* have proved that there are two things *external to our minds*. Isn't it possible that a dog, though it certainly must be "to be met with in space", might *not* be an external object—an object external to our minds? Isn't a separate proof required that anything that is to be met with in space must be external to our minds? Of course, if you are using "external" as a mere synonym for "to be met with in space", no proof will be required that dogs are external objects: in that case, if you can prove that two dogs exist, you will *ipso facto* have proved that there are some external things. But I find it difficult to believe that you, or anybody else, do really use "external" as a mere synonym for "to be met with in space"; and if you don't, isn't some proof required that whatever is to be met with in space must be external to our minds?

Now Kant, as we saw, asserts that the phrases 'outside of us' or 'external' are in fact used in two very different senses; and with regard to one of these two senses, that which he calls the 'transcendental' sense, and which he tries to explain by saying that it is a sense in which 'external' means 'existing *as a thing in itself* distinct from us', it is notorious that he

himself held that things which are to be met with in space are *not* 'external' in that sense.⁷ There is, therefore, according to him, a sense of 'external', a sense in which the word has been commonly used by philosophers—such that, if 'external' be used in that sense, then from the proposition 'Two dogs exist' it will *not* follow that there are some external things. What this supposed sense is I do not think that Kant himself ever succeeded in explaining clearly; nor do I know of any reason for supposing that philosophers ever have used 'external' in a sense, such that in *that* sense things that are to be met with in space are *not* external. But how about the other sense, in which, according to Kant, the word 'external' has been commonly used—that which he calls 'empirically external'? How is this conception related to the conception 'to be met with in space'? It may be noticed that, in the passages which I quoted (A373), Kant himself does not tell us at all clearly what he takes to be the proper answer to this question. He only makes the rather odd statement that, in order to remove all uncertainty as to the conception 'empirically external', he will distinguish objects to which it applies from those which might be called 'external' in the transcendental sense, by 'calling them outright things which are *to be met with in space*'. These odd words certainly suggest, as one possible interpretation of them, that in Kant's opinion the conception 'empirically external' is *identical* with the conception 'to be met with in space'—that he does think that 'external', when used in this second sense, is a mere synonym for 'to be met with in space'. But, if this is his meaning, I do find it very difficult to believe that he is right. Have philosophers, in fact, ever used 'external' as a mere synonym for 'to be met with in space'? Does he himself do so?

7 Basically, this is because, for Kant, the things we "meet with in space" are always *appearances* of things, rather than "things in themselves" (the hidden nature behind those appearances). That is, we never meet with "things in themselves" in space, so if *those* things are what we mean by "the things external to us" then none of the things which we *do* meet with in space could be external. See the notes on the Kant selection in this chapter for more information.

I do not think they have, nor that he does himself; and, in order to explain how they have used it, and how the two conceptions 'external to our minds' and 'to be met with in space' are related to one another, I think it is important expressly to call attention to a fact which hitherto I have only referred to incidentally: namely the fact that those who talk of certain things as 'external to' our minds, do, in general, as we should naturally expect, talk of other 'things', with which they wish to contrast the first, as 'in' our minds. It has, of course, been often pointed out that when 'in' is thus used, followed by 'my mind', 'your mind', 'his mind', etc., 'in' is being used metaphorically. And there are some metaphorical uses of 'in', followed by such expressions, which occur in common speech, and which we all understand quite well. For instance, we all understand such expressions as 'I had you in mind, when I made that arrangement' or 'I had you in mind, when I said that there are some people who can't bear to touch a spider'. In these cases 'I was thinking of you' can be used to mean the same as 'I had you in mind'. But it is quite certain that this particular metaphorical use of 'in' is not the one in which philosophers are using it when they contrast what is 'in' my mind with what is 'external' to it. On the contrary, in their use of 'external', you will be external to my mind even at a moment when I have you in mind. If we want to discover what this peculiar metaphorical use of '*in* my mind' is, which is such that nothing, which is, in the sense we are now concerned with, 'external' to my mind, can ever be 'in' it, we need, I think, to consider instances of the sort of 'things' which they would say are 'in' my mind in this special sense. I have already mentioned three such instances, which are, I think, sufficient for my present purpose: any bodily pain which I feel, any after-image which I see with my eyes shut, and any image which I 'see' when I am asleep and dreaming, are typical examples of the sort of 'thing' of which philosophers have spoken as '*in* my mind'. And there is no doubt, I think, that when they have spoken of such things as my body, a sheet of paper, a star—in short 'physical objects' generally—as 'external', they have meant to emphasize some important difference which they feel to exist between such things as these and such 'things' as a pain, an after-image seen with

closed eyes, and a dream-image. But *what* difference? What difference do they feel to exist between a bodily pain which I feel or an after-image which I see with closed eyes, on the one hand, and my body itself, on the other—what difference which leads them to say that whereas the bodily pain and the after-image are 'in' my mind, my body itself is *not* 'in' my mind—not even when I am feeling it and seeing it or thinking of it? I have already said that one difference which there is between the two, is that my body is to be met with in space, whereas the bodily pain and the after-image are not. But I think it would be quite wrong to say that this is *the* difference which has led philosophers to speak of the two latter as 'in' my mind, and of my body as *not* 'in' my mind.

The question what the difference is which has led them to speak in this way, is not, I think, at all an easy question to answer; but I am going to try to give, in brief outline, what I *think* is a right answer.

It should, I think, be noted, first of all, that the use of the word 'mind', which is being adopted when it is said that any bodily pains which I feel are 'in my mind', is one which is not quite in accordance with any usage common in ordinary speech, although we are very familiar with it in philosophy. Nobody, I think, would say that bodily pains which I feel are 'in my mind', unless he was also prepared to say that it is *with* my mind that I feel bodily pains; and to say this latter is, I think, not quite in accordance with common non-philosophic usage. It is natural enough to say that it is with my mind that I remember, and think, and imagine, and feel *mental* pains—e.g., disappointment, but not, I think, quite so natural to say that it is with my mind that I feel *bodily* pains, e.g., a severe headache; and perhaps even less natural to say that it is with my mind that I see and hear and smell and taste. There is, however, a well-established philosophical usage according to which seeing, hearing, smelling, tasting, and having a bodily pain are just as much *mental* occurrences or processes as are remembering, or thinking, or imagining. This usage was, I think, adopted by philosophers, because they saw a real resemblance between such statements as 'I saw a cat', 'I heard a clap of thunder', 'I smelt a strong smell of onions', 'My finger smarted horribly', on the one hand, and such statements as 'I remembered hav-

ing seen him', 'I was thinking out a plan of action', 'I pictured the scene to myself', 'I felt bitterly disappointed', on the other—a resemblance which puts all these statements in one class together, as contrasted with other statements in which 'I' or 'my' is used, such as, e.g., 'I was less than four feet high', 'I was lying on my back', 'My hair was very long'. What is the resemblance in question? It is a resemblance which might be expressed by saying that all the first eight statements are the sort of statements which furnish data for psychology, while the three latter are not. It is also a resemblance which may be expressed, in a way now common among philosophers, by saying that in the case of all the first eight statements, if we make the statement more specific by adding a date, we get a statement such that, if it is true, then it *follows* that I was 'having an experience' at the date in question, whereas this does not hold for the three last statements. For instance, if it is true that I saw a cat between 12 noon and 5 minutes past, today, it *follows* that I was 'having some experience' between 12 noon and 5 minutes past, today; whereas from the proposition that I was less than four feet high in December 1877, it does not *follow* that I had any experiences in December 1877. But this philosophic use of 'having an experience' is one which itself needs explanation, since it is not identical with any use of the expression that is established in common speech. An explanation, however, which is, I think, adequate for the purpose, can be given by saying that a philosopher, who was following this usage, would say that I was at a given time 'having an experience' if and only if either (1) I was conscious at the time or (2) I was dreaming at the time or (3) something else was true of me at the time, which resembled what is true of me when I am conscious and when I am dreaming, in a certain very obvious respect in which what is true of me when I am dreaming resembles what is true of me when I am conscious, and in which what would be true of me, if at any time, for instance, I had a vision, would resemble both. This explanation is, of course, in some degree vague; but I think it is clear enough for our purpose. It amounts to saying that, in this philosophic usage of 'having an experience', it would be said of me that I was, at a given time, having *no* experience, if I was at the time neither conscious nor dreaming nor having a

vision nor *anything else of the sort*; and, of course, this is vague in so far as it has not been specified what else would be *of the sort*: this is left to be gathered from the instances given. But I think this is sufficient: often at night when I am asleep, I am neither conscious nor dreaming nor having a vision nor *anything else of the sort*—that is to say, I am having no experiences. If this explanation of this philosophic usage of 'having an experience' is clear enough, then I think that what has been meant by saying that any pain which I feel or any after-image which I see with my eyes closed is '*in my mind*', can be explained by saying that what is meant is neither more nor less than that there would be a contradiction in supposing *that very same pain* or *that very same after-image* to have existed at a time at which I was having no experience; or, in other words, that from the proposition, with regard to any time, that *that pain* or *that after-image* existed at that time, it *follows* that I was having some experience at the time in question. And if so, then we can say that the felt difference between bodily pains which I feel and after-images which I see, on the one hand, and my body on the other, which has led philosophers to say that any such pain or after-image is '*in my mind*', whereas my body *never* is but is always '*outside of*' or '*external to*' my mind, is just this, that whereas there is a contradiction in supposing a pain which I feel or an after-image which I see to exist at a time when I am having no experience, there is no contradiction in supposing my body to exist at a time when I am having no experience; and we can even say, I think, that just this and nothing more is what they have meant by these puzzling and misleading phrases '*in my mind*' and '*external to my mind*'.

But now, if to say of anything, e.g., my body, that it is external to my mind, means merely that from a proposition to the effect that it existed at a specified time, there in no case follows the further proposition that I was having an experience at the time in question, then to say of anything that it is external to *our* minds, will mean similarly that from a proposition to the effect that it existed at a specified time, it in no case follows that any of us were having experiences at the time in question. And if by *our* minds be meant, as is, I think, usually meant, the minds of human beings living on the earth, then it will follow that any

pains which animals may feel, any after-images they may see, any experiences they may have, though not external to *their* minds, yet are external to *ours*. And this at once makes plain how different is the conception 'external to our minds' from the conception 'to be met with in space'; for, of course, pains which animals feel or after-images which they see are no more to be met with in space than are pains which *we* feel or after-images which *we* see. From the proposition that there are external objects—objects that are not in any of *our* minds, it does *not* follow that there are things to be met with in space; and hence 'external to our minds' is not a mere synonym for 'to be met with in space': that is to say, 'external to our minds' and 'to be met with in space' are two different conceptions. And the true relation between these conceptions seems to me to be this. We have already seen that there are ever so many kinds of 'things', such that, in the case of each of these kinds, from the proposition that there is at least one thing of that kind there *follows* the proposition that there is at least one thing to be met with in space: e.g., this follows from 'There is at least one star', from 'There is at least one human body', from 'There is at least one shadow', etc. And I think we can say that of every kind of thing of which this is true, it is also true that from the proposition that there is at least one 'thing' of that kind there *follows* the proposition that there is at least one thing external to our minds: e.g., from 'There is at least one star' there follows not only 'There is at least one thing to be met with in space' but also 'There is at least one external thing', and similarly in all other cases. My reason for saying this is as follows. Consider any kind of thing, such that anything of that kind, if there is anything of it, must be 'to be met with in space': e.g., consider the kind 'soap-bubble'. If I say of anything which I am perceiving, 'That is a soap-bubble', I am, it seems to me, certainly implying that there would be no contradiction in asserting that it existed before I perceived it and that it will continue to exist, even if I cease to perceive it. This seems to me to be part of what is meant by saying that it is a real soap-bubble, as distinguished, for instance, from an hallucination of a soap-bubble. Of course, it by no means follows, that if it really is a soap-bubble, it did in fact exist before I perceived it or will continue to exist after I

cease to perceive it: soap-bubbles are an example of a kind of 'physical object' and 'thing to be met with in space', in the case of which it is notorious that particular specimens of the kind often do exist only so long as they are perceived by a particular person. But a thing which I perceive would not be a soap-bubble unless its existence at any given time were logically *independent* of my perception of it at that time; unless that is to say, from the proposition, with regard to a particular time, that it existed at that time, it *never* follows that I perceived it at that time. But, if it is true that it would not be a soap-bubble, unless it *could* have existed at any given time without being perceived by me at that time, it is certainly also true that it would not be a soap-bubble, unless it *could* have existed at any given time, without its being true that I was having any experience of any kind at the time in question: it would not be a soap-bubble, unless, whatever time you take, from the proposition that it existed at that time it does *not* follow that I was having any experience at that time. That is to say, from the proposition with regard to anything which I am perceiving that it is a soap-bubble, there *follows* the proposition that it is external to *my* mind. But if, when I say that anything which I perceive is a soap-bubble, I am implying that it is external to *my* mind, I am, I think, certainly also implying that it is also external to all other minds: I am implying that it is not a thing of a sort such that things of that sort can only exist at a time when somebody is having an experience. I think, therefore, that from any proposition of the form 'There's a soap-bubble!' there does really *follow* the proposition 'There's an external object!' 'There's an object external to all our minds!' And, if this is true of the kind 'soap-bubble', it is certainly also true of any other kind (including the kind 'unicorn') which is such that, if there are any things of that kind, it follows that there are *some* things to be met with in space.

I think, therefore, that in the case of all kinds of 'things', which are such that if there is a pair of things, both of which are of one of these kinds, or a pair of things one of which is of one of them and one of them of another, then it will follow at once that there are some things to be met with in space, it is true also that if I can prove that there are a pair of things, one of which is of one of these kinds and another of

another, or a pair both of which are of one of them, then I shall have proved *ipso facto* that there are at least two 'things outside of us'. That is to say, if I can prove that there exist now both a sheet of paper and a human hand, I shall have proved that there are now 'things outside of us'; if I can prove that there exist now both a shoe and sock, I shall have proved that there are now 'things outside of us', etc.; and similarly I shall have proved it, if I can prove that there exist now two sheets of paper, or two human hands, or two shoes, or two socks, etc. Obviously, then, there are thousands of different things such that, if, at any time, I can prove any one of them, I shall have proved the existence of things outside of us. Cannot I prove any of these things?

It seems to me that, so far from its being true, as Kant declares to be his opinion, that there is only one possible proof of the existence of things outside of us, namely the one which he has given, I can now give a large number of different proofs, each of which is a perfectly rigorous proof; and that at many other times I have been in a position to give many others. I can prove now, for instance, that two human hands exist. How? By holding up my two hands, and saying, as I make a certain gesture with the right hand, 'Here is one hand', and adding, as I make a certain gesture with the left, 'and here is another'. And if, by doing this, I have proved *ipso facto* the existence of external things, you will all see that I can also do it now in numbers of other ways: there is no need to multiply examples.

But did I prove just now that two human hands were then in existence? I do want to insist that I did; that the proof which I gave was a perfectly rigorous one; and that it is perhaps impossible to give a better or more rigorous proof of anything whatever. Of course, it would not have been a proof unless three conditions were satisfied; namely (1) unless the premiss which I adduced as proof of the conclusion was different from the conclusion I adduced it to prove; (2) unless the premiss which I adduced was something which I *knew* to be the case, and not merely something which I believed but which was by no means certain, or something which, though in fact true, I did not know to be so; and (3) unless the conclusion did really follow from the premiss. But all these three

conditions were in fact satisfied by my proof. (1) The premiss which I adduced in proof was quite certainly different from the conclusion, for the conclusion was merely 'Two human hands exist at this moment'; but the premiss was something far more specific than this—something which I expressed by showing you my hands, making certain gestures, and saying the words 'Here is one hand, and here is another'. It is quite obvious that the two were different, because it is quite obvious that the conclusion might have been true, even if the premiss had been false. In asserting the premiss I was asserting much more than I was asserting in asserting the conclusion. (2) I certainly did at the moment *know* that which I expressed by the combination of certain gestures with saying the words 'There is one hand and here is another'. I *knew* that there was one hand in the place indicated by combining a certain gesture with my first utterance of 'here' and that there was another in the different place indicated by combining a certain gesture with my second utterance of 'here'. How absurd it would be to suggest that I did not know it, but only believed it, and that perhaps it was not the case! You might as well suggest that I do not know that I am now standing up and talking—that perhaps after all I'm not, and that it's not quite certain that I am! And finally (3) it is quite certain that the conclusion did follow from the premiss. This is as certain as it is that if there is one hand here and another here *now*, then it follows that there are two hands in existence *now*.

My proof, then, of the existence of things outside of us did satisfy three of the conditions necessary for a rigorous proof. Are there any other conditions necessary for a rigorous proof, such that perhaps it did not satisfy one of them? Perhaps there may be; I do not know; but I do want to emphasise that, so far as I can see, we all of us do constantly take proofs of this sort as absolutely conclusive proofs of certain conclusions—as finally settling certain questions, as to which we were previously in doubt. Suppose, for instance, it were a question whether there were as many as three misprints on a certain page in a certain book. A says there are, B is inclined to doubt it. How could A prove that he is right? Surely he *could* prove it by taking the book, turning to the page, and pointing to three separate places on it, saying 'There's one mis-

print here, another here, and another here': surely that is a method by which it *might* be proved! Of course, A would not have proved, by doing this, that there were at least three misprints on the page in question, unless it was certain that there was a misprint in each of the places to which he pointed. But to say that he *might* prove it in this way, is to say that it *might* be certain that there was. And if such a thing as that could ever be certain, then assuredly it was certain just now that there was one hand in one of the two places I indicated and another in the other.

I did, then, just now, give a proof that there were *then* external objects; and obviously, if I did, I could *then* have given many other proofs of the same sort that there were external objects *then*, and could now give many proofs of the same sort that there are external objects *now*.

But, if what I am asked to do is to prove that external objects have existed in *the past*, then I can give many different proofs of this also, but proofs which are in important respects of a different *sort* from those just given. And I want to emphasise that, when Kant says it is a scandal not to be able to give a proof of the existence of external objects, a proof of their existence in the past would certainly *help* to remove the scandal of which he is speaking. He says that, if it occurs to anyone to question their existence, we ought to be able to confront him with a satisfactory proof. But by a person who questions their existence, he certainly means not merely a person who questions whether any exist at the moment of speaking, but a person who questions whether any have *ever* existed; and a proof that some have existed in the past would certainly therefore be relevant to *part* of what such a person is questioning. How then can I prove that there have been external objects in the past? Here is one proof. I can say: 'I held up two hands above this desk not very long ago; therefore two hands existed not very long ago; therefore at least two external objects have existed at some time in the past, QED'.⁸ This is a perfectly good proof, provided I *know* what is asserted in the premiss. But I do know that I held up two hands above this desk not very long ago. As a

8 *Quod erat demonstrandum*—Latin for "which was to be demonstrated."

matter of fact, in this case you all know it too. There's no doubt whatever that I did. Therefore I have given a perfectly conclusive proof that external objects have existed in the past; and you will all see at once that, if this is a conclusive proof, I could have given many others of the same sort, and could now give many others. But it is also quite obvious that this sort of proof differs in important respects from the sort of proof I gave just now that there were two hands existing *then*.

I have, then, given two conclusive proofs of the existence of external objects. The first was a proof that two human hands existed at the time when I gave the proof; the second was a proof that two human hands had existed at a time previous to that at which I gave the proof. These proofs were of a different sort in important respects. And I pointed out that I could have given, then, many other conclusive proofs of both sorts. It is also obvious that I could give many others of both sorts now. So that, if these are the sort of proof that is wanted, nothing is easier than to prove the existence of external objects.

But now I am perfectly well aware that, in spite of all that I have said, many philosophers will still feel that I have not given any satisfactory proof of the point in question. And I want briefly, in conclusion, to say something as to why this dissatisfaction with my proofs should be felt.

One reason why, is, I think, this. Some people understand 'proof of an external world' as including a proof of things which I haven't attempted to prove and haven't proved. It is not quite easy to say *what* it is that they want proved—*what* it is that is such that unless they got a proof of it, they would not say that they had a proof of the existence of external things; but I can make an approach to explaining what they want by saying that if I had proved the propositions which I used as *premises* in my two proofs, then they would perhaps admit that I had proved the existence of external things, but, in the absence of such a proof (which, of course, I have neither given nor attempted to give), they will say that I have not given what they mean by a proof of the existence of external things. In other words, they want a proof of what I assert *now* when I hold up my hands and say 'Here's one hand and here's another'; and, in the other case, they want a proof of what I assert *now* when I say 'I

did hold up two hands above this desk just now'. Of course, what they really want is not merely a proof of these two propositions, but something like a general statement as to how *any* propositions of this sort may be proved. This, of course, I haven't given; and I do not believe it can be given: if this is what is meant by proof of the existence of external things, I do not believe that any proof of the existence of external things is possible. Of course, in some cases what might be called a proof of propositions which seem like these can be got. If one of you suspected that one of my hands was artificial he might be said to get a proof of my proposition 'Here's one hand, and here's another', by coming up and examining the suspected hand close up, perhaps touching and pressing it, and so establishing that it really was a human hand. But I do not believe that any proof is possible in nearly all cases. How am I to prove now that 'Here's one hand, and here's another'? I do not believe I can do it. In order to do it, I should need to prove for one thing, as Descartes pointed out, that I am not now dreaming. But how can I prove that I am not? I have, no doubt, conclusive reasons for asserting that I am not now dreaming; I have conclusive evidence that I am awake: but that is a very different thing from being able to prove it. I could not tell you what all my evidence is; and I should require to do this at least, in order to give you a proof.

But another reason why some people would feel dissatisfied with my proofs is, I think, not merely

that they want a proof of something which I haven't proved, but that they think that, if I cannot give such extra proofs, then the proofs that I have given are not conclusive proofs at all. And this, I think, is a definite mistake. They would say: 'If you cannot prove your premiss that here is one hand and here is another, then you do not know it. But you yourself have admitted that, if you did not know it, then your proof was not conclusive. Therefore your proof was not, as you say it was, a conclusive proof'. This view that, if I cannot prove such things as these, I do not know them, is, I think, the view that Kant was expressing in the sentence which I quoted at the beginning of this lecture, when he implies that so long as we have no proof of the existence of external things, their existence must be accepted merely on *faith*. He means to say, I think, that if I cannot prove that there is a hand here, I must accept it merely as a matter of faith—I cannot know it. Such a view, though it has been very common among philosophers, can, I think, be shown to be wrong—though shown only by the use of premisses which are not known to be true, unless we do know of the existence of external things. I can know things, which I cannot prove; and among things which I certainly did know, even if (as I think) I could not prove them, were the premisses of my two proofs. I should say, therefore, that those, if any, who are dissatisfied with these proofs merely on the ground that I did not know their premisses, have no good reason for their dissatisfaction.