

Perception
A representative theory

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To Morag Fraser

Introduction

o. In this book I argue that the correct philosophical theory of perception is a representative one. By such a theory, I mean one which holds

- (i) that the immediate objects of (visual) perception are always mental;
 - (ii) that there are objects, variously called external, material or physical, which are independent of the existence of sentient creatures;
 - (iii) that these objects have only the primary qualities;
- and
- (iv) to (visually) perceive a material object is to be in a certain kind of perceptual state as a causal result of the action of that object.

(The restriction to visual perception – seeing – is to be understood throughout.)

With the exception of clause (ii), these clauses are defended in the chapters that follow. Clause (ii) is, however, an assumption. I assume, that is, that Idealism (Phenomenalism) is false. I take it that we are a very small part of a universe that existed millions of years before we did and will exist millions of years after we have gone. The reason I do not defend the assumption is threefold: first, space; secondly, I have little to add to the criticisms of Idealism by writers like D. M. Armstrong,¹ Don Locke,² and J. J. C. Smart;³ and, thirdly and most importantly, the main reason Idealism has been seriously entertained is the belief that its competitors – Direct Realism and Representationalism – face decisive objections; and I argue that Representationalism does not face decisive objections in chapter six.

Clause (i) is defended at the greatest length – as it ought to be; it is

¹ *Perception and the Physical World*, chs. 5 and 6. (Full bibliographical details are given in the bibliography.)

² *Perception and Our Knowledge of the External World*, ch. 4.

³ *Philosophy and Scientific Realism*, ch. 2.

the one which nearly all writers on perception today reject. Its defence requires the conclusions of the first five chapters, the structure of this defence being indicated as we progress through them.

Clause (iii) is defended in chapter five. In this chapter it is argued that scientific investigation of the material world strongly supports the contention that material things have only what I call scientific properties, which turn out to be pretty much Locke's primary qualities.

Clause (iv) is defended and explained in chapter seven. The explanation draws on the sense-datum theory espoused in chapter four.

The role of chapter six is essentially negative: it presents objections to the familiar objections to Representationalism.

1. The philosophical viewpoint from which this work is written is to a considerable extent traditional. In the arguments of the following chapters traditional analytical terms like: 'analysis', '(logical) possibility', 'contingent', 'entailment' and 'necessarily true' play a prominent role.

I cannot defend this viewpoint here, for that would require a book in itself. But I think I should say something about why I adopt it.

One reason is simply that I do not find the criticisms of such concepts by, for instance, Morton White⁴ and W. V. Quine⁵ convincing. But there is a second reason which should, I feel, carry weight even with those who take Quine's and White's criticisms seriously.

Around the turn of the century, it was known that there was something badly wrong with Newtonian Physics, but it was not known what should be put in its place until Einstein's Theory of Relativity was proposed and became established. However, the physicists of 1900 did not stop work; rather they used the best theory they then had, in the full knowledge that it was inadequate. Likewise, physicists today who believe that certain paradoxes show that there is something fundamental amiss in current quantum theory do not stop using it; rather they use it because it is the best they have to date.

Now it seems to me beyond question that the traditional notions that make up the so-called intensional circle are the best we have to date: there is wide-spread, non-collusive agreement about their application; there are accepted axiom systems embodying the central notion of logical necessity; and we have semantics of a set-theoretic kind for these axiom systems. This is far more than we have for the suggested replacement notions like: paraphrase, degree of revisability, distance

⁴ In, e.g., *Towards Reason in Philosophy*.

⁵ In, e.g., 'Two Dogmas of Empiricism'.

from the periphery of experience, and so on. At best, all we have for these notions are preliminary sketches that might serve as bases for fuller explications in the future. Indeed, as has been often noted, the clearest current accounts of these notions appear to presuppose the old notions. For example, the clearest account of the degree of revisability of a statement is in terms of the extent of revisions in a person's beliefs consequent upon abandoning that statement. And the relevant notion of consequence appears to be logical consequence, that is, entailment.

In short, it seems to me that someone who refuses to employ the traditional notions at all is like one who says, to borrow a phrase, 'I see it is wrong to build on sand, therefore, I will build on nothing at all.'

In any case, what is quite certain is that, if we are to use the traditional notions, there is no point in using them sloppily just because they face philosophical problems – two approximations take one further from the truth, rather than 'cancelling out'. Or, to borrow a maxim from morals, two wrongs do not make a right. It seems to me quite wrong to put forward analyses to which there are clear counter-examples and then try and excuse this fact by reference to, say, Quine's criticism of synonymy: this is to seek to have one's cake and eat it too. Either one eschews the notions in question altogether or one uses them as precisely as possible.

2. Finally, two matters partly concerning philosophical viewpoint and partly terminology.

Clause (i) of the statement of Representationalism in §0 above uses the term 'mental'. The question of how to define the mental is, rightly, highly controversial. All I will attempt here is to describe my usage in as philosophically neutral a way as possible, while going beyond merely giving the usual list: pains, desires, hopes, etc.

I take it that we have a reasonably clear conception of a sentient creature: that of which we (persons) and the higher mammals are prime examples, and rocks are prime non-examples. What I mean by 'mental' is what we *qua* sentient creatures bring to the world; what there could not be if there were no such creatures. Of course there are difficulties here, but we must make a start somewhere; and this account at least enables us to give direction to arguments over whether something is mental: *As* are mental just if there could be no *As* if there were no sentient creatures. It is important to notice the generality here: '*As*', not '*this A*'. My car could not exist without a sentient creature, me – at

least in one clear sense, that given by noting that 'My car exists without my existing' is an inconsistent statement. But cars could exist without sentient creatures, they could, for example, have been made by automators or have come into existence spontaneously.

The second matter concerns the usage of 'see'. I will use this in the ordinary sense according to which 'Jones sees the tree', for example, entails that the tree exists; and according to which Macbeth did *not* see a dagger for there was no dagger for him to see, though he may have *thought* he was seeing a dagger and it was, perhaps, *as if* he were.

Of course, from the fact that Macbeth did not see a dagger, it does not follow that he saw nothing. There are two views that can be taken concerning hallucinations.⁶ One is that they exist and are seen, but are not, of course, material or physical. On this view, Macbeth saw something, albeit a non-physical something. Alternatively, it can be held that Macbeth saw nothing, and that when under hallucination one sees nothing (relevant) at all, either physical or mental. On this view, one should not really talk about hallucinations at all, for there are none; rather there are cases of *hallucinating*. (I return to this question at length in chapter three.)

The one thing that I think cannot be said is that 'Macbeth did see something, and that something did not exist',⁷ or, concerning hallucinations in general, 'people can and do perceive things which do not exist'.⁸ For there are no things – perceived or not – which do not exist. Perhaps when hallucinated one sees nothing – though I will argue against this in chapter three – but one thing is certain: nothing is not a very special, non-existent thing which one sees when hallucinated.

It sometimes seems to be thought that we can side-step the whole issue of whether 'see' has 'success grammar' or 'existential import', by arguing as follows: Let us grant that 'see' as used in current English licences inferring 'D exists' from 'S sees D'. But, for various reasons, this usage is philosophically inconvenient; hence we should conduct our discussion in terms of 'see*', where 'see*' means just what 'see' means, except that 'S sees* D' does not entail 'D exists'.⁹

⁶ I follow the fairly standard practice of using 'illusion' for cases where something material is seen which looks other than it is, thus the straight stick in water looking bent is an illusion; and of using 'hallucination' for cases where nothing material is seen, thus after-images are hallucinations.

⁷ Don Locke, *Perception and Our Knowledge of the External World*, p. 16.

⁸ *Ibid.*, p. 17.

⁹ I take this to be A. J. Ayer's view in *The Foundations of Empirical Knowledge*, ch. 1.

There is, however, a fundamental problem with such a procedure. Consider someone writing on the secondary qualities who observes that 'X is red' entails that X is coloured, and decides to introduce the term 'red*' to mean precisely what 'red' means except that 'X is red*' does not entail that X is coloured. The question such a procedure obviously raises is whether the deletion of the entailment to 'X is coloured' leaves anything significant behind. And it is hard to see how to settle this question other than by considering whether 'X is red' may be analysed as a conjunction with 'X is coloured' as one conjunct and some sentence, P, not entailing 'X is coloured' as the other. If it can, 'X is red*' means P; if not, 'red*' has no consistent meaning at all.

Likewise, whether or not there is anything meaningful corresponding to 'see*' depends on whether 'S sees D' can be analysed as a conjunction with one conjunct as 'D exists', and the other not entailing that D exists. Therefore, the question as to whether it is fruitful to introduce 'see*' cannot be raised at the *beginning* of a philosophical discussion of perception, but only after enough has been said to enable an opinion on the possibility of the required kind of conjunctive analyses.

More particularly, the issue turns out to pivot – as we will see in chapters three and four – on whether 'see' is essentially *relational*. 'A is to the left of B' entails that B exists, but this is no 'mere verbal convention' or quirk of English usage. For there is no analysing it as 'A is to the left of *B and B exists', where 'A is to the left of *B' does not entail that B exists – if there were, Logic could dispense with many place relations.

Finally and briefly, I suppose 'see' to be such that 'S sees D and D=D' entails that S sees D'. That is, 'D' is here subject to substitutivity (of co-referring terms) and so 'S sees —' is a transparent construction.¹⁰ If I see the friendly-looking dog and the friendly-looking dog is about to attack me, then I see the dog who is about to attack me, whether or not I am fortunate enough to know the fact. This view receives a detailed defence in G. J. Warnock's, 'On What is Seen'.¹¹

¹⁰ In the sense defined in W. V. Quine, *Word and Object*, §30.

¹¹ See also his earlier, 'Seeing', and Fred. I. Dretske, *Seeing and Knowing*, p. 54ff

I

The distinction between mediate and immediate objects of perception

o. Before I can argue that the major claim of the Representative Theory of Perception (RTP) that the immediate objects of perception are always mental, is true, we must see what it means; and, in particular, what 'immediate object of perception' means. This is the concern of this chapter.

1. We talk of seeing things and of seeing *that* . . . : 'I see the tomato,' 'I see *that* the tomato is red.' In the first case, 'see' is followed by a singular term putatively naming something; in the second, by a sentence prefixed by 'that'. (We also talk of seeing events, processes, etc.: 'I saw the explosion', 'I saw the steady erosion of the river bank.' But I will concentrate on the first two cases here.)

In starting with the question '*What* are the immediate objects of perception', I am opting for the view that seeing things is more basic than seeing-*that*. The best warrant for such a view would be (i) a successful analysis of seeing-*that* in terms of seeing things, plus (ii) an argument that showed that the converse – an analysis of seeing things in terms of seeing-*that* – is impossible. Such a warrant will be offered in chapter 7.

In any case, the distinction between mediate and immediate perception, as conceived here and by traditionally minded writers on perception like G. E. Moore and H. H. Price pertains to perceiving things, not perception-*that*. For the distinction is introduced as a preamble to discussing *what* we immediately perceive. It is a preliminary to considering the nature of the immediate objects of perception. We shall see that some versions of the traditional ways of drawing the mediate-immediate distinction appear to overlook this point.

I believe that the usual formulations of the mediate-immediate distinction fail. I will argue this principally for D. M. Armstrong's formulation in terms of inference and suggestion, for H. H. Price's in terms of doubt, and for G. E. Moore's in terms of the parts not seen. This does not by any means exhaust the many attempts to draw the

distinction,¹ but I think it will be sufficiently clear that the kinds of objections that I raise can, if they work at all, be more widely applied.

The general idea behind the distinction is to distinguish seeing houses, cats and mountains, on the one hand, from seeing red triangular shapes and white circular patches, on the other. What is at issue is whether there is an important distinction here, and, if there is, what its importance is. It is not, of course, at issue that statements like 'I see a red, round patch' and 'I see a ship' are both sometimes true.

2. D. M. Armstrong draws the distinction in terms of inference or suggestion, taking as his starting point Berkeley's (in)famous claim in the first dialogue of *Three Dialogues Between Hylas and Philonous* that 'when I hear a coach drive along the streets, immediately I perceive only the sound, but from experience I have had that such a sound is connected with a coach, I am said to hear the coach'.²

This is a puzzling claim. Berkeley purports to be talking about hearing the coach, hearing the sound, and about the relation between the two; but what he says is plausible only if construed as being about *believing* (or *knowing*) that one is hearing a sound and hearing a coach. For example, 'the experience I have had that such a sound is connected with a coach' is irrelevant to whether I hear a coach. There is such a thing as hearing a coach for the *first* time, and so, one may hear a coach in the absence of the past experience Berkeley refers to. Past experience is only relevant to the quite separate question of whether I believe or know that the sound is that of a coach, and hence to whether I hear *that* there is a coach outside.

This confusion in Berkeley over whether we are considering the perception of things, or beliefs about perception, or perception-*that* seems to me to carry over into Armstrong's remarks elucidating Berkeley. For instance, Armstrong argues that

we can be said to have heard the coach only because we have heard the sound. We may not have paid much attention to the sound, we may have been much more *interested* in the coach than in the sound, but we must have heard the sound in order to hear the coach. But the reverse implication does not hold. Somebody who heard a noise, which was in fact made by a coach, but who was unfamiliar with the

¹ E.g., A. White in *G. E. Moore*, ch. 8, distinguishes six methods to be found in Moore's writings alone.

² *The Works of George Berkeley*, ed. Luce and Jessop, vol. 2, p. 204.

noise that coaches make, could not say that he heard a coach. Or at any rate he could not say that he knew he was hearing a coach.³

But the reverse implication *does* hold. If I hear 'a noise, which was in fact made by a coach', then *ipso facto* I hear the coach – whether or not I am in a position to say that I do, or know that I do. It seems that both Berkeley and Armstrong are confusing its being true that I hear a coach with my believing or being in a position to say that I hear a coach.

The confusion between perception and belief about perception underlies the common doctrine that the distinction between mediate and immediate perception is that the latter but not the former involves no inference. Consider, for example, Armstrong's account: 'Immediate perception, then, is perception which involves no element of inference, while mediate perception does involve such an inference';⁴ and, later: 'Immediate perception, then, is perception which involves no element of suggestion. We can say if we like that it involves no element of inference, but we must remember the latinian sense of the word 'inference' that is being employed.'⁵

But inference is a notion definable in terms of belief: to infer is at least to believe as a result of . . . (The interesting problems associated with spelling this out are not relevant here⁶) So to claim that mediate perception, by contradistinction to immediate perception, involves inference is to claim that mediate perception involves certain beliefs that immediate perception does not; and this is false. Hearing the coach does not require any beliefs that hearing the sound does not. There are, so to speak, no additional beliefs which must be 'added on' to hearing the sound to get hearing the coach – if the sound is the sound of a coach, then hearing the sound is hearing the coach regardless of what one believes about whether the sound is that of a coach.

A similar point applies against the formulation in terms of suggestion. Suggestion, in the sense at issue, involves at least putative belief, but one may hear the coach without having any idea that it is a coach that one is hearing; and if one is hearing the sound of a coach, then one is hearing the coach even if the sound in no way suggests a coach to one.

In order to make reasonable sense of the claim that mediate percep-

³ *Perception and the Physical World*, p. 20.

⁴ *Ibid.*, p. 21.

⁵ *Ibid.*, p. 21.

⁶ But see M. Deutscher, 'A Causal Account of Inferring' in *Contemporary Philosophy in Australia*.

tion involves inference (or suggestion) in a significant way that immediate perception does not, we must modify the claim to something like: *believing* that one is immediately perceiving involves inference while *believing* that one is immediately perceiving does not involve inference; or in terms of the objects of perception rather than the perceiver, *X* is an immediate object of perception if and only if one may believe that one perceives *X* without carrying out any kind of inference. In terms of this modification, the general idea will be that the sound counts as an immediate object of perception because one does not need to infer in order to believe that one is hearing a sound of a certain kind; while the coach is a mediate object because one does need to infer – from, for example, previously established generalizations about the kind of sound coaches make – in order to believe that one is hearing a coach.

3. There is an enormous amount that could be said here about inference and its connexion with perception but – as these issues do not bear on what follows – I will restrict myself to advancing two objections which can, I believe, be seen to be decisive without our entering into a detailed discussion of inference.

Let us switch from hearing to our primary concern, vision, and put the two objections by reference to a case of seeing a white cat. The idea behind the mediate-immediate distinction is that a certain coloured shape – white, 'cat-shaped', and with fuzzy edges – will be the immediate object of (visual) perception in such a case, and that the cat will be the mediate object of perception.

The first objection (to the account of the distinction given three paragraphs back) arises from the role of the mediate-immediate distinction in arriving at an overall account of perceiving. It is supposed to be a *first* step. Hence, the distinction must be drawn in a way which does not presuppose the answer to later questions. Now consider our white cat seen in pink light. What is the immediate object of perception in this case – a white shape (which looks pink), or a pink shape? The choice between these two answers is notoriously a crucial one, and drawing the distinction in terms of inference pre-empt the choice by forcing the answer most philosophers now reject – namely, a pink shape. For in order to know that one is seeing a white shape which looks pink in the circumstances, one must make reference to facts like (i) that cats are very rarely pink, and (ii) that white objects commonly look pink in this kind of lighting. Hence, precisely the reason – be it good or bad in itself – for saying that believing one is seeing a cat

involves inference, namely, the reference to past experience, applies to the belief that one is seeing a white shape; so, if the first involves inference, so does the second. Likewise, the familiar point that further investigation might, in a perfectly straight-forward way, force one to abandon one's belief that one is seeing a cat (in favour, for example, of the belief that one is seeing a cleverly-made dummy) applies equally to the belief that one is seeing a white shape which looks pink. We are all familiar with the kind of cases where we would abandon the latter kind of belief in favour, for example, of the belief that what we were seeing really was pink. Sometimes a thing thought to be looking other than it is, is found to be, in fact, looking as it is.

As it happens, I believe that the immediate object of perception in the case of the white cat looking pink is a pink shape. But it is clear that this view must be argued for, as it will be, and not presumed by the very method of drawing the mediate-immediate distinction that is adopted.

The second objection arises from the fact that we are seeking to draw a distinction among objects (things, entities): things like white shapes and sounds being alleged to be in the class of the immediate objects of perception, and things like cats and coaches being alleged to be in the class of the mediate objects of perception. The inference test is disastrously equivocal when applied to objects, as the following argument shows.

Suppose I am looking at the white cat in normal lighting, so that it is not at issue that I am seeing a white shape and that I am seeing a cat; and let us use, following G. E. Moore, 'belongs to' for the relation between the white shape and the cat, whatever that relation turns out to be (perhaps it is identity, or the part-whole relation, or causal - this question can be left to one side here). Now the white shape seen will be *one and the same* as the white shape belonging to the cat. But, on the inference test, the white shape belonging to the cat must be counted as a mediate object of perception if the cat is. If inference is involved in believing that one sees a white cat, it must also be involved in believing that one sees a white shape belonging to a white cat; for the latter belief is stronger than the former. Hence, the inference test has the unacceptable consequence that one and the same thing - equally describable as a white shape and as a white shape belonging to a white cat - both is and is not an immediate object of perception.

Clearly, this kind of difficulty will arise for any putative immediate object of perception: the sound is the sound of a coach, and if believing that I hear a coach involves inference, so does believing that I hear the

sound of a coach. At best, inference can serve only to distinguish among perceptual statements, descriptions, perception-that, and the like; it cannot serve to distinguish among perceptual objects. (In *A Materialist Theory Of The Mind*, Armstrong modifies his view in a way which suggests he would now accept at least part of this conclusion. See page 233.)

It might be thought that a simple modification to the inference test is available to avoid the difficulty just raised. Instead of: *A* is an immediate object of perception for *S* just if '*S* believes that he sees *A*' involves no inference, it might be suggested the inference test be modified to: *A* is an immediate object of perception for *S* just if there is a singular term '*B*', such that $A=B$, and '*S* believes that he sees *B*' involves no inference. But this modification does not really advance matters. Suppose I see a black cat, and this is the only thing I am seeing; then 'the thing I am seeing' designates the cat. And 'I believe that I am seeing the thing I am seeing' does not involve inference. So the modification leads to treating the cat as an immediate object of perception, contrary to intention. A natural reply here is that 'the thing I am seeing' is ambiguous; only if it means 'the thing I am *mediately* seeing' does it designate the cat; if it means 'the thing I am *immediately* seeing', it designates, rather, the black shape. But this reply is, of course, only available to someone who *already* grasps the distinction at issue. It presupposes the distinction, and so cannot be appealed to in elucidating it.

4. In a famous passage in *Perception*, H. H. Price argues as follows:

When I see a tomato there is much that I can doubt. I can doubt whether it is a tomato that I am seeing, and not a cleverly painted piece of wax. I can doubt whether there is any material thing there at all. . . . One thing however I cannot doubt: that there exists a red patch of a round and somewhat bulgy shape.⁷

An immediate problem with this passage is that it appears to beg an important question in the philosophy of perception, namely, whether there is an important distinction between seeing a red patch and there being a red patch which I see, akin to the undeniable distinction between looking for a totally honest man and there being a totally honest man that I am looking for. If there is such a distinction in the perceptual case, Price's central claim becomes very implausible. I may be quite certain that I am looking for the totally honest man, while

⁷ *Perception*, p. 3.

entertaining the gravest doubts as to whether *there is* a totally honest man such that I am looking for him. Likewise, *if* the distinction applies in the perceptual case, it might be granted to Price that I cannot doubt that I am seeing a red patch of a round and etc., without it being granted that I cannot doubt that 'there exists a red patch of a round and etc.' which I see.

A consideration of this matter is postponed to chapter 3, for, regardless of how it should be resolved, any attempt to use the (alleged) indubitability of our knowledge that we are seeing red patches as opposed to the obvious fallibility of our knowledge that we are seeing material things like tomatoes, faces the two objections that we raised to the inference test.

(I say 'any attempt' rather than 'Price's attempt' because Price uses the indubitability claim to pick out a relation, that of being directly given, rather than a class of objects. The two approaches converge as the range of this relation is intended to be the class of immediate objects of perception, or, as Price calls them, sense-data.)

Briefly, first, suppose I am looking at a white tomato in red light. Price must hold that I see a red patch, not a white one; for it is obvious that I may doubt that I am seeing a white patch in this situation. Hence, the doubt test begs the same crucial question as the inference test for immediate perception.

Second, the red patch of a round and etc. must be reckoned *one and the same* thing as the red patch of a round etc. belonging to the tomato, and I can, of course, doubt that I am seeing a red patch of a round and etc. belonging to the tomato to at least the extent that I can doubt that I am seeing the tomato. So reference to doubt also fails to pick out anything unequivocally as an immediate object of perception.

As might be expected, similar remarks apply to attempts to draw the mediate-immediate distinction by reference to *going beyond*, as in Don Locke's claim that 'The crucial point about immediate perception is that it does not go beyond what is perceived at the particular moment.'⁹ Perhaps we do have here a significant distinction between perceptual *statements*; perhaps there is a sense in which 'I see a red patch', for example, does not go beyond, or, in another favoured phrase, *takes nothing for granted*,⁹ while 'I see a tomato' does; but, in any case, we do not have here a way of delimiting the class of immediate objects of perception. For, if the red patch is an immediate object of perception,

⁹ Perception and Our Knowledge of the External World, p. 171.

⁹ See G. J. Warnock, *Bartleby*, ch. 7.

then — by Leibniz's Law — so is the red patch belonging to, let us say, the prize-winning tomato at this year's Royal Show; and the statement 'I see the (or a) red patch belonging to the prize-winning tomato at this year's Royal Show' is obviously exactly the sort of statement that would be described as going beyond or as taking things for granted. (More precisely, it is, of course, a person asserting the statement who goes beyond or takes for granted.)

5. A quite different way of drawing the mediate-immediate distinction is suggested by the point C. D. Broad, John Wisdom and Moore emphasise in this connexion.¹⁰ Normally, when we see an opaque, material thing, there is a great deal of that thing we do not see (for example, the back and inside). This suggests we define an immediate object of (visual) perception as one we see all of.¹¹ This suggestion at least has the advantage of avoiding the central problem just raised for accounts in terms of inference and doubt: whether I see all of *X* or not is independent of how *X* is described; that is, it is a question about *X*, not about some description of or statement concerning *X*.

There is, however, a major drawback to defining immediate objects of perception as those we see all of: it reverses the correct order of argument on perception, it puts the cart before the horse. For how, on this definition, do we settle whether there are any immediate objects of perception? It is non-controversial that there are *mediate* objects of perception, for it is accepted by all parties that we sometimes see things which have parts we do not see (at the time of seeing). But it is highly controversial whether there are things such that we both see them and see all of them, and so, highly controversial as to whether there are any immediate objects of perception according to the suggested definition. Moreover, the answer to this question depends on the nature of what we perceive. If, as in one version of Direct Realism,¹² we always perceive opaque physical objects, then there will be no immediate objects of perception, for it is impossible to see all parts of an opaque physical object. Every such object has a back which one will not be seeing. This is as true of facing surfaces of objects as it is of three-dimensional ones — the fact that a surface is facing one does not remove

¹⁰ See, e.g., C. D. Broad, 'Some Elementary Reflections on Sense-Perception', *J. Wisdom, Problems of Mind and Matter*, ch. 9, and G. E. Moore, 'The Nature and Reality of Objects of Perception'.

¹¹ Cf. D. Locke, *Perception and Our Knowledge of the External World*, p. 175.

¹² That which holds that everything we perceive is physical, as opposed to the version which adds the proviso — except when hallucinated.

its back. On the other hand, *if* after-images are a typical example of what we see, there may, on the definition under consideration, be immediate objects of perception, for it is reasonable to hold that we see all parts of them.

But what we want from the distinction between mediate and immediate objects of perception is a firm base from which to launch an investigation of such questions as whether the immediate objects of perception are always mental, or physical, or whether some are mental and some physical. The definition in question is of no help for this: it makes the answer to whether or not something, *X*, that I see is an immediate object of perception, depend on first deciding whether *X* is mental or physical – if mental, there may be no part of *X* I do not see; if physical (and opaque), there is.

6. In somewhat later writings, Moore introduces the notion of a sense-datum by an essentially ostensive procedure, where, in his usage, 'sense-datum' is a term for the immediate objects of perception, be they mental or physical. For example, in a famous passage he says:

And in order to point out to the reader what sort of things I mean by sense-data, I need only ask him to look at his own right hand. If he does this, he will be able to pick out something . . . with regard to which he will see that it is, at first sight, a natural view to take that that thing is identical, not, indeed, with his whole right hand, but with that part of its surface which he is actually seeing, but will also (on a little reflection), be able to see that it is doubtful whether it can be identical with the part of the surface of his hand in question. Things of the sort (in a certain respect) of which this thing is . . . I mean by sense-data.¹³

I agree with O. K. Bouwsma's criticism,¹⁴ which I take to be essentially the following dilemma. Either we take Moore to be pointing to a part of his hand's surface, or to be pointing to something else. If the first, there is no question of 'a little reflection' (or a lot) leading us to be 'doubtful whether it can be identical with the part of the surface of his hand in question'; for this is a contradiction. If the second, we must *already* understand the notion of a sense-datum and believe it to be distinct from any part of the hand, for there is nothing else relevant (and distinct from the hand) to which Moore might be taken to be pointing.

¹³ 'A Defence of Common Sense', p. 54.

¹⁴ 'Moore's Theory of Sense-Data', in *Philosophy of G. E. Moore*.

Moore would probably reply that he was pointing to a certain coloured patch (of white and 'hand-shaped') and leaving it as a matter for further investigation whether this patch is or is not identical with the hand's surface. But how can I be sure that there is a relevant, certain coloured patch that I see *unless* we take it to be the physical hand. Presumably, we can be sure that some statement like 'Moore sees a certain coloured patch' is true, but to take it that this entails that *there is* such a coloured patch which he sees is to beg just the kind of question that notion of an immediate object of perception is supposed to be a first step in helping us solve. And, secondly, we are left by this reply quite in the dark as to why this certain, coloured patch should play a basic role in the analysis of perception. Why is seeing a certain, coloured patch more fundamental than seeing part of the surface of a hand? For all Moore says, they are just both things we see, neither being especially prior to the other.

I now turn to the (always more difficult) task of offering a positive account of the distinction.

7. The account I wish to give of the mediate-immediate distinction can be approached by specifying the *in virtue of* relation.

There are many cases where statements to the effect that something is *F*, or something bears *R* to something, may be analysed in terms of some *other* thing being *F* or bearing *R* to something. For instance, to say that a car is red is to say that the body of the car is red: 'This car is red' may be analysed in terms of something distinct from the car, its body, being red. Likewise, anyone who holds that persons are not identical with their bodies is committed to holding that such statements as 'He is tall (heavy, strong)' may be analysed in terms of something distinct from him, his body, being tall (heavy, strong). A relational example is the statement 'The car is touching the kerb': this statement may be analysed in terms of something distinct from the car, namely, some part of the car, touching some part of the kerb.

I will use the expression 'in virtue of' to describe this kind of case. That is, when '*F*_{*d*}' may be analysed in terms of *b* being *F*, where *a* ≠ *b*, or '*a* *R* *b*' in terms of *c* bearing *R* to *d*, where *a* ≠ *c* and/or *b* ≠ *d*, I will say that '*F*_{*d*}' is true in virtue of *b* being *F*, and '*a* *R* *b*' is true in virtue of *c* bearing *R* to *d*. Thus, the car is red in virtue of the body of the car being red; a man is tall in virtue of his body being tall; the car is touching the kerb in virtue of, say, its left front tyre touching the kerb; and so on.

It is important to note that 'in virtue of' is being used to cover cases

where a certain kind of systematic analysis is possible; it is not a surrogate for entailment. Saying that 'My car is red' is true in virtue of my car's body being red is not just another way of saying that 'The body of my car is red' entails 'My car is red'; for the converse is also true, 'My car is red' entails 'The body of my car is red', but the car body is not red in virtue of the car being red. The crucial point is that the application of the predicate 'is red' to cars can be analysed in terms of the application of 'is red' to car bodies, but not vice versa. For every red car there must be a red body, but there may be (and are on assembly lines) red car bodies without red cars. Moreover, if my car is my most unreliable possession, then my most unreliable possession is red in virtue of its body being red; but 'My most unreliable possession is red' neither entails, nor is entailed by, 'My most unreliable possession's body is red.'

The 'in virtue of' relation is implicitly involved in many widely entertained philosophical theses. The doctrine that propositions, conceived as abstract entities distinct from sentences, are the fundamental bearers of truth-value, is that a sentence, *S*, is true *in virtue of* the proposition expressed by that sentence being true, but not vice versa. (And, of course, entailment may run both ways or neither way: '*S* is true' entails, and is entailed by, 'The proposition expressed by *S* is true'; while 'The fourth sentence on the board is true' neither entails, nor is entailed by 'The proposition that snow is white is true' — though, according to the doctrine, if the fourth sentence is 'Snow is white', it is true in virtue of the proposition that snow is white being true.) Likewise, to say that the (singular) causal relation holds between events is to say that a statement like 'The stone caused the window to break' is true *in virtue of* some event (involving the stone, presumably) causing the window to break.

There is a use of 'in virtue of' and the like to stand for causal connexions or counterfactual conditions. This is not, of course, our use. No one supposes that the truth of propositions causes the truth of sentences; and nor does the redness of the car body cause the truth of red, the spray painting does that. Likewise, our usage cannot be analysed counterfactually. Suppose my car is touching the kerb in virtue of the front tyre touching the kerb. It may be true that if the front tyre were not touching the kerb, the car would not be; but, equally, it may not be. It may be that if the front tyre were not touching the kerb, then the back tyre would be; and so, the car would still be touching the kerb. The same applies in the proposition case: suppose

the fourth sentence is true in virtue of a certain proposition being true. This is consistent with things being such that if this proposition were false, the fourth sentence would still be true; for it may be that the fourth sentence was chosen because it is true, and so, if the proposition were false, the fourth sentence would have been chosen differently.

Thus far, I have given a number of examples of what I mean by 'in virtue of', and a deliberately rather vague definition in terms of *a*'s being *F* being analysable in terms of *b*'s being *F* and *a* and *b* being suitably related. A precise, generally applicable definition is very difficult to achieve. Despite the frequency with which the notion of analysing one thing being so and so in terms of another thing being so and so is appealed to, its explication is highly controversial. In particular, there is an asymmetry in the notion which it is difficult to capture.

Take, for instance, the doctrine that sentences are true in virtue of propositions being true, that is, that the former's truth is to be analysed in terms of the latter's truth. It is obviously a part of this doctrine that each true sentence bears a relation to some true proposition such that the latter's being true together with the holding of this relation logically entails the former's being true. But there must be more to it than this. For the doctrine is not just that the truth of sentences and propositions is logically interrelated, it is that the truth of sentences derives from, is a matter of, or (as we have put it) the sentence is true in virtue of the proposition being true, and *not* vice versa. In the sentence-proposition case, the explanation for the asymmetry seems to be ontological: for advocates of the doctrine want to say that true propositions could exist without true sentences existing; for instance, if no one had ever written or spoken, there would be no sentences but many truths.

The asymmetry consequent upon this point comes out most clearly (as Melynn Cann pointed out to me) if one considers the question of order of definition. Given an understanding of '— is true' applied to propositions, one can (according to advocates of the doctrine) obtain a definition of '— is true' applied to sentences thus: a sentence is true just if it expresses a true proposition. The converse, however, is *not* possible. One cannot adequately define '— is true' applied to propositions given its application to sentences. One cannot, for example, say that a proposition is true just if it is expressed by a true sentence, for there are true propositions for which there are no sentences which express them (both in the possible world where there are no sentences, and in the actual world, because there is a non-denumerable infinity of propositions).

Similar remarks apply to our other cases. Given an understanding of '— is red' applied to car bodies, a definition of '— is red' applied to cars can be obtained thus: a car is red just if its body is red. But the converse procedure is not possible because of the possibility (and actuality) of car bodies not attached to cars. Again, '— touches the kerb' applied to cars can be defined in terms of '— touches the kerb' applied to parts of cars, but not conversely. Because no car can touch the kerb without a part of it, the front tyre, say, doing so; but the front tyre can touch the kerb without the car doing so, for it might be detached from the car.

We are now able to spell out *in virtue of* sufficiently for present purposes. An A is F in virtue of $a B$ being F if the application of '— is F ' to an A is definable in terms of its application to a B and a relation, R , between A s and B s, but not conversely. This gives us an account for the indefinite case. We obtain an account for the definite case as follows: *This A is F in virtue of this B being F* if (i) an A is F in virtue of a B being F (as just defined), (ii) this A and this B are F , and (iii) this A and this B bear R to each other.

We have noted one way the converse may not be possible: there may be B s which lack corresponding A s (propositions without sentences, car parts without cars, and so on). There is another. The relation, R , may not be specifiable without circularity. This is the case with our example of the car touching the kerb in virtue of its front tyre doing so; but, for variety, I will illustrate the point with a different example.

I live in Melbourne, a city of Australia; I, therefore, live in Australia. Melbourne and Australia are not identical, nevertheless, I do not live in two different places. Rather, I live in Australia in virtue of living in Melbourne. This example accords with what I have said above. The application of 'I live in —' to countries is clearly definable in terms of its application to parts of countries, but the reverse is not possible because any part of a country might fail to be a part of a country — Melbourne, for instance, is but might not have been a part of Australia.

There is an additional reason why the reverse is not possible in this case. The relevant relation between Melbourne and Australia is that Melbourne is a part of Australia, and the definition of 'I live in —' as applied to a country in terms of its application to a part thereof is achieved by reference to this relation thus: I live in a country just if I live in something which is a part of that country. But a definition of the application of 'I live in —' to some part of a country cannot be achieved by: I live in some particular part of a country just if I live in the country which has that part as a part. For I might live in that country without

living in that part. It does not follow from my living in Australia and Melbourne being a part of Australia, that I live in Melbourne. Of course, there is a relation between Melbourne and Australia such that it follows from my living in Australia together with Melbourne having this relation to Australia, that I live in Melbourne, namely, *having Melbourne as the part in which I live*. But it would be circular to appeal to this kind of relation in trying to define the application of 'I live in —' to parts of countries in terms of its application to countries.

I hope I have now made what I mean by 'in virtue of' clear enough for what follows. I have laboured the matter to try to allay the suspicions many feel about any attempt to distinguish immediate from mediate perception.

8. We are now in a position to develop a definition of an immediate object of perception (for S at t).

We commonly see things in virtue of seeing *other* things: I see the aircraft flying overhead in virtue of seeing its underside (and the aircraft is not identical with its underside); I see the table I am writing on in virtue of seeing its top; I first see England on the cross-channel ferry in virtue of seeing the white cliffs of Dover; and so on and so forth. Each of these cases fits the account of *in virtue of* given in the preceding section.

Take, for instance, the case of seeing the table in virtue of seeing its top. The top of the table is a reasonably substantial part of the table. And the application of 'I see —' to an opaque, three-dimensional object is definable in terms of its application to a reasonably substantial part, for I am properly said to see an opaque object if I see a reasonably substantial part of it. But the application of 'I see —' to a part of an object cannot be defined in terms of its application to the object to which the part belongs. This is for both of the kinds of reasons noted in the previous section. The particular part might not have been a part of the particular object, and I might have seen the object by seeing some *other* part of it: I might, for instance, have seen the table by seeing the underneath of it.

It follows, therefore, that I see an opaque object in virtue of seeing a part of it. Moreover, by inspection of the account, it is also true that I see *this* opaque object (the table) in virtue of seeing *this* part (the top). The same line of reasoning obviously applies to the other cases mentioned and, indeed, to a multitude of like ones. That is, we often see things in virtue of seeing other things.

Now for our definition: x is a *mediate object of (visual) perception* (for

S at t) iff S sees x at t , and there is a y such that ($x \neq y$ and) S sees x in virtue of seeing y . An immediate object of perception is one that is not mediate; and we can define the relation of immediately perceiving thus: S immediately perceives x at t iff x is an immediate object of perception for S at t (as just defined).

9. It is one thing to provide a definition, quite another to show: (i), that something satisfies it, and, (ii), what kind of thing satisfies it. A full answer to what kinds of things are the immediate objects of perception depends on matters discussed in following chapters, but it is possible to go part of the way at this stage. We have already in effect noted, on the negative side, that reasonably sized, opaque material things are never immediate objects of perception. Any such object will be seen in virtue of seeing some part of that object, for example, the table is seen in virtue of seeing its top.

On the positive side, I will consider three cases in turn. The first is that of seeing a red, round after-image. If this is a case of seeing something, as I will argue later (in chapter three), then it quite clearly is a case where there is an immediate object of (visual) perception, namely, the red, round after-image itself; for there is nothing else seen which could plausibly be held to be such that one sees the after-image in virtue of seeing it. Perhaps one sees the wall behind, the side of one's nose, and the like, but obviously the after-image is not seen in virtue of seeing any of them. Therefore, provided after-images are seen, we have shown that something satisfies our definition; and, clearly, for hallucinations in general, if they are part of what is seen, then they are immediate objects of perception.

The second case I consider is that of veridical perception. Suppose I stand in front of a white wall; then if I look at it in reasonably normal circumstances, I will see a largeish, white expanse. That is, one true answer to the question 'What do I see?' will be – a white expanse. There will, of course, be other true answers – like, a wall, and the painted surface of a wall; but I do not think it can seriously be denied that a white expanse is one true answer, and so, that there is at least one white expanse which is seen. I say 'at least one', because on some theories there will be more than one; but, on all sane theories, there is at least one white expanse seen.

Moreover, I do not think it can be seriously denied that at least one of the white expanses seen is an immediate object of perception as defined here; because it follows regardless of the theory of perception assumed. If Direct Realism is true, then what is seen is a white expanse

identical with the facing surface of the wall, and nothing else relevant. Clearly, the wall is seen in virtue of seeing the facing surface, and hence is not an immediate object of perception; but the facing surface is not seen in virtue of seeing the wall (for the same kinds of reasons that applied to the table case earlier). And, as far as Direct Realism is concerned, there will be nothing else seen which could at all plausibly be that which the facing surface is seen in virtue of seeing. Hence, the Direct Realist must acknowledge that the facing surface is an immediate object of perception. But the facing surface is, according to him, one and the same as the white expanse, so he must acknowledge the white expanse ('the', as there is only one according to him) as the immediate object of perception.

If Representationalism is true, then, depending on the version, there may be two white expanses which are seen – one mental, the other facing surface of the wall causally responsible for the mental one (or, better, responsible for having the mental one) – or, on representative theories which deny that colour properly speaking qualifies physical things, just one. In either case, the mental one will have to be regarded by the representationalist as an immediate object of perception as we have defined it; for the mental entity, if seen as postulated on the theory, is evidently not seen in virtue of seeing something else. It is not, for instance, seen in virtue of seeing the object which, according to the theory, causes one to experience the white expanse. On the other hand, the wall is seen in virtue of seeing the white expanse. On the other material objects can, according to him, be analysed in terms of seeing mental entities belonging to them. That is, he holds that the application of ' S sees —' to something material can be defined in terms of its application to something mental, but not conversely – because, for instance, the mental thing might exist and be seen without the material one existing or being seen.

Both the Representationalist and the Direct Realist, therefore, must acknowledge that in the case of veridical perception there is an immediate object of perception and that it is a coloured expanse – white, of course, disagreeing profoundly about the ontological status of this coloured expanse. Similar remarks apply to Idealism.

The final case I consider is that of illusion. Suppose the white wall of the previous case is being illuminated by a red light and consequently looks pink. Again, it is quite certain that there is a coloured expanse which is being seen and is an immediate object of perception. What is controversial is whether two coloured expanses, one white and one

22

Mediate and immediate objects of perception

pink, are seen or only one, white expanse is seen. If there is only one expanse, this will be the immediate object of perception, for we cannot be seeing it in virtue of seeing the pink one, there being no pink expanse. On the other hand, if there are two, the immediate object of perception will obviously (from the considerations above) be the mental, pink one. In either case, therefore, there is an immediate object of perception, and it is a coloured expanse.

The upshot, therefore, is that in every case where something is seen – hallucination (if that is a case), illusion and the veridical case – there is a coloured expanse which is seen and not in virtue of seeing anything else; that is, whenever something is seen, there is an immediate object of perception and it is always a coloured shape or expanse.

10. It will make the significance of this conclusion clearer, and, possibly, forestall some objections if I draw attention to certain things I am *not* saying when I say that whenever a person sees something, there is a coloured expanse which he sees and which is an immediate object of perception for him.

First, in saying that the immediate objects of perception are always coloured expanses, I am not saying that they are *merely* coloured expanses, that they have *only* the properties of shape, extension, and colour. I am not, for example, expressing any view one way or the other on whether R. Firth is right to claim 'that such qualities as simplicity, regularity, harmoniousness, clumsiness, Gracefulness . . . can also have the same phenomenological status as colour and shape'.¹⁵ What I am claiming, and all I need for the argument of the following chapters, is that the immediate objects of perception have *at least* colour, shape, and extension.

Second, though I do hold that it is certain that opaque, three-dimensional physical objects like tomatoes are not immediate objects of perception, I do not hold, and need not, that perceiving a physical object, say the tomato, is a two-fold process starting with the perception of a red shape and finishing with the tomato. If I see a red shape which belongs to the tomato, then I see the tomato, regardless of whether I believe that I am, or am conscious of seeing a tomato, or see the shape as belonging to a tomato, and so on. There is – as we, in effect, noted in §2 – nothing that needs to be added to seeing the patch to get seeing the tomato.

There is, of course, a manifest difference between seeing the red patch (and so, the tomato), and such things as: taking it that one is seeing R. Firth, Sense-Data and the Percept Theory', p. 221.

23

Mediate and immediate objects of perception

ing the tomato, being conscious of seeing the tomato, seeing the patch as related to a tomato, and so on. But these latter, though important, are not important for the theses I wish to defend here; and, hence, will not be discussed in any detail.

There has, I think, been a tendency to confuse what it is to perceive a material object with: what it is to take it that one is seeing a material object, seeing something as being a certain kind of material object, being conscious that one is seeing a material object of a particular type, and so on. To give a recent example, T. L. S. Sprigge, in advancing what he describes as the traditional empiricist stance, holds that

it is proper to distinguish *two factors* in each case of perception, first, the sensing of a certain sense-datum, second, the putting of some interpretation upon this sense-datum of a kind such that, if it is correct, or at least correct enough, the two factors together will constitute perception of some material thing.¹⁶

I think Sprigge is right to distinguish the two factors (and our arguments later will support his description of one of them in terms of sense-data); but, surely, he is wrong to say that two factors together 'constitute perception of some material thing'. For what constitutes perception of some material thing can occur without any appropriate interpretation occurring.

I can see the headmaster without knowing that I am; I can see him even without realising that I am seeing a person – I may mistake him for a realistic dummy planted in a student rag. Again, I may see a red patch on the wall but take it that I am seeing a red after-image – even as radical a mistake in interpretation as this does not rule out my in fact seeing the red patch.

Third, I am not denying the familiar and important point that, in many circumstances, we find it much easier to specify the physical objects we see than the coloured shapes we see; nor that sometimes we remember seeing some physical thing without being able to remember what corresponding coloured shape we saw. My definition of *immediate object of perception* does not entail that immediate objects of perception are easier to specify or remember than mediate objects; and, hence, though I say that every physical object is seen in virtue of seeing some coloured expanse, this does not commit me to saying that the coloured shape in question is easier to specify or remember than the physical object (and in many cases it certainly is not).

¹⁶ *Facts, Words, and Beliefs*, p. 3, my italics.

Consider a parallel: suppose Jones lives in Detroit, and so, in America. In the terminology used in this chapter, he lives in America in virtue of living in Detroit, just as we saw that I live in Australia in virtue of living in Melbourne. But this in no way entails that it is easier for me to specify or remember the city Jones lives in than the country he lives in. And, of course, we are commonly more certain of the country someone lives in than the part thereof.

Fourthly and similarly, I am not committed to denying the occurrence of what is sometimes called unconscious perception. Armstrong describes a case thus,

I am driving along an unfamiliar street, and I pass a hoarding. When I reach the end of the street I am asked what it was that the hoarding was advertising. *To my surprise* I am able to answer; to my surprise, because I was not conscious of seeing what was on the hoarding when I passed it, I did not notice it at the time. Should we say, nevertheless, that I *did* see it?¹⁷

Armstrong answers, yes, to his final question, and this seems at least as reasonable as any other answer. 'But how can you contemplate this answer, given that he remembers only what was advertised and nothing of the colour or shape of the advertisement; for you are committed to saying that if he sees the hoarding, then he sees a coloured expanse.' But it is evidently absurd to hold that he saw the hoarding without seeing the front face of the hoarding (that is where the advertisement was) and that is a coloured expanse. So *if* the case is to be described as seeing the hoarding, it must be allowed that a coloured expanse was seen without in any way registering.

'But how can something register, without what it is true in virtue of registering?' Well, suppose our subject had also been asked if there was a black cross painted somewhere on the face of the hoarding. It seems quite possible that he should be able to answer, Yes, without being able to say *where* on the hoarding the cross was painted. But the cross *must* have been somewhere on the hoarding, thus it seems we can (visually) register that something is the case without registering what it is the case in virtue of.

Fifthly, as will be obvious from the tenor of the preceding, the notion of an immediate object of perception I am concerned with is quite distinct from the notion of what is *directly* given or of what one is

¹⁷ *Perception and the Physical World*, p. 123.

directly aware, at least on the usual understanding of these expressions. For I do not maintain any of the following:

- (i) that my belief that I am seeing the tomato must derive from believing that I am seeing the red shape which is the immediate object of perception.
- (ii) that my belief that I am seeing the tomato *must* be less certain than my belief that I am seeing the red shape.
- (iii) that a necessary condition of seeing the tomato is being *aware* of the red shape.

Not only am I not maintaining any of (i)-(iii), I in fact take them to be false. My reasons for this are the usual ones so will just be summarised. Take (i): First, I may, of course, see the tomato without believing I see it – perhaps I think it is a wax dummy, or perhaps I see it without in any way noticing it. Second, suppose I both see the tomato and believe that I see it, must my belief that I see the tomato derive from believing that I see the red shape? Well, of course, it may; but there seem clear cases to show that it need not so derive. Suppose I glance briefly into the kitchen and see a bowl of fruit and vegetables containing a tomato. And suppose I am then asked whether I saw a tomato and whether it was red or green (that is, was ripe or unripe). It seems clear that I might be able to answer the first query without being able to answer the second; that is, it is possible that I noticed seeing the tomato without noticing in any way the colour (which I must, of course, have seen). Hence, it is possible that I believe that I see the tomato without believing that I see a red shape (though I *am* seeing a red shape). The case just described may seem contrived, but I think similar cases arise fairly often. Suppose I am walking along a country lane at the beginning of autumn deep in thought. Then there will normally be *very* many things – hundreds of leaves, for example – that I see without noticing them at all, and so, without believing that I am seeing them; but there will also be many things – more leaves, for example – which I see and notice sufficiently to believe, perhaps very briefly, that I am seeing them, but not sufficiently to have any opinion on their colour: I see many of the leaves and am aware that I am seeing them, without being aware of whether they have 'turned' yet, that is, without being aware of whether they are green, yellow or red.

These kinds of case – of briefly glancing at an object (in our case, a leaf or a tomato) and noticing its identity more than its colour – show also that (ii) and (iii) are false: I may, obviously, be more sure that I

am seeing a tomato or a leaf than a red shape and be unaware (in any natural meaning of that term) of the red shape in such a case.

I am not, though, denying that if *at the time of knowingly seeing* an object I am asked to specify the relevant coloured shape or apparent coloured shape, I will, except in bizarre circumstances,¹⁸ be able to give a clear answer. There is a capacity of human beings, which we might call 'directing one's attention to one's perceptual experience' or 'putting oneself in the phenomenological frame of mind', the exercise of which enables us to pick out a coloured shape corresponding to any physical object we are seeing.

Nor am I denying the familiar point that one cannot see something without its looking some way (in particular, some colour or shape) to one. Likewise, I am not denying that seeing presupposes seeing as. Every leaf seen on my walk must look some colour and shape to me and must be seen as having some colour and shape by me at the time of seeing. But, just as I may see something without noticing it, without believing that I see it, so something may look some way to me (or be seen as . . .) without my noticing this in any way. As I drove quickly through the village, perhaps I saw the third house on the left without noticing or believing that I did. If so, the house must have looked some way to me, but I may not have noticed what way that was.

11. My insistence above that the notion of an immediate object of perception as defined here is not intended to play anything like its usual *epistemological* role, might give rise to the objection that if I refuse to give the immediate objects of perception their usual epistemological role, then I am simply side-stepping the major issue and, perhaps, leaving the immediate objects without any significant role at all to play in the philosophy of perception.

The first part of my answer to this charge is simply that we cannot do everything at once. The questions that arise in *analysing* statements of visual perception will keep us busy enough. The second part, and the main part, of my answer is that – important and interesting though epistemological questions are – they are secondary to analysis in an important respect. By this I do not mean that we cannot know a statement to be true without first knowing its analysis. That is an absurd position. Whether or not we know the analysis of statements about the minds of other persons, such statements as 'Jones is in pain' are sometimes known to be true. What I mean is that in order to have a *general*

¹⁸ Like that of seeing a just perceptible star, where concentrating on seeing the star makes it 'disappear' from the night sky.

theory of how we know, we must have at least the beginnings of an analysis. I may know that Jones is in pain, but I cannot even start on an explanation of how I know this, without taking a position on the analysis or meaning of such statements. For example, if I explain our knowledge on analogical grounds, I am assuming the analytical thesis that psychological predicates mean the same when applied to myself and to others. If I explain our knowledge by reference to the fact that Jones is behaving in the kind of manner that is used to teach the meaning of 'is in pain' to children, then I am assuming some analytical connexion between meaning and manner of teaching; and so on.

Therefore, though questions as to the epistemic relations between statements like 'I see a red patch' and 'I see a tomato' are extremely important, it seems a reasonable procedure to first tackle the question of the analysis of 'I see a tomato.' And the role I see for the immediate objects of perception is that of providing a starting point from which to answer this latter question. It is for similar reasons that I eschew such questions as: 'What is it not just to see a tomato, but to be *conscious* of seeing one, or, 'What is it to *interpret* one's perceptual experience as being of a tomato – questions like those I argued above tended to be confused with the question of what it is to see a tomato. These questions are obviously important (and relate to psychology as well as to philosophy), but are surely questions that presuppose what it is to see a tomato (being conscious of seeing a tomato involves seeing a tomato, for instance), and so, may reasonably be postponed.

12. It is common to introduce the term 'sense-datum' (or 'sense-impression', 'sensum', etc.) at this point as a convenient term for the immediate objects of perception. There are two reasons why I do not follow this practice. Visual sense-data – as traditionally conceived, and as conceived later in this work – are both what is seen whenever seeing occurs, and the bearers of the *apparent* properties (if the white wall looks blue, the corresponding sense-datum is blue). Regarding the first point, I have argued that whenever there is something which is seen, there is an immediate object of perception which is seen; but this is silent on whether there are cases of seeing which are not cases where something is seen. Regarding the second point, I have argued that the immediate objects of perception are coloured expanses, that is, that every immediate object of visual perception has some colour and some shape; but the issue of *what* colour and *what* shape has been left open.

13. A final comment. The view being advanced here is an *analytical*

expansion view, not a two meanings one. I have argued that though we see opaque, material things of reasonable volume, they are never the immediate objects of perception for a person at a time. But this is *not* to say that we see material objects in a different sense from that in which we see the immediate objects; it is, rather, to advance as an analytical thesis that to see a reasonable-sized, opaque material object *is* to see something distinct from that object, the relevant immediate object of perception (whatever the ontological status of the latter may turn out to be).

In 'Sense-Data', Benson Mates argues that we must concede that 'see' has two senses (at least), as follows:

Suppose that Smith and Jones are looking at the Campanile from different points of view; the light is good and neither of them has any difficulty seeing it. We consider the assertion:

(1) Smith and Jones see the same thing.

Is it true or false? Well, on the one hand, *of course* it is true, for *ex hypothesi* Smith and Jones both see the Campanile. On the other hand, since what anyone sees in a given situation depends upon his perspective, the lighting, and the whole structure and state of his nervous system, it is equally obvious that what Smith sees under these circumstances is not even 'congruent' let alone literally identical, with what is seen by Jones. Now no sentence can be both true and false when taken in the same sense; consequently we are led to the conclusion that sentence (1) has more than one sense. And it is natural to single out the verb 'see' as the culprit, to say that there are two (or, at least two) senses of 'see'.¹⁹

But the fact that there is both a case for saying (1) is true, and a case for saying it is false, does not show that there is a hidden ambiguity (located by Mates in 'see'); rather, it shows the need for analytical expansion. Jones and Smith see the same thing, the Campanile, in virtue of seeing different things, different aspects or whatever. Suppose Jones lives in Los Angeles and Smith in New York, do they live in the same place? In order to answer this question, we do not need to postulate two meanings for 'live in'. All we need to say is that they live in the same place, USA, in virtue of living in different places, Los Angeles and New York. In other words, they live in the *same country*, but different cities; and, likewise, they see the same *extended object*, but

¹⁹ 'Sense-Data', p. 230. In my discussion of this passage, I am indebted to Alec Hyslop.

different aspects: there is no need to postulate ambiguity, only a need to spell things out.

Perhaps it is worth putting the matter in semi-formal terms. Mates is suggesting that we have both

(3x) [Jones and Smith see x],

~(3x) [Jones and Smith see x],

as true sentences; and, hence, that 'see' in each must carry a different meaning.

But what in fact we have as true together in the situation he describes are

(3x) [x is a material thing of reasonable volume & Jones and Smith see x]

and ~(3x) [x is an aspect of a material thing & Jones and Smith see x] and the overall situation is best described by

(3x) (3y) (3z) [x ≠ y & x and y are aspects of z & Jones sees x & Smith sees y & (hence) Jones and Smith see z].

There is no putative contradiction here that calls for resolution by identifying an equivocation.

14. To conclude, we now have an account of what an immediate object of (visual) perception is. It is something seen, but not in virtue of seeing anything else. It is always a coloured shape, though the arguments of later chapters are needed before we can say in every case what colour and what shape it has. The account is doubly 'topic-neutral' in that it leaves as matters for further investigation, (i), whether the immediate object is mental or physical, and, (ii), the precise relation – causal, part-whole, or whatever – that holds between the immediate object of perception and a material object which is seen in virtue of seeing it. I now turn to the required further investigation.

The existence of mental objects*

o. It is now time to give the account of visual hallucinations adverted to in chapter 2, §o. In chapter 1, my comments on hallucinations were characteristically conditional. I distinguished the non-contradictory claim that statements like 'I see a red after-image', 'Drunkards see pink, rat-like shapes', and 'The travellers saw a mirage' are, on occasion, true, from the highly controversial claim that when such statements are true, *there are* red after-images, pink shapes, mirages, and so on which are seen. And I avoided the controversy by talking conditionally, by restricting myself to saying that *if* the visual hallucinations are part of what there is, then they are examples of immediate objects of (visual) perception. I can avoid the controversy no longer: it is time to argue that hallucinations are part of what there is, that 'a red after-image', 'a mirage', 'a rainbow' are not merely nominal substantives, but actually name things, and, in particular, name a special sub-set of the immediate objects of perception.

The issues that arise when discussing the existence of hallucinations parallel those that arise when discussing the existence of the bodily sensations, a matter of interest in itself; hence, I have discussed the two questions together in this chapter. It might, however, be urged that there is a simple and decisive consideration which shows that hallucinations do not exist which does not apply to the bodily sensations. It is sometimes urged that it is part of the meaning of the word 'hallucination' that when someone is under an hallucination he is not seeing anything at all, and so that it is simply a matter of definition that visual hallucinations, in the sense of what is seen when hallucinated, do not exist.¹ But, of course, what is true by definition is that nothing *physical* or *material* is seen when hallucinating, and so, that visual hallucinations are not physical things. Therefore, it is simply a matter of definition that if the drunkard who seems to be seeing pink rats is hallucinating,

* The first half of this chapter derives from my 'On The Adverbial Analysis of Visual Experience' and from 'The Existence of Mental Objects'.

¹ See, e.g., N. Brown, 'Sense Data and Physical Objects', p. 132.

there are no pink rats which he is seeing; and, likewise, Macbeth was not seeing a dagger. But the definition of an hallucination leaves open the possibility that something non-physical, that is, mental, is seen when hallucination occurs. As far as the definition is concerned, there may be pink rat-like (mental) shapes which are seen by drunkards, and there may have been a mental image seen by Macbeth which he mistakenly took to be a dagger.

1. We will, then, be concerned in this chapter with two kinds of mental objects: the bodily sensations – such things as pains, itches, and throbs; and the visual hallucinations – such things as after-images and mirages. There is a very widespread view that, while there are things like the *having* of bodily sensations and the *experiencing* of after-images, there are, strictly speaking, no such things as bodily sensations and after-images. What exists includes the experiencing of pains and after-images, but not the pains and after-images themselves.

This denial of mental objects is particularly associated with contemporary versions of Materialism wherein it is the having of a pain and the experiencing of an after-image which are identified with a process in the brain – it being considered unnecessary to say what kind of thing the pain and the image are, on the ground that they are no kind of thing at all.² But the denial is appealing for Dualists too, and, as Keith Campbell observes, 'the program to eliminate mental objects is almost common ground in the philosophy of mind'.³ Despite this near unanimity, I believe that there are substantial considerations favouring the existence of mental objects and the associated act-object account of having sensations and visual hallucinations (the account of which distinguishes the having from what is had and allows both as existing); indeed, I believe that the arguments that follow force us to acknowledge that mental objects exist.

A word of clarification: when I say that sensations and images exist, I mean just that. I do not mean that they exist independently of persons (or sentient creatures in general). It is reasonable to hold that sensations and after-images cannot exist unowned, that for every such there is necessarily a person who has it; but this does not in itself show that sensations and after-images are not examples of existent mental objects. It is an open philosophical question whether 'What exists?' and 'What

² See, e.g., J. J. C. Smart, *Philosophy and Scientific Realism*, p. 97; and D. M. Armstrong, *A Materialist Theory of the Mind*, p. 117. The point is particularly emphasised by Jaegwon Kim, 'Properties, Laws, and the Identity Theory'.

³ *Body and Mind*, p. 62.

exists independently?² are really the same questions. It is one to be settled by looking at the individual cases and, in particular, the case of sensations and after-images – as we will be doing in this chapter. 'Everything is a substance (in the Aristotelean sense)' is a substantial philosophical claim, not a tautology.

2. We certainly talk and write as if there were mental objects: 'There is a pain in my foot', 'This after-image is brighter than that one', 'The itch gets worse when I eat tomatoes', and so on.

This settles nothing as it stands. We once talked as if there were demons, and we now often talk about the average family or the next waltz; and yet there are no demons, average families or waltzes. These three examples illustrate three ways to show that there are no things of a certain kind. We were wrong about demons, because many statements we took to be true turned out false: epilepsy is *not* caused by demons, for example. There is no average family because statements that appear to be about this family can be given a reductive style of analysis in terms of the many non-average families that there are. The case with waltzes is slightly different. Presumably, 'The waltz is about to start' can be given a reductive analysis in terms of certain people being about to move in certain distinctive ways; but to show that there are no waltzes we do not need to go as far as this. It is sufficient to observe that 'The waltz is about to start' can be construed as 'People are about to start waltzing', 'The waltz is romantic' as 'People get romantic when they waltz', and so on. We do not need to give a full-scale analysis of statements about waltzing; we only need to know enough about the meaning of 'waltz' to know that statements apparently about waltzes can be, and are best, re-cast as being about people waltzing. The same is, in fact, true of the average family. We can show that 'The average family owns 0.9 pets' does not commit us to there being a family with a most peculiar pet, by pointing out that the statement may be analysed as 'The number of pets divided by the number of families equals 0.9'; but we can achieve the same goal without a full-scale analysis, by pointing out that the statement may be written as 'The average number of pets in a family is 0.9.' Here the crucial term 'average' reappears and so the analysis is only partial, but enough has been done to make it clear that there need be no family with 0.9 pets.

3. In similar vein, there are three ways we might seek to show that there are no mental objects: by showing that all statements of the form, 'S has a pain (itch, after-image, etc.) of kind F' are false; by producing a

reductive analysis of such statements, for example, of a behaviourist or topic-neutral kind, which eliminates the relevant psychological terms; or, finally, by offering a partial analysis (a recasting which better displays logical form or semantic structure) of these psychological statements, and which, while not eliminating all mentalist vocabulary, shows that these statements are not really about mental objects.

Of the first strategy, I will just say that I am sure it is mistaken, but I do not know how to prove that it is. For I do not know of any premises which are more obvious than that it is sometimes true that we are in pain, having a red after-image, and so on, from which a proof might be constructed.

The second strategy has been much discussed in connexion with the translation versions of Materialism advanced by J. J. C. Smart and D. M. Armstrong. I am afraid that Behaviourist analyses and the topic-neutral development of them by Smart and Armstrong in terms of typical causes of behaviour and typical effects of stimuli, strike me as very implausible. I agree with Alvin Plantinga's comment that 'no one has produced even one example of a mental-state-ascribing proposition that is equivalent to some behaviour-cum-circumstances proposition; nor has anyone suggested even the ghost of a reason for supposing that there are such examples';⁴ a comment which also seems to me to apply to the topic-neutral descendants of Behaviourism (though, let me add, they are certainly preferable to their ancestor). Moreover, my reasons for finding them implausible are familiar;⁵ hence, I will simply take it as read that the second strategy fails.

I will, therefore, concentrate on the third strategy in this chapter. I am sure the popularity of the denial of mental objects is due to the belief that it can be sustained by a relatively simple re-casting of sensation statements without recourse to anything as implausible as a wholesale rejection of the truth of such statements, and without recourse to anything as difficult as a full-scale behaviourist or topic-neutral analysis of psychological statements.

With one exception, our discussion of the third strategy applies equally to statements about bodily sensations and statements about visual images. The exception is Bruce Aune's attempt to re-cast

⁴ Plantinga, *God and Other Minds*, p. 191. For a similar view see D. Davidson, 'Mental Events'.

⁵ From, e.g., Campbell, *op. cit.*, ch. 5; Jerome Shaffer, *Philosophy of Mind*, ch. 2; M. C. Bradley, 'Sensations, Brain-Processes, and Colours'; and S. J. Noren, 'Smart's Materialism: The Identity Theory and Translation'.

statements putatively about bodily sensations as statements about parts of the body.

4. Aune urges that sensations can be regarded as properties of, or relations with, the body thus:

I have a pain in *my arm*, asserts no more than, and may be re-phrased as, 'My arm pains me' or 'My arm hurts'. And these latter locutions, far from suggesting that pain is a peculiar object that may be here or there, imply that it is rather a feature, in some sense, of a part of one's body.⁵

If one favours 'My arm hurts' as the reconstruction of 'I have a pain in my arm', one is treating sensations as properties or qualities of parts of the body; if one favours 'My arm pains me', one is treating sensations as relations between persons and parts of their bodies.

A common objection to both views has been that sensations are private while properties and relations are public. But, first, it is not entirely clear that sensations are private; and, secondly, it is very far from clear that it is essential to either the notion of a property or of a relation that it be public. It is, however, quite clear that it is essential to the notion of a property that it cannot be instantiated in the absence of a bearer, and essential to the notion of a relation that it cannot obtain in the absence of relata. And this will be sufficient to show that the two views are untenable. The argument will be developed for the relation view alone, as it applies *mutatis mutandis* to the property view.

The phantom limb phenomenon shows that it is possible to have bodily sensations outside of one's body. But if bodily sensations are to be understood in terms of relations between persons and parts of the body, this is impossible; as it is impossible for a relation to hold in the absence of its relata. It is impossible for me to be standing next to the Taj Mahal in the absence of the Taj Mahal. Likewise, if sensation statements essentially related persons to parts of their bodies, they could not be true in the absence of appropriate parts of the body.

It might be objected that pains in phantom limbs are not located outside the body. But if pains in phantom limbs are not where they feel to be, that is, where a limb used to be, then they are, presumably, either nowhere, or in the stump, and it cannot be maintained that having a pain in one's phantom limb is having either nowhere or one's stump

⁵ B. Aune, *Knowledge, Mind, and Nature*, p. 130.

hurting one. The first because it is nonsense, and the second because it is the translation of a quite different statement according to the view in question, namely, of 'I have a pain in my stump.' Perhaps, as a matter of fact, pains said to be in phantom limbs are really in stumps, but the point remains that Aune's theory does not enable us to translate statements about pains in phantom limbs into relational statements relating persons to parts of the body, because 'I have a pain in my stump' is evidently not equivalent to 'I have a pain in my phantom limb.' (Of course, if one took the view, as I do, that disembodied existence is logically possible, Aune's view could be immediately dismissed. 'I have a pain' cannot be translated as '($\exists x$) [x is a part of my body & x hurts me]', for the latter but not the former, entails that I have a body.)

One might try to save Aune's kind of theory by invoking the psychologists' notion of a body-image, and say that to have a pain in some place is to have the body-image at that place hurting one. This avoids the phantom limb objection because in such cases the body image extends beyond the body. It, nevertheless, leads nowhere. Apart from the suspicion of circularity – what is the body-image apart from the total locus of the bodily sensations – the body-image is not a physical body (if it were, invoking it would be useless as a reply to the phantom limb objection), and to rely it is to commit oneself to mental objects as much as relying the sensations themselves.

There is a further problem for Aune's account arising from the occasional disparity between the location of a pain and the location of its cause. Appropriate stimulation of appropriate brain regions gives rise to pains in various parts of the body; and, as a matter of common experience, disturbances in the mouth can cause pains in the ears. These pains which are remote from their causes are commonly called referred pains. They are uncommon but not rare; and, of course, they might be common. If they were common, pains would not play as useful a role in signalling bodily damage as they now do; but it cannot possibly be maintained that it is logically necessary that pains are useful. Their usefulness is a consequence of Evolution not of Logic.

According to Aune, to have a pain in one's foot at t is to bear the paining relation to one's foot at t . Now Aune must hold that this relation is *intrinsic* in the same way as, for example, 'is redder than'. If X is redder than Y at t_1 , but not at t_2 , then either or both X and Y must have changed between t_1 and t_2 – in particular, one or both must have changed colour. It is not possible that X and Y each be the same

colour at t_2 as they were at t_1 , yet their colour relationship be different at the two times. Likewise, it seems clear that if my foot pains me now, then either I or my foot must have changed between an earlier time when my foot was not painning me and now.

The problem this presents Aune is that the pain in question may be a referred one, so that the cause is not in the foot; and if the cause is remote from the foot, clearly the foot may be totally unchanged as far as physical features go. This means that either I myself, the person, changes, or that the foot changes with respect to some non-physical, that is, mental, feature. But the latter entails that something in the foot has mental features, and something with mental features is a mental object. And mental objects are just what Aune is seeking to avoid. It is, therefore, clear that Aune must adopt the former view that I, the person, changes. Now for a person to change is for a person to go from one state to another state. So that if Aune takes the view that the person changes he is, in effect, seeking to avoid mental objects by taking the view that having a pain is not a matter of being related to a pain, but of being in a certain mental state; that is, he is offering an account of sensations as states of persons.⁷ I argue against such a state theory in §7, 8, 9 below.

5. I now turn to examples of strategy three which are equally applicable to sensations and hallucinations. I will start by talking in terms of the former and switch later, for variety, to the latter.

The following passage from Thomas Nagel's paper, 'Physicalism,' makes a convenient starting point:

although it is undeniable that pains exist and people have them, it is also clear that this describes a condition of one entity, the person, rather than a relation between two entities, a person and a pain. For pains to exist *is* for people to have them.

... we may regard the ascription of properties to a sensation simply as part of the specification of a psychological state's being ascribed to the person. When we assert that a person has a sensation of a certain description B , this is not to be taken as asserting that there exist an x and a y such that x is a person and y is a sensation and $B(y)$ and x has y . Rather we are to take it as asserting the existence of only one thing, x , such that x is a person, and moreover $C(x)$, where C is the attribute 'has a sensation of description B '... Any ascription of properties to them [sensations] is to be taken simply as part of the

⁷ Which he, in fact, does, *ibid.*, p. 132.

ascription of other attributes to the person who has them – as specifying those attributes.⁸

Nagel's general idea here is clear enough. It is to switch from predicates on or descriptions of sensations, to predicates on or descriptions of persons: strictly, nothing is painful, but many things are persons with painful sensations. What is not so clear is just how Nagel supposes the switch he recommends serves to dispose of sensations.

Consider, for example, my brother. Every description of my brother can be transposed to a description of me without meaning loss: 'My brother is tall', for instance, goes to 'I have a tall brother.'⁹ But the possibility of switching from 'is tall' as a predicate on my brother to 'has a tall brother' as a predicate on me is clearly irrelevant to the question of my brother's existence. What matters is the way we ought to understand the predicate 'has a tall brother'; the answer in this case being that it is to be understood as formed from a relation by filling an argument place with a singular term. Likewise, what is crucial for whether sensations exist is not just that a statement like 'My pain is severe' can be rendered as 'I have a severe pain', but whether or not it can be so rendered with the predicate 'has a severe pain' understood other than as containing 'a pain' functioning as a singular term filling an argument place in the relation ' x has y '.

The general position here is like that concerning whether there are literally objects of belief – entities such that to believe is to be appropriately related to these entities. We can always switch from predicates on beliefs to predicates on persons, as in the switch from 'His belief is unusual' to 'He has an unusual belief', but this possibility is, in itself, compatible with the relational view of belief.

6. Can we, then, view the semantic structure of 'has a painful sensation' and the like so as not to commit ourselves to there being painful sensations; in particular, so that 'a sensation' is not, strictly speaking, a singular term?

The simplest such view would be the view which sees nothing; the 'Physicalism', p. 342. I have no doubt that Nagel would argue in precisely the same way for hallucinations.

⁸ It may be objected that this only holds if I refer to my brother as my brother. Suppose my brother is the life of the party. 'The life of the party is tall' cannot be translated into a statement about me. But the same applies to sensations. There are ways of referring to sensations other than as sensations; for example, as that which is the subject of this chapter, or by giving them proper names – or at least there are if there are sensations, and to suppose otherwise would beg the question at issue.

8. The many-property objection arises from the fact that we ascribe many things to our sensations: a sensation may be painful *and* burning *and* in the foot. How can a state theorist handle this?

The state theorist recasts 'I have an *F* sensation' as 'I am in an *F* sensation-state.' Hence, the obvious account for him to give of 'I have a sensation which is *F* and *G*' is 'I am in a sensation-state which is *F* and *G*'.

But this conjunctive style of account faces a decisive difficulty. Suppose I have a sensation which is *F* and a sensation which is *G*, then, on the state theory, I am in a sensation-state which is *F* and in one which is *G*. But there may at a given time be only one such unitary state for a given person; therefore, I am in a sensation state which is *F* and *G*. But the latter is the state theorist's account of 'I have a sensation which is *F* and *G*'. Hence, the conjunctive style of account has as a consequence that 'I have a sensation which is *F* and a sensation which is *G*' entails 'I have a sensation which is *F* and *G*', which is quite wrong. The latter entails the former, but not conversely; for I may have one sensation which is *F* and, at the same time, another which is *G*. That is, having, for example, a burning, painful sensation in the foot is being conflated with having a burning sensation and painful sensation and a sensation in the foot.

It is important to appreciate that it serves no purpose for the state theorist to try to avoid this consequence by renouncing the commitment to there being at most one sensing or sensation-state for a given person at a given time. If we may have many sensings for one person at a time, sensings must clearly be strongly distinct from persons and to have a sensation will be, as on the act-object theory, to be related to something other than oneself. The theory will be nothing more than the verbal recommendation to use the word 'state' rather than the word 'object'.

What the state theorist must do is give a different account from the conjunctive one of how his theory handles statements that a particular sensation is *F* and *G* and . . . A number of different answers are possible, but it turns out that the various possibilities are essentially the same as those that arise in the discussion of the corresponding objection to the adverbial theory and so I will postpone the matter until then.

9. The complement objection to the state theory is a special case of a general way of showing that some term does not qualify a given thing. We show that if the term did, so might its complement.

For example, the view that truth is a property of sentence *types* may be refuted by noting that 'is true' and its complement 'is not true' may apply to one and the same sentence type depending on the meanings given to the constituent terms of that type. Thus, 'He is a bachelor' may be true if by 'bachelor' is meant bachelor of arts but false otherwise (and, likewise, true or false depending on who is meant by 'He'). And there are, of course, two characteristic responses to this kind of observation: to look for a new entity to be the bearer of truth-value, like external sentences or propositions; or to argue that we are dealing with a relational predicate – like 'is true in *L*' or 'is true said by *S* at *t*' – rather than a one-place predicate. A second example, more mundane but closer to current concerns, is the view that 'school-age' in 'I have a school-age child' qualifies having a child rather than the child; that is, that being of school-age is, strictly, a property of having children rather than of children. One way of showing that this view is false is to observe that 'I have a school-age child' and 'I have a non-school-age child' are both true. But nothing, including the having of children, can be both *F* and non-*F*, hence it is a child, not the having of it, which is or is not of school-age (and there must be at least two children).

In parallel with the child case, it may be the case that 'I have a painful sensation' and 'I have a non-painful sensation' are both true at the one time, hence we cannot construe being painful or not as a characteristic of the having of the pain rather than the pain. For if we did, we would have a state – in this case, a sensing – being both *F* and non-*F*.

As with the first objection, there are a number of replies that might be made on behalf of the state theory which are essentially the same as the replies to the corresponding objection to the adverbial theory, and will thus be discussed then.

10. Two digressions. First, the possibility of having different kinds of sensations at the one time also seems to me to undermine the analogy commonly drawn between sensations, colours, and wax impressions by those who wish to deny that there are mental objects.

On the way to his adverbial theory to be discussed below, C. J. Ducasse suggests colour predicates as a model for sensation predicates: the relation between 'has a severe pain in his foot' and 'has a sensation' is like that between 'is bright red' and 'is coloured'.¹²

In what I take to be similar vein, Descartes suggests that we view sensations on the model of impressions in wax: 'I allow only so much difference between the soul and its ideas as there is between a

¹² *Nature, Matter and Mind*, see ch. 13.

piece of wax and the various shapes it can assume.¹³ Presumably the notion here is that, as far as ontology goes, for a person to have a particular kind of sensation is like a piece of wax assuming a particular shape.

But it is impossible for one object to be two different colours or shapes at once. Though we may say that an apple is both red and green, by this we mean that one part is red and a *different* part is green; likewise, a statue may be different shapes at a time only in the sense that different parts are different shapes. The analogies, therefore, fail at a crucial point.

It might be objected that, though the analogies fail, they do not do so at a crucial point. However, I think it can be shown that the disanalogy pointed to is crucial. The point of suggesting an analogy between, say, 'X is bright red' and 'X has a severe pain' is to suggest that we view the semantic role of 'severe' as paralleling that of 'bright'. 'Bright' does not stand for a feature of what 'red' denotes; instead it serves to describe X more precisely, to identify more closely or delimit the class to which X belongs: X belongs not just to the class of red things, but to a proper sub-class of that class – the class of bright red things as opposed to, say, the class of dark red things. This is why X cannot be both bright red and dark red at the same time: 'bright' and 'dark' serve to say different, incompatible things *about* X. Likewise, if 'severe' served, by analogy with 'bright', to say something about X rather than about a pain in 'X has a severe pain', X could not have both a severe and a mild pain at the same time, for this would involve *one* thing, X, having incompatible characteristics. By way of contrast, the act-object theory has no trouble here. 'Severe' in 'X has a severe pain' serves to say something about a pain on this theory, and all that needs to be said of the case where X has a severe pain and a mild pain is that there must be *two* pains, one mild, one severe – which is precisely what theorists who deny that there are mental objects cannot say, for they cannot say that there are any pains at all.

The second digression concerns a point drawn to my attention by Keith Campbell. In my discussion of the state theory, I have assumed that persons *qua* persons really exist, for I have treated the theory as analysing mental objects away in favour of states of persons. And if one adopted a Humean-style bundle theory of the person according to which persons are 'convenient fictions' and statements putatively about them are analysable in terms of sets of individual mental experiences

¹³ Descartes: *Philosophical Writings*, p. 288.

bearing some common relation to each other, then my case against the state theory would be undermined. My reply to this objection is that a bundle theory of the person is only as good as its account of the relation between the individual experiences in virtue of which they constitute a person. And, to date, no remotely plausible account of this relation has been offered. (See Armstrong, *A Materialist Theory of the Mind*, p. 55ff.)

11. I now come to the most widely canvassed theory of those which deny that there are mental objects, the so-called adverbial theory held by, for example, Ducasse, R. M. Chisholm, and Aune.¹⁴ Our discussion will be couched principally in terms of our main concern, visual images, in particular, for concreteness, after-images, as a change from bodily sensations.

The basic idea behind the theory is to utilise the fact that, on standard views, after-images, sensations, and the like, cannot exist when not sensed by some person (sentient creature), in order to reconstruct statements which purport to be about sensations, after-images and so on, as being about the way or mode in which some person is sensing. Thus, 'I have a red after-image' becomes 'I sense red-ly', and 'I have a pain' becomes 'I sense painfully', and so on.

A parallel often appealed to in presentations of the adverbial analysis is the elimination of talk putatively about smiles in favour of talk about the manner of smiling; as in the recasting of 'Mary wore a seductive smile' as 'Mary smiled seductively.' Similarly, it is pointed out that one way of showing that we need not acknowledge the existence of limps or dances is to note that 'He has an unusual limp' and 'Patrick dances a magnificent waltz' may be transcribed to 'He limps unusually' and 'Patrick waltzes magnificently', respectively.

The two objections I will be raising against the adverbial theory parallel the two raised against the state theory. This will surprise no one who accepts Donald Davidson's general approach to adverbs,¹⁵ for on this approach there will be no significant difference between the state and the adverbial theories – except, perhaps, that the adverbial theory will have events in place of states, a difference which is not important in this context. I want, however, to keep my objections as independent as possible of the controversial issues surrounding the whole question of the semantics for adverbial modification.

¹⁴ Ducasse, *Nature, Matter and Minds*, R. M. Chisholm, *Perceiving*, R. Aune,

op. cit.

¹⁵ See 'The Logical Form of Action Sentences'.

12. Our statements about after-images are not just to the effect that an image is red, or square, or whatever; they are also to the effect that an image is red *and* square *and* . . . The first objection I will be raising for the adverbial theory turns on this point that an after-image has many properties, and will be referred to as the many-property problem.

It seems to me that adverbial theorists have been rather reticent about how they handle this problem. It is clear enough that their view is that to have an after-image which is *F*, is to sense *F*-ly – the attribute, *F*, goes to the mode or manner, *F*-ly. But it is not clear just what account would be offered of having an after-image which is *F* and *G*. Do both of the (in their view, apparent) attributes go to separate modes, so that to have an after-image which is *F* and *G* is analysed as sensing *F*-ly and *G*-ly; or do we have a new compound mode, *F*-*G*-ly? It seems to me that both these answers, and the variants on them, face substantial difficulties.

Suppose having an *F*, *G* after-image is analysed as sensing *F*-ly and *G*-ly.¹⁶ This conjunctive style of answer has the advantage of explaining the entailment from 'I have a red, square after-image' to 'I have a red after-image'; for it will correspond to the entailment from 'I sense red-ly and square-ly' to 'I sense red-ly.'

But if this answer is adopted, it will be impossible for the adverbial theorist to distinguish the two very different states of affairs of having a red, square after-image at the same time as having a green, round one, from that of having a green, square after-image at the same time as having a red, round one; because both will have to be accounted the same, namely, as sensing red-ly and round-ly and square-ly and green-ly. In essence, the point is that we must be able to distinguish the statements: 'I have an *F* and a *G* after-image', and 'I have a *F*, *G* after-image', and the conjunctive answer does not appear to be able to do this.

In discussion of this objection, it has been suggested to me (by Edward Madden) that the adverbial theorist might have recourse to the point that when I have a red, square after-image at the same time as a green, round one, they must (as we say) be in different places in my visual field: the red one will be, for instance, to the left of the green one. But how can this help the adverbial theorist? For 'I have a red after-image to the left of a green one' raises the same problem; namely, that it

¹⁶ This is the obvious interpretation of Ducasse, *Nature, Mind, and Death*, ch. 13, §22.

cannot be analysed conjunctively as 'I sense red-ly and to-the-left-ly and green-ly'; for that is equivalent to 'I sense green-ly and to-the-left-ly and red-ly', which would be the analysis of 'I have a green after-image to the left of a red one.' (And, likewise, for 'there-ly' and 'here-ly' in place of 'to-the-left-ly'.)

Perhaps the thought is that when applied to after-images terms like 'red' and 'square' are *incomplete*, they demand supplementation with a term indicating location in a visual field. But this cannot be right. I can know perfectly well what saying someone has a red or a square after-image means without having any idea at all of the location of the after-image. Moreover, it is evidently not possible to give an exhaustive list, P_1, \dots, P_n , of all the parts of a person's visual field that might be occupied by one of his after-images. So that 'I have a red after-image' cannot be analysed as 'I sense red- P_1 -ly or . . . or red- P_n -ly.' The best that can be done is '($\exists x$) [x is a part of my visual field and I sense red- x -ly]', which – leaving aside the question of interpreting quantification into adverbial modification – commits the adverbial theorist to the existence of a species of mental object, namely, parts of visual fields, and so undermines the whole rationale behind his theory.

13. What other answers might the adverbial theorist give to the many-property problem? One answer might take its starting point from the ambiguity of a statement like 'He spoke impressively quickly.' Here 'impressively' can be taken as modifying 'spoke', in which case we are regarding the statement conjunctively – as equivalent to 'He spoke impressively and quickly.' Alternatively and more naturally, 'impressively' can be read as modifying 'quickly' – just as 'very' modifies 'quickly' not 'spoke' in 'He spoke very quickly.' Likewise, the adverbial theorist might argue, we should translate 'I have an *F*, *G* after-image' as 'I sense *F*-ly *G*-ly', where the latter is not to be read conjunctively with '*F*-ly' and '*G*-ly' both modifying 'sense', but with just one adverb, say '*G*-ly', modifying 'sense' and the other, '*F*-ly', modifying '*G*-ly'.

There seem to me to be two objections which, taken together, are decisive against this answer to the many-property problem. First, if we consider an actual example, for instance, the analysis of 'I have a red, square after-image' as 'I sense red-ly square-ly', it is hard to see how one could in a non-arbitrary manner decide which adverb modified which. Does 'red-ly' modify 'square-ly', or vice versa? I cannot see any way of settling such a question rationally: it is, for example, equally impossible to have a colourless, shaped after-image as it is to have a

shapeless, coloured after-image; and, further, it seems to make no difference which order one reads the adverbs in.

Secondly, suppose the adverbial theorist finds a suitable ground for settling the question as to which adverb modifies which, and suppose it is 'red-ly' which modifies 'square-ly'; then, he is faced with the absurd consequence that 'red' takes a different meaning in 'I have a red after-image' to that it takes in 'I have a red, square after-image'. For in the former, on the adverbial theory itself, 'red' indicates a mode of sensing, the former statement translating to 'I sense red-ly'; while in the latter statement 'red' does not stand for a mode of sensing at all, because the latter statement, on the theory, translates to 'I sense red-ly square-ly', with the 'red-ly' understood as modifying 'square-ly' and *not* 'sensing'. There are, of course, cases where the one adverb sometimes modifies a verb and sometimes another adverb: witness our earlier example, 'impressively' – in 'He spoke impressively' it modifies 'spoke', and in 'He spoke impressively quickly' it modifies 'quickly' (on the most natural reading). But this is of no assistance to the adverbial theorist. It is clear that 'impressively' plays a different, though related role in the two statements – this is why 'He spoke impressively quickly' does not entail 'He spoke impressively' – while, on the contrary, it is clear that 'red' plays the same role in 'I have a red after-image' and 'I have a red, square after-image'. This is why the latter does entail the former, and why having a red, square after-image is properly described as a special case of having a red after-image.

14. Although W. Sellars does not address himself directly to the many-properties question, he does use a suggestive notation in this connexion.¹⁷ When talking of having a red, triangular sense-impression, he talks of sensing red-triangular-ly. The precise significance of the hyphenation is not made explicit, but an obvious interpretation of it is as indicating that red-triangular-ly is not a mode of sensing having red-ly as a component; it is, rather, a quite new mode of sensing; and so the meaning of 'red-triangular-ly' is not to be viewed as being built out of independently semantically significant components like 'red' and 'triangular'; and likewise for 'green-square-ly', etc.¹⁸

¹⁷ In, e.g., 'Reply to Anne', in *Intentionality, Minds and Perception*; and *Science and Metaphysics*. In 'The Adverbial Theory of the Objects of Sensation', Sellars argues that what follows is *not* his view. But it is, in any case, worth consideration. In the latter paper, Sellars emphasises the role of comparative analyses in his adverbial theory. These are criticised in §19, below.

¹⁸ A view of this kind is explicitly advanced by G. Pitcher in 'Minds and Ideas in Berkeley'.

Put thus baldly, this view obviously faces in more acute form the difficulty just considered. Having a red, triangular after-image is a special case of having a red after-image, hence any adverbial theorist must treat sensing red-triangular-ly as a special case of sensing red-ly. But on this view in question, sensing red-triangular-ly fails to have sensing red-ly as even a component.

The view might, however, be refined. In discussions of the step from 'This is a horse's head' to 'This is a head', it is sometimes suggested that the latter should be read as 'This is a head of something', so that the step can be viewed as Existential Generalization. In similar vein, it might be suggested that 'I have a red after-image' should be expanded to 'I have a red after-image of some shape', and consequently its adverbial translation should be expanded to 'I sense red-some-shape-ly'. On this view, red-ly is not a mode of sensing at all. The modes of sensing are red-triangular-ly, red-square-ly, green-round-ly, and so on, and sensing red-ly is to be understood as sensing red-square-ly or red-round-ly or red-...-ly.

There seem to be two serious difficulties facing this suggestion (apart from the difficulty of giving a precise construal of the dots). The first is that the modification appears to undermine the adverbial theorist's claim to be offering a philosophically perspicuous account of after-images. When I have a red, square after-image, the redness and the squareness appear as distinguishable elements in my experience; and hence elements that it is desirable to have reflected in distinct elements of any offered analysis. The act-object analysis of having an after-image clearly meets this desideratum: to have a red, square after-image is to be in a certain relation to a mental object which has as distinct properties redness and squareness. The adverbial theory, on the modification in question, does not; for having a red, square after-image is accounted as sensing red-square-ly, where the hyphenation indicates that this mode of sensing is not to be further broken up into distinct elements. Indeed, on this view, someone who remarks on the common feature in having a red, square after-image and having a red, round after-image is making a plain mistake – the first is sensing red-square-ly, the second sensing red-round-ly, which are different, and that is that. But, far from being a plain mistake, the remark looks like an evident truth.

The second objection¹⁹ derives from the point that there are indefinitely many things that may be said about one's after-images. An

¹⁹ This objection can also be applied to the suggestion discussed in §13.

after-image may be red, red and square, red and square and fuzzy at the edges, red and square and fuzzy at the edges and to the left of a blue after-image, and so on.

Now consider how the adverbial theory should handle 'I have a red, square, fuzzy after-image.' It cannot analyse this as 'I sense red-square-ly and fuzzy-ly', for essentially the same reasons as the conjunctive account had to be rejected. In brief, such a treatment would confabulate 'I have a red, square, fuzzy after-image' with 'I have a red, square after-image and a fuzzy after-image.' Should the theory then abandon the view that red-square-ly is a fundamental mode of sensing, and adopt the view that red-square-fuzzy-ly is a fundamental mode of sensing? On this further modification, 'I have a red, square fuzzy after-image' would go to 'I sense red-square-fuzzy-ly'; and 'I have a red, square after-image' would be analysed as, roughly, 'I sense red-square-fuzzy-ly or I sense red-square-sharp-ly.' Thus, on this further modification, red-square-ly, green-round-ly, and so on, are no longer modes of sensing; rather red-square-fuzzy-ly, green-round-sharp-ly, and so on, will be the various ways of sensing.

However, in view of the point this objection started with, this process of modification will continue without end. For any n that the adverbial theorist offers an analysis of 'I have an F_1, \dots, F_n after-image' as I sense $F_1 \dots -F_n$ -ly', he can be challenged for his analysis of 'I have an F_1, \dots, F_{n+1} after-image'; and so, for the reasons above, be forced to abandon $F_1 \dots -F_n$ -ly in favour of $F_1 \dots -F_n F_{n+1}$ -ly as a basic mode of sensing. This means that the adverbial theorist cannot ever give even a single example of a basic mode of sensing, and thus cannot ever complete even one of his adverbial analyses; and even if he could, would, moreover, end up with a theory no better than the no-structure one rejected earlier.

15. I suspect that some adverbial theorists who have written down expressions like 'red-square-fuzzy-ly', have meant by the hyphenation no more than that mode of sensing associated with what we normally, and in their view misleadingly, call having a red, square, fuzzy after-image. But this is not to give us a theory we can oppose to the act-object theory; it is merely to express the hope that such a theory may be forthcoming. It is not to argue or show that we can do without mental objects; it is just to say that we can, for the central question of how to interpret the hyphenation is left unanswered except for a reference to the very theory being denied.

16. My second objection to the adverbial theory is, in essence, the

complement objection transferred from the state theory to the adverbial. Just as it is not possible for something to be F and non- F at the same time, it is not possible for a person at a given time to V both F -ly and non- F -ly. I can sing badly easily enough, but I cannot sing both well and badly at the same time; I can run quickly, but not both quickly and slowly; and I can inspect carefully, but not both carefully and carelessly; and so on and so forth.

Therefore, to have an after-image which is F cannot be to sense F -ly; for it is manifestly possible to have an after-image which is F at the same time as one which is non- F : I may have a red and a green after-image at the same time, or a square and a round one at the same time; while it is not possible to sense F -ly and non- F -ly at the same time. (And likewise for the bodily sensations.)

The only reply which appears to have any real plausibility here is to urge that, though one cannot V both F -ly and non- F -ly at a given time, one can V F -ly with respect to A and V non- F -ly with respect to B . For instance, I can, during a concerto, listen happily to the strings and unhappily to the piano. And that when I have a red and a non-red after-image together, I am sensing red-ly with respect to one thing and non-red-ly with respect to another. But what are these things with respect to which I am sensing, for there need, of course, be no appropriate physical things in the offing? It is hard to see what they could be other than the mental objects of the act-object theory.

17. Two lines of objection to the arguments just given might be thought to arise from Terence Parsons' 'Some Problems Concerning the Logic of Grammatical Modifiers'.²⁰

(i) Parsons claims that:

(1) John wrote painstakingly and illegibly.

and

(2) John wrote painstakingly and John wrote illegibly.

are not equivalent because – though (1) entails (2) – (2) does not entail

(1). He gives two cases which he claims show (2) may be true when (1) is false:

if there were two separate past occasions on which John wrote, on one of which he wrote painstakingly, and on the other of which he wrote illegibly, but no past occasion on which he did both at once . . . Also if on one and the same occasion he wrote painstakingly with one hand and illegibly with the other. [p. 331]

²⁰ I am indebted to Barry Taylor for drawing my attention to the relevance of this paper.

This might appear to threaten my arguments in two ways. First, in my discussion of the conjunctive reply to the many property problem, I was clearly working under the general assumption that there is no significant distinction between a statement like (1) and the corresponding statement like (2). Second, Parsons' second case where (2) may be true while (1) is false, could easily be modified to threaten the principle that one cannot *V-F-ly* and non-*F-ly* at the same time, and so my discussion of complementation *vis-à-vis* the adverbial theory. The modification would be to consider a case where John wrote illegibly with his left hand while writing legibly with his right; would he then be writing legibly and illegibly at the same time?

The threat, however, is more apparent than real. This is obvious in the first case Parsons gives, because it involves considering *different* times of writing; and our discussion of the conjunctive reply involved just *one* time – we noted the possibility of having different visual images at the *same* time. In short, it is sufficient for us if 'John is writing painstakingly and illegibly' is equivalent to 'John is writing painstakingly and John is writing illegibly', and the first case does not threaten this equivalence.

With the second case we must remember that we are dealing with something that can be judged both overall and in a particular aspect. Normally, when we say that Jones wrote illegibly, we mean that overall the writing was illegible, not that every word was illegible (likewise, a speech may be impressive without every part of it being impressive). In this sense, 'Jones wrote illegibly with one hand (his left, say)', does not entail that Jones wrote illegibly, for most of the writing may have been with his right hand in elegant cursive; and similarly for 'painstakingly'. And in this sense Parsons will be right that it is possible that Jones wrote painstakingly with one hand and illegibly with the other without (1) being true, but equally this is possible without (2) being true, so the case fails to establish that (2) may be true without (1) being true.

On the other hand, if we take 'Jones wrote illegibly' to count as true if any part or aspect of Jones' writing was illegible, and likewise for 'painstakingly'; then if Jones wrote painstakingly with one hand and illegibly with the other, (2) must be true, but so will (1); and so there is still no case for denying that (2) entails (1).

Parallel remarks apply to the possibility of writing illegibly and legibly. It is not, in the overall sense, possible to write, on a given occasion, both legibly and illegibly (though it is possible to write in a

manner which deserves neither epithet). It is possible that *one* aspect of one's writing be legible and *another* be illegible. But we noted in §16 that the possibility of *V-ing F-ly* with respect to *A* while *V-ing non-F-ly* with respect to *B* is of no use to the adverbial theory, for the only plausible candidates for *A* and *B* in the sensing case are mental objects.

In general, whether or not one agrees with my discussion of (1) and (2), there is little comfort for the adverbial theorist in Parsons' remarks. The case for distinguishing (1) and (2) rests heavily on there being something *more* involved than just the person (John's hand as well as John); and the adverbial theorist's aim is to effect an ontic reduction to the person alone in his account of sensing.

(ii) The second line of objection concerns the 'predicate-modifier' formal semantics for adverbs given by Parsons. By contrast with Davidson's event-predicate treatment,²¹ these semantics view adverbs as functions on predicates; and it might be thought that they could be appealed to by the adverbial theorist to elucidate 'green-triangularly' and so on in a way which acknowledged structure without facing the problems of the conjunctive treatment.

The 'predicate-modifier' theorist must, however, see a certain *intensionality* in *all* adverbs. 'x senses' and 'x breathes' are (we may suppose) co-extensional. But John does not breathe slowly if and only if he senses slowly, and the adverbial theorist will not allow that he breathes red-ly if he senses red-ly. Without going into the details,²² this means that possible worlds (and beings) other than the actual must be invoked in predicate-modifier semantics. Hence, they achieve nothing for the adverbial theory. Perhaps (perhaps) we need possibilities for the elucidation of modal statements, but 'I have a pain' and 'I have a red image' are statements about the actual world, if any are. Moreover, appeal to possibilities would make a mockery of any claim of the adverbial theory to greater ontological economy than the act-object.

It may be objected to this last argument that because extension (in the actual world) is notoriously insufficient to determine intension, any adequate semantic theory – even for non-modal statements – requires acknowledging possible worlds and beings other than the actual.

In order to meet this objection it is necessary to sketch (very briefly) a possible-world semantics. '*A* is red' is true if and only if *A* belongs to the class of red things. But this class does not determine the intension of

²¹ In the paper cited in footnote 15.

²² But see David Lewis', 'General Semantics', especially p. 28.

'red'. The latter is determined (more nearly, anyway) by the class of possible red things, which we can view as the union of the classes of red things in each possible world. Hence, the intension of 'red' may be viewed as a function with the set of possible worlds as its domain and the set of red things in all possible worlds as its range, which goes from each possible world to the set of red things in that possible world: that is, the value of [red] at w is the set of red things in w (where [...] is the intension of ...).

We can now say that ' A is red' is true in w if and only if A belongs to the value of [red] at w . The important point to notice here is that the evidently non-modal nature of ' A is red' is reflected in the fact that the value of [red] at w has as its members only the red things in w , and the value of [red] at *other* worlds is *irrelevant*. By contrast, ' A is necessarily red' is true in w if and only if A belongs to the value of [red] in all worlds (or all worlds accessible to w , or something along these lines) and these truth-conditions do involve red things outside w .

In similar vein, the truth-conditions for 'Jones walks' will be along the lines of: 'Jones walks' is true in w if and only if Jones belongs to the value of [walks] at w , where [walks] is a function from each possible world to the set of walkers in that world. What about 'Jones walks slowly'? According to the predicate-modifier approach, [slowly] is a function from one intension to another, that is, on the possible-world conception, a function from one function to another function. But the intensional aspect noted earlier means that it cannot be said that 'Jones walks slowly' is true in w if and only if Jones belongs to the value of [slowly] at the value of [walks] at w . Because, for any w in which every walker is a thinker and *vice versa*, the value of [walks] at w will be identical with the value of [thinks] at w ; and so, for every such w , we will have every slow walker a slow thinker, and *vice versa*. This unacceptable consequence can only be avoided by taking the value of [walks] at worlds *other than* w into account in giving the truth-conditions in w for 'Jones walks slowly'. And this is wrong. Even if one grants the possible worlds of the semantics just sketched, 'Jones walks slowly' ought – like ' A is red' and unlike modal statements – to be given truth-conditions in a possible-world w involving only how things are in *that* world.

18. To this stage, we have been concentrating on short-comings in alternatives to the act-object theory. I want now to mention and develop a positive advantage of the theory.

Many of the terms that we use to describe material things may also

be used to describe visual hallucinations: both may be said to be red, triangular, moving, and so on. This is not true to the same extent in the case of bodily sensations: pains and itches are not triangular or red, and chairs and tables are not severe or intense. However, certain spatial locations apply equally to both: both an achse and a bone may be said to be in the foot or in the hand.

How is this striking fact to be explained? Obviously, it is not a linguistic accident, a fantastic fluke in the development of English (and, of course, a similar situation exists in French, German, Russian, etc.) that 'triangular', for example, may apply equally to an after-image and a figure in chalk on the black-board, or that 'in my foot' may apply equally to a pain and a blood vessel.

The simplest explanation, and, thus, in the absence of strong contrary indications, the best, is that both after-images and chalk figures may have the same property, that of being triangular, and, hence, may warrant the same linguistic description; and, likewise, both pains and blood vessels may have the same property, that of being located in the foot, and, hence, may warrant the same linguistic description. But this explanation is only available to one who acknowledges the existence of after-images and pains. For if they do not exist, they cannot have any properties at all, and, *a fortiori*, cannot have the same property as a chalk figure or a blood vessel.

Essentially the same point can be put in terms of meanings (and so in a manner more neutral concerning realism about properties). The simplest theory is that 'triangular' and 'in the foot', for example, mean the same when applied to mental objects and material objects. What I am saying about the chalk figure when I say it is triangular is the same as what I am saying about the after-image when I say that it is triangular. Likewise, when I say that my pain is in my foot I am making the same claim about my pain as I make about a blood vessel when I say that it is in my foot. And this theory is available only to one who acknowledges that *there is* an after-image and that *there is* a pain. For if after-images and pains do not exist, they cannot possibly be said to be triangular or in the foot in the sense that chalk figures and blood vessels may be.

This question of the properties that mental objects have (to put the matter in its realist guise), as well as bearing on the existence of such objects, also bears of course on their nature. There is little philosophical bite to the bald assertion that there are mental objects, that in itself is just an affirmation of pluralism about the mind. The bite comes with

our claim that these mental objects really are red, triangular, in the foot, or whatever.

This argument for mental objects will provoke two related lines of reply. First, that there are good reasons, independent of whether pains and after-images exist, for denying the univocality thesis just sketched, for denying, that is, that 'red', 'square', 'five inches across', and the like mean the same when applied to visual hallucinations as they do when applied to physical objects; and for denying that 'in my foot', 'in my stomach', and the like mean the same when applied to bodily sensations as they do when applied to physical objects. Secondly, that, in support of the denial of univocality, it is possible to give intuitively plausible *special analyses* of the meanings of the terms in question when applied to visual hallucinations and bodily sensations. For instance, it might be suggested that the meaning of 'in my foot' in 'I have a pain in my foot' is captured by analysing the latter as 'I have a pain of the kind typically caused by a disturbance in my foot'; and that the meaning of 'red' ('square') in 'I have a red (square) visual image' is captured by analysing the latter as 'Something is going on in me like what goes on in me when I see something red (square).'

19. Both lines of reply seem to me to be particularly weak in the visual hallucination case.

(i) Though it is commonly asserted that univocality fails for hallucinations, it is hard to find any real arguments for the claim – other than arguments against the existence of hallucinations as mental objects, either based on adverbial or state theories of the kind we have already rejected or on behavioural analyses that we have agreed to have been shown mistaken elsewhere.

It has, of course, been widely maintained that the application of terms like 'red' and 'square' to visual hallucinations is *logically secondary* to their application to physical things. But this is a separate question to the univocality one. What is meant by saying that the application of, say, 'square' to visual hallucinations is logically secondary is something like (the matter is not always entirely clear) one or more of: 'square' could not apply to hallucinations unless it also applied to physical objects; one could not learn 'square' as applied to hallucinations prior to learning its application to physical objects; there could not be a language containing 'square' which applied to hallucinations but not physical objects. Now, whether or not such claims are correct (and I find them less plausible than many do), they relate to the conditions of *application* of terms to hallucinations, not to the nature

(that is, meaning) of *what* is applied. Hence, they are separate from the issue of univocality. That is, the fact (if it is a fact) that the application of a term to *As* is logically secondary to its application to *Bs* does not entail that the meaning of the term is different when applied to *As*.

It is, I think, a confusion of the issues of univocality and logical secondariness which leads P. T. Geach in *Mental Acts* to the surely absurdly extreme position that temporal predicates like 'before', 'now', 'lasts for five minutes' are equivocal in their application to mental and physical things: 'though time-determinations . . . can really be ascribed to sensations . . . nevertheless we are not saying the same thing when ascribing them to sensation as when we apply them in the physical world' (p. 128). Although this claim that, for instance, 'preceded' in "The red after-image preceded the green one" means something different from what it means in "The explosion preceded the flash" is extremely implausible; a claim like that our use of 'preceded' in the first statement is logically secondary to its use in the second is not, I suspect that Geach has slid from the latter to the former.

There is, moreover, good reason for accepting univocality in the case of visual hallucinations. As J. L. Austin emphasises in *Sense and Sensibilia*, we are only rarely deceived by our visual hallucinations. Nevertheless, we are sometimes deceived, and, more commonly, are sometimes undecided. I may take a mirage for a real oasis, or I may simply not know whether I am seeing a mirage or an oasis; I may take a red after-image to be a faded red blob of paint on the wall, or I may simply not know whether what I am seeing is an after-image or a paint blob; or I may take a phosphene (what happens when a certain part of the brain has a very small electric current passed through it) to be a real flash of light, or I may simply not know whether it is a phosphene or a flash of light.

The cases where I am undecided seem to me to provide substantial support for univocality. Suppose I just cannot tell whether the bright yellow flash is a phosphene or a flash of light. Then I will not know whether to describe my experience as seeing a yellow flash of light or as having an hallucination of one; but I will know that 'bright yellow' is the term to use to describe my experience *whether or not* it is a phosphene or a flash of light. But to deny univocality is to adopt a *two meanings doctrine*: 'bright yellow' takes two meanings, one when applied to physical things like light flashes, another when applied to hallucinations like phosphenes; accordingly, one cannot know the meaning of 'bright yellow' unless one knows whether it is being

applied to something physical or to a visual hallucination. And, hence, it is a consequence of denying univocality that, in the case we have described, I do not know what 'bright yellow' means; because I do not know whether or not I am hallucinating. This is absurd. Clearly, I know precisely what I mean by saying that I am seeing a bright yellow flash, even though I do not know whether the flash is a light flash or a hallucination, and I do not need to find out whether it is or is not a phosphene in order to find out what I meant.

By way of contrast, with a word like 'burning' which does take one meaning applied to a bodily sensation, say, an itch, and another (related) meaning when applied to a physical thing, say, a fire, one does not know what is meant if someone says that something is burning unless one knows whether the something is mental or physical. It might be suggested that I do know the meaning of 'burning' even if I do not know to what it is being applied; for I know that either it means what it does when applied to something mental, or what it does when applied to something physical. But this is to concede that I do not know the meaning of 'burning' at all in such a case. I know what the two possibilities are, but not which one obtains – knowing the two possibilities for the next Prime Minister is *not* knowing who the next Prime Minister will be. Likewise, the denial of univocality cannot hold that I know the meaning of 'bright yellow' in the case of the previous paragraph on the ground that I know that 'bright yellow' either means what it does when applied to light flashes or what it means when applied to phosphenes. This is not knowing what 'bright yellow' means, it is merely knowing what it *might* mean.

(ii) The difficulties for analysing 'I have a red (square) visual image' along the lines of 'Something is going on in me like what goes on in me when I see something red (square)' parallel those raised for comparative analyses of the phenomenal use of 'looks' in chapter 2, §4. I will, therefore, just summarise them.

Not only is it possible, but people actually have visual images whose colours are distinct from those of any physical objects they have ever seen, and likewise for shapes; they have, therefore, images which are *F* without being in a state of the kind normally brought about in them by seeing things which are *F* (and without having something going on in them like what etc., and so on for the various formulations). Moreover, it is clear that not only might the colour or shape of a person's image differ from that of any physical object he has seen, it might differ from that of any object there is. Therefore, it does not help to

point out that the state will at least be of the kind normally brought about in people in general by seeing things which are *F* (and, further, there might not be any other people).

Moreover, it does not help this style of analysis to point out that the state will be of the kind that *would* be brought about *if* one were to see an *F*. There is nothing contradictory about a totally colour-blind person having coloured images. Indeed, some psychologists believe that there are such people, that is, that there are people who are all the time in the kind of situation all of us are in at dusk – able to have coloured images, but with everything physical looking grey. Such a person will have an image which is, say, red, while being in a state which, because of his colour-blindness, is unlike the state he is in when (or would be in if he was) seeing something red.

Contrariwise, a person may be in a state of the kind normally caused in him by seeing an *F*, without having an image which is *F*. This follows immediately from the case described in chapter 2, §4.

20. The two lines of reply of §18 have more bite in the case of bodily sensations. A number of initially attractive arguments have been offered for denying the univocality of location idioms as applied to physical things and bodily sensations. And this denial of univocality has been supported by not implausible analyses of the location element in statements concerning bodily sensations. Nevertheless, I think that on inspection the initial attractiveness of the arguments for denying univocality disappears and that serious problems emerge for the proffered analyses of the location element, so that both lines of reply fail even in the bodily sensation case. I will start by considering the arguments for denying univocality of location, for holding, that is, that sensations are not literally located in the way that physical things are.

(i) It is often supposed that the well-known phantom limb phenomena which we were concerned with in §4 show that bodily sensations are not located in the literal sense. J. J. C. Smart, for instance, argues as follows.

we can characterise a pain, for example, as 'in my right thumb' or 'under my breast bone'. What is meant by this? It is quite clearly not that my pain is in my thumb or under my breast bone in the literal sense . . . This is obvious when we consider that I might have a pain 'in my thumb' even though my thumb had been amputated.²³

²³ *Philosophy and Scientific Reason*, p. 103. In my discussion of this and the following objections, I am much indebted to M. C. Bradley, 'Two Arguments Against the Identity Thesis', part II.

This certainly shows that not all sensations are located in parts of the body. But it is hard to see the bearing of this on the question of whether sensations are located *simpliter*. Why not take the phantom limb phenomenon as showing that, though most sensations are located in parts of the body, not all are; some are located in regions near, but outside, the body? Alternatively, (though, in my view, implausibly) the phantom limb phenomenon could be taken as a case of radical mislocation: the pain is taken to be outside the body, but is really in the body, say, in the stump. In either case, the phantom limb phenomenon does not show that sensations are not literally located.

(ii) In chapter xx of *Principles of Psychology*, William James concedes the plausibility of the view being defended here. Concerning the differences between qualitatively identical sensations differently located, he observes that 'The most natural and immediate answer to make is that they [the differences] are unlikenesses of *place* pure and simple.' (§ 'The Meaning of Localization')

He then, however, argues that this answer faces 'an insuperable logical difficulty':

No single *quale* of sensation can, by itself, amount to a consciousness of *position*. Suppose no feeling but that of a single point ever to be awakened. Could that possibly be the feeling of any special *whereness* or *thereness*? Certainly not. *Only when a second point is felt to arise can the first one acquire a determination of up, down, right or left, and these determinations are all relative to that second point.* Each point, so far as it is placed, is then only by virtue of what it is not, namely, by virtue of another point. This is as much as to say that position has nothing *intrinsic* about it . . . a *feeling of place cannot possibly form an immanent element in any single isolated sensation.* [Later in same section, author's emphasis.]

I think there is a crucial ambiguity in this passage as to whether James is taking a relational stance about position in general, or just about the position of sensations. For example, when he says that 'position has nothing intrinsic about it', is he talking about position in general or about the position of sensations in particular? If he is talking about position in general, then his warrant for saying that no *quale* or immanent element of a sensation can constitute its location, will be clear enough. If position in general is relational, then no thing, be it mental or physical, a pain or a chair, can have the position it does in virtue of an intrinsic property. But it is hard to see how this constitutes a difficulty

for one who holds that sensations are literally located. Of course, if one took the view that sensations have only intrinsic qualities, or that only the intrinsic qualities or *quale* of sensations can be known, it would follow either that they are not located or that their location cannot be known. But there is no indication that James takes this view, which is, anyhow, absurd.

On the other hand, it may be that in this passage James is advancing a particular relational thesis intended to apply just to sensations. For example, the claim that 'each point' is placed only by virtue of its relation to 'another point', appears to be about sensation points or points of feeling to the effect that sensations are located only by reference to other sensations. On this view, the location of a sensation would be a matter of its bearing certain relations to other sensations; and if it were adopted, the doctrine that sensations are literally located in parts of the body would have to be abandoned. For on this latter doctrine, a pain in my foot is so located because of its relation to my foot, not because of its relation to other sensations.

James seems, however, to provide no reason to adopt the view that sensations are located solely in virtue of their relations to other sensations. For instance, the point that no single *quale* of sensation can constitute a consciousness of position does not provide a reason; for it bears only on whether location for sensations is relational, not on the *relata* of that relation.

Likewise, James' very plausible claim (in the second and third sentences of the quotation) that if one had only ever been aware of one point, that awareness could not have contained an awareness of position, does not provide a reason. For it applies equally to material things. If I had only ever been aware of one material thing, say a chair, I could not have been aware of that thing as having some location. Awareness of position involves, it is plausible to say, awareness of more than one thing, and, hence, awareness of the location of a bodily sensation involves awareness of something other than that sensation; but it does not follow that that other thing must itself be a sensation. And not only does this not follow, it is in itself implausible. I am now aware of an ache in my left knee, but I have no other bodily sensation, and so am not aware of its location in relation to any other current sensation. Perhaps it will be urged that my awareness of the location of my ache – though not dependent on my awareness of some other current sensation – is dependent on my awareness of the location of past, remembered sensations. But this claim is very implausible.

Amnesiacs, for example, do not have trouble locating their first few sensations after awakening, though they may not remember the location of any past sensations.

(iii) It is sometimes urged that bodily sensations are only 'intentionally' located, because they are where they *feel* to be. A pain in the leg is a pain which feels to be in the leg. Now the phantom limb phenomenon shows that this cannot be quite right, for it shows that some pains which feel to be in a leg are not. But, in any case, it is hard to see how the point counts against the literal location of bodily sensations. Many material objects are located where they appear to be, and are, none the less, literally located there.

Perhaps the point the advocates of this argument have in mind is the (alleged) impossibility of being mistaken about where a sensation feels to be, and so, about where a sensation is, by contrast with the manifest possibility of mistake about the location of material things. But even if we grant the alleged point of difference, why must we construe this as a difference in the sense in which sensations and material things are located? Why not construe it as simply a difference between material things and sensations?

Moreover, there is good reason for denying that our knowledge of the location of our sensations is incorrigible. In §21, cases are described which show conclusively that we can be mistaken about where our own sensations are located.

(iv) Finally, some arguments that can be discussed more briefly. Sometimes it is emphasised that doctors do not detect pains and itches in parts of the body. But, of course, they do – by feeling them in their own case, and by being told about them in their patients'. What doctors do not do is come across sensations during surgery in the way they come across blood vessels, nerves, and so forth. But why accept the principle that everything located in the body can be discovered by surgical procedure? Surely, unless one is to beg the whole question at issue, sensations are a *prima facie* counter-example to this principle.

It also seems to me to be mistaken to argue that bodily sensations cannot be in parts of the body because they are in the mind.²⁴ The sense in which sensations are in the mind is that they cannot exist without the mind (or person) existing – they are incapable of independent existence. Hence, saying that a sensation is in the mind is not assigning it a location incompatible with its being in a part of the body. Nor is there a difficulty here over logical connexions between distinct.

²⁴ See, e.g., D. M. Armstrong, *A Materialist Theory of the Mind*, p. 316.

existences.²⁵ True, if my pain is a located item and if it is dependent on my mind, distinct things are logically connected – which violates one empiricist dogma. But it is equally true that if my pain is *not* located, distinct things are logically connected; for, on any sane view, the mind is not identical with any particular sensation, whether or not sensations are located.

Likewise, it seems to me that there is little force in the consideration that absolutely precise locations cannot be given to one's bodily sensations. The same holds true for clouds and cities. Moreover, on the most widely held interpretation of Quantum Mechanics, the fundamental particles lack an absolutely precise location in the normal sense, and yet they are certainly located. (These particles also provide an example of located items not detected during surgery.)

Finally, there seems to me to be little force in the argument that pains cannot be located in the same sense as physiological occurrences on the ground that we determine the location of the former quite differently from the way we determine the location of the latter.²⁶ I determine the location of things I see quite differently from how I ask you in the second. Visible things have their location determined quite differently from invisible, tangible things; and electrons have their location determined quite differently from mountains. But in none of these cases do we regard the location idiom as equivocal. The differences are to be explained by the differences in the nature of the things located, not by differences in the sense in which they are located.

21. We now come to the question of whether the location element in sensation statements is susceptible to special analysis: analysis which removes the appearance that sensations are items literally located in parts of the body.

(i) In *Intention*, G. E. M. Anscombe says: 'it [is] difficult to guess what you mean . . . if you say that your foot, not your hand, is very sore, but it is your hand you nurse, and you have no fear of or objection to an inconsiderate handling of your foot, and yet you point to your foot as the sore part: and so on' (p. 14).

We agreed in §5 to take it for granted that no full-scale behaviourist account of psychological statements is possible. But this is consistent with the possibility of a behaviourist style of analysis of a particular part of certain psychological statements. For instance, 'He is in

²² The aspect of the matter Armstrong emphasises in *Bodily Sensations*, see p. 78.

²⁶ I take this argument from Jerry Tichelman, *The Mind and the Soul*, p. 75.

uncontrollable pain' cannot be fully analysed behaviourally, but evidently the meaning of 'uncontrollable' can be handled in behavioural terms. Likewise, this passage from Anscombe might be used as the basis for suggesting that the location part of sensation statements can be translated behaviourally, that 'I have a pain in my foot', for example, is equivalent to something like 'I have a pain which disposes me to nurse my foot, direct attention to my foot...'. I will advance two objections to this analysis (apart from the obvious one that it is hard to see how to extend the analysis so as to cover bodily sensations which are mildly pleasurable).

First, though it is true that usually when one has a pain in a part of one's body, one is disposed to nurse that part and otherwise behave in a manner that might reasonably be described as directed towards that part, this appears to be a consequence of something purely contingent – namely, that nursing the relevant part normally relieves the pain, and, generally, that to relieve the pain it is necessary to direct one's attention to where the pain is. But this is not, of course, universally the case. The way to relieve those ear pains caused by disturbances in the mouth is to direct attention to the mouth rather than the ear; and the way to relieve the pains in the arm caused by disturbances in the heart is to direct attention to the heart; and, in general, the way to relieve referred pains is to concentrate on the place of the cause rather than on the place of the pain. Moreover, with the development of analgesics, it is becoming more and more common to direct attention, in effect, to the brain rather than to where the pain or the cause is. It appears, therefore, that though appropriately directed behaviour is correlated with pain location, it is not in any way constitutive of such location: the correlation is far from universal and might not obtain at all.

The second objection derives from a point made by K. Baier. He argues that we can mis-locate our pains, as follows:

Under certain conditions of observation, as when he is not allowed to see the relevant parts of his body, a person may make claims about where on his body he was pricked and where he felt the pain, claims concerning which he later accepts corrections. When told by the experimenter or when allowed to explore the area with his own finger or to watch as he is being pricked again in the same place, he admits that the pains (and the pricks) were not in the place where he first said they were.²⁷

²⁷ 'The Place of a Pain', pp. 142–3.

Another, more mundane case leading to the same conclusion is where you bend down to scratch an itch or rub an ache on the shin and find that it was not quite where you started scratching or rubbing. Moreover, it is possible to become confused in certain extreme situations about which leg is one's left and which one's right, and so, to have a pain in the right leg while thinking it is in the left leg.

As Baier points out, this possibility of error provides a particularly clear difficulty for behaviourist analyses of location. When we have the location of a pain wrong, our behaviour will normally be directed to the wrong place. The possibility of error also rules out suggestions like: the place of a pain is where I would point to if asked.²⁸ If asked, I may point to the wrong place. (Additionally and obviously, I may also point to the wrong place because I wish to mislead, am embarrassed, or whatever.)

(ii) The other obvious way of attempting to find an analysis of pain location is to start from the fact that pains are commonly where their causes are. But referred pains, to which we have already alluded, are clear counter-examples to analysing 'I have a pain in my foot' as 'I have a pain whose cause is in my foot.' Moreover, though 'Every pain has a cause' is true, there is nothing contradictory about uncaused pains, and, in particular, about an uncaused pain in the foot; that is, it is not a necessary truth that a pain in my foot has a cause.

It might be suggested that instead of saying that a pain in the foot is a pain whose cause is in the foot, we say that a pain in the foot is a pain of the kind typically caused by a disturbance in the foot.²⁹ But, first, add, of the kind typically relieved by massaging the foot.²⁹ But, first, pains in the foot do not seem to have any particular phenomenal quality which makes them form a kind (as critics of R. H. Lotze's Local Sign theory³⁰ have emphasised). And, second, sufferers from pains in phantom limbs not uncommonly suffer severe pains 'therein' for many years. These pains are caused by disturbances in the stump, and are, thus, clearly of the kind typically caused by a disturbance in the stump, yet they do not have the pain in the stump. In similar vein, we can imagine a 'brave new world' in which pleasurable sensations are typically caused by direct stimulation of the brain while remaining distributed about the body.

²⁸ This is one possible interpretation of L. Wittgenstein's remarks in *Blue and Brown Books*, p. 50.

²⁹ See, e.g., G. Ryle, *The Concept of Mind*, p. 105.

³⁰ Presented in his *Outlines of Psychology*, part 1, ch. 4.

The obvious tactic at this point is to switch from the place of the cause to the *believed* place of the cause. Now we sometimes know that a pain is a referred one, so that 'I have a pain in my foot' is not equivalent to 'I have a pain whose cause I believe to be in my foot' – I may know that the cause is not in my foot; and I may know this for certain, so that there is no inclination on my part to believe that the cause is in my foot. But, it might be urged, the analysis should be put counterfactually: if I had not known the cause was elsewhere, I would have believed the cause was in my foot. I think it is clear enough that this suggestion faces the same general problem that the counterfactual rendition of the notion of a suppressed inclination to believe faced in chapter 2, §5.

Perhaps 'I had a pain in my foot' entails that if I had not known that the cause of my pain was not in my foot and if I had believed that the cause of a pain and the place of a pain were generally the same in these sorts of circumstances, then I would have believed that the cause of my pain was in my foot. But this is worthless as an analysis for it refers to the very notion, *the place of a pain*, for which an analysis is being sought. And it is certainly not the case that 'I had a pain in my foot' entails that if I had not known that the cause of my pain was not in my foot, then I would have believed that the cause was in my foot; for one way of not knowing that the cause is not in my foot is having no opinion on whether the cause is or is not in my foot, so it might well have been the case that if I had not known the cause was not in my foot, I would neither have believed that it was or that it was not in my foot. In addition, we have the usual problem with counterfactual analyses of the categorical. Surely to say that I have a pain in my foot is to say how things are, not how things would be if things were different.

Baier's point about the possibility of error concerning the place of a pain also constitutes a serious problem for the analysis in question. Believing, as I do, that the cause of a pain is usually where the pain is, when I am in error about the place of a pain I will mis-locate the cause. I will believe it is where I *wrongly* think the pain is.

Baier, naturally, is cognizant of this difficulty, and in his own analysis of pain-location in terms of the believed place of cause he adds a special *unless* clause to give the following:

'The place of someone's pain' means 'The place where, going by the feeling of pain alone, the sufferer would be inclined to say *the cause* of his pain seemed to him to be unless, in the light of further experience

by sight and touch, he would be inclined to say it really was in some other place.' [*op. cit.*, p. 149]

But what does 'going by the feeling of pain alone' amount to? Disturbances in the heart give rise to characteristic pains in the arms and in parts of the chest remote from the heart (often the parts of the chest in where the sufferer mistakenly thinks his heart is). *Going by the feeling alone*, those who experience these pains are inclined to say that the cause is in their heart – which is where their pains are not. I suspect that Baier really means by 'going by the feeling alone', going by *where* the pain feels to be – the aspect of the pain we are supposed to attend to when we go by feeling alone is not its severity, or its burning quality, not the kind of pain it is, but rather its location or its felt location. But this is to put the cart before the horse. We are seeking an understanding of what it means to say that a pain has a certain location, and we are not going to achieve this by presupposing a grasp of what it means to say that a pain has a certain felt location; for in order to understand 'feels to be in my foot' we need an understanding of 'feels . . . ' and 'in my foot' as applied to sensations.

Moreover, despite the 'unless' clause, Baier's analysis is also exposed to the objection deriving from his own point about the possibility of mis-location. If we can be wrong about the location of a pain going on feeling alone – the point on which we and Baier are agreed – then we can surely also be wrong after subsequent investigation by sight and touch. It is generally agreed that the everpresent logical possibility of perceptual illusion makes the deliverances of sight and touch fallible. Consequently, once the possibility of mistake about pain location is granted, how could subsequent perceptual investigation possibly yield *logically* indubitable knowledge of location? Therefore, despite the 'unless' clause, Baier has left open the possibility of mistaken belief about the place of a pain, and so, the possibility that a subject has a pain in one place, but, despite subsequent investigation by sight and touch, has a mistaken belief about its location and is inclined, consequently, to locate the cause of the pain at a place remote from where the pain really is.

At this point, a radical reply might be suggested. Instead of seeking ever more complex accounts of pain-location in terms of cause, belief, and/or behaviour, it might be suggested that we return to the simple view that 'I have a pain in my foot' means 'I have a pain whose cause is in my foot', and describe cases of referred pain as cases of radical mis-location. When, as we say, I have a pain in my car caused by a

disturbance in my mouth, I really have a pain in my mouth which I mistakenly think is in my ear.³¹

This cannot be right. I may (indeed, I normally do) know that the cause is in my mouth. But 'The cause is in my mouth' is the proffered analysis of 'The pain is in my mouth'. Hence, an advocate of this radical reply cannot say that mis-location has occurred. I have the place of the cause right, and that, on his view, is having the place of the pain right. Further, one thing that is beyond contest is that the pain feels to be in the ear; the cause, however, may not. I may feel the gun disturbance which causes the pain; that is, the cause of the pain may be felt in the gum, and so, in the mouth. But, then, how can the advocate of the view under discussion explain how the pain fails to be felt in the mouth? For on his view there is nothing more to a pain being in the mouth than its cause being in the mouth, and I feel the cause there.

22. This is all I want to say for now in defence of the existence of mental objects. Certain difficulties that have been raised for allowing them as part of what there is parallel those raised against sense-data, and will be considered in the latter context (in chapter 4, §12ff.).

Once mental objects are admitted, the account to be offered of visual hallucinations is obvious. First, we noted in chapter 1, §8 that if visual hallucinations exist, they are immediate objects of perception. They do exist, hence they are immediately perceived. Second, when under hallucination, one is not thereby seeing any physical object, by definition. Therefore, to be under hallucination is to immediately see a mental object which is coloured and shaped and which does not correspond to any physical thing. For instance, seeing an after-image is a hallucination because the coloured, shaped image that is seen does not correspond to any physical reality. (The precise significance of 'does not correspond to any physical reality' is discussed in chapter 7, §10ff.)

23. I want to finish this chapter by considering and rejecting a very general kind of objection to the way the question of the existence of mental objects has been discussed. The objection might be summed up in the slogan: Paraphrase cannot create or destroy entities. The sense of the objection is that whether mental objects exist is a question about the *world*, not a question about language or statements; yet throughout the chapter I talk of whether certain parts of certain statements can be analysed this way or that way, of whether this word or phrase is like an adverb, of whether that word is a name and so on. I talk, that is, about

³¹ Keith Campbell suggested an approach of this kind to pains in phantom limbs to me, but I do not think he would accept this wider application.

language, about the possibility of analyses and paraphrases and readings of logical form, rather than the things themselves.

I think two things need to be emphasised in reply to this. First, of course paraphrase cannot create or destroy mental objects. Pains exist or do not exist regardless of whether anyone has ever carried out a certain paraphrase; and they would exist or not whether or not we had developed a language with statements to be the subject of philosophical analysis. What paraphrase can create or destroy is the *case for or against* believing in certain entities. A parallel is a comprehensive wave theory of light: if such could be made out, it would destroy the case for believing in the corpuscles of the corpuscular theory, but not the corpuscles themselves. The latter either exist or not independent of our theories — it is the reasonableness of believing that they exist that depends on our theories. Likewise, our discussion of language was a discussion of the reasonableness of *accepting* that there are mental objects; and if our discussion was successful, it did not make any mental objects; what it made was a case for believing that there are mental objects.

Secondly, our concern was not with any old statements. It was with *true* statements, statements that tell us how it is; and our concern was with just what they do tell us. If 'I have a red after-image' is true, what it tells us is that I have a red after-image, and what this in turn amounts to depends on what reading should be given to the statement. If, as we argued, it is to be understood on the act-object model, it tells us that there is something red which I have. But if the adverbial theory is right, it tells us how I am sensing and does not require for its truth that there be an object being sensed. This does not mean that empirical matters are irrelevant to the existence of after-images. It is an empirical fact that 'I have a red after-image' and the like are true on occasion; and if they were never true, there would not be any after-images or pains regardless of our earlier arguments. The analysis of statements enters the picture only when we have accepted the truths and are concerned with their implications for what there is.

