What is the problem of perception?

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1. Introduction

It will be obvious to anyone with a slight knowledge of twentieth-century analytic philosophy that one of the central themes of this kind of philosophy is the nature of *perception*: the awareness of the world through the five senses of sight, touch, smell, taste, and hearing. Yet it can seem puzzling, from our twenty-first-century perspective, why there is a distinctively *philosophical* problem of perception at all. For when philosophers ask 'what is the nature of perception?', the question can be confused with other, purely empirical, questions. For example: how do our sense-organs actually work? What are the mechanisms of smell and taste? How do vision and touch actually provide us with information about the world around us? There is much general agreement, in its broad outlines, about how to answer such questions empirically; but it is not clear what role, if any, philosophy has to play in answering these empirical questions. So if these were the only questions about the nature of perception, then it would not be clear exactly what the philosophy of perception is supposed to be about.

Some philosophers (e.g. Brewer 2000) have argued that there is a distinctively philosophical question here, but it is epistemological, *viz*. how does perception provide

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reason for our beliefs about the empirical world? This, it seems, is a question which remains to be answered even after the empirical world is done. This is because the question about reasons is normative rather than scientific or descriptive. Even once the psychological theory of vision, for example, has done its job in describing fully the mechanisms of vision, the normative question still can be asked: what makes this process result in something which gives a reason, something which justifies a belief? Suppose I see a bottle before me, and come to believe on the basis of this that there is a bottle before me. My reason for believing that this is a bottle is that I can see it. But what makes seeing the bottle a reason for this belief? It can be argued that the need to give a satisfactory answer to this question constrains our choice of theory of perception. Some say that we need to see perception as involving a 'direct' or unmediated awareness of the world, for example, if perception is to play the role of giving us reasons. Others say that we should think of our knowledge of the empirical world as based on an inference to the best explanation of the data given to us by perception, which data may fall short of direct awareness of the world itself.

Of course, some will dispute the distinction made here between descriptive and normative questions, and insist that questions about reasons or warrant can be answered in purely descriptive, causal terms. But even if this were so, this epistemological dispute is nonetheless a distinct one from the empirical question of what the causal mechanisms of vision and touch etc. are. It is a dispute about what counts as a reason. The epistemological problem of perception just described proceeds on the assumption that the form of warrant or justification at issue here is *internalist* justification: the kind which subjects themselves can provide for their own beliefs (see BonJour 1985). But it would

be possible to conceive of the warrant for empirical beliefs in different terms – for example, in the way a reliabilist would. A reliabilist treats knowledge as true belief acquired by a reliable method (Armstrong 1970). On this conception, perception warrants empirical belief by being the paradigm of a reliable method. An account of the causal mechanisms of the senses work would then, of course, be part of the account of perceptual warrant. But nonetheless these would be put into the epistemological framework of a reliabilist account of warrant.

Are these epistemological problems of perception the only real philosophical problems here? One way to approach this question is to ask: suppose one had settled to one's satisfaction the answer to the above epistemological question. Would any distinctively philosophical problem of perception then remain? If the epistemological problem were the only philosophical problem, then the answer would have to be no. The same would apply if we rejected the epistemological question as based on misconceived ideas about warrant and knowledge. For if we have answered, or rejected as misconceived, the question 'how does perception give reasons for belief?' then all that would remain is the empirical study of the senses. There would be no more for philosophy to do.

But if this were right, then it would be impossible to make sense of much of the history of the philosophy of perception in the twentieth-century. The philosophy of perception appears to ask questions which are, on the face of it, not directly related to the epistemological question about perception just discussed. Philosophers of perception ask questions such as: what is the relation between perception and belief? How should we construe the relationship between appearance and reality? Does the idea of sensation have

any place in understanding perception? How does perceiving something differ from thinking about it? Does perception involve the awareness of non-physical objects? What is the role of concepts and conceptualising in perception? What kind of introspective knowledge do we have of our own perceptions? And so on. While it would be just about possible to treat all these questions purely in terms of how they contribute to the epistemological question, this will tend to distort the underlying issues at which some or all of these questions are pointing. Or so it will be argued here.

This paper will therefore present and discuss the problems of perception which are distinct both from the problem of how perception justifies empirical belief and from the empirical studies of vision and the other senses. Of course, it is somewhat artificial to distinguish problems in this way; it will turn out that epistemological and empirical considerations do overlap with the answers to the questions which will be discussed here. The point is not that the study of perception is not an empirical or an epistemological matter; it is rather that the problems discussed by epistemology and empirical psychology do not constitute the whole of the philosophy of perception.

2. Openness to the world

The problem of perception which, it will be argued here, has been central to analytic philosophy, is a result of attempting to reconcile some apparently obvious truths about perception with the apparent possibility of a certain kind of perceptual error. We can express the problem in an intuitive way as follows. Perceptual experience seems to be what we might call an 'openness to the world': an immediate awareness of mindindependent objects. Indeed, it is arguable that the nature of a perceptual experience is

partly determined or constituted by the nature of its objects. But it also seems possible for someone to have an experience (which we shall call a 'hallucination') which is subjectively indistinguishable from a genuine perception of a mind-independent object, but where there is no mind-independent object being perceived. And if conscious states of mind which are subjectively indistinguishable are states of the same kind, then the problem emerges: how can it be that the nature of a perceptual experience is partly determined or constituted by the nature of its mind-independent objects if it is possible for such an experience to occur in the absence of such objects? Either perceptual experiences depend on mind-independent objects, or they do not. If they do, then what should we say about hallucinatory experience? But if they do not, then it seems that much of what we believe about perception is false.

Here then are the four assumptions which form the essence of the problem as outlined above:

- (1) *Mind-independence*: When a subject has a perceptual experience as of an object or objects, the only objects perceived if any objects are perceived at all are ordinary, mind-independent objects. For example, when I have a perceptual experience of the snow-covered churchyard outside my window, the only objects perceived are the churchyard, the window and so on: ordinary objects whose existence is not dependent on my state of mind.
- (2) *Object-dependence*: When a subject has a perceptual experience of an object, the nature of the experience is partly determined by the nature of the actual object currently being perceived. For example, when I have a visual experience of the actual white snow in the churchyard, then the nature of this

- experience is partly determined by the way the object, the snow, actually is now; by how things are with the snow during the experience. If the snow were grey and melting, then *ceteris paribus* my experience would be different.
- (3) The possibility of hallucination: It is metaphysically possible for a subject to have an experience which is subjectively indistinguishable from a veridical perception of an object of a certain kind, but where there is nothing of that kind being perceived. For example, I may have an experience which is subjectively indistinguishable from a veridical perception of a snow-covered churchyard but where there is in fact no churchyard which I am perceiving at all.
- (4) The identity of subjective indistinguishables: When two conscious experiences are indistinguishable for a subject, then the experiences are of the same specific psychological kind. So, for example, if my genuine perception of the snow-covered churchyard and my hallucination of the snow-covered churchyard are indistinguishable for me, then these experiences are of the same specific psychological kind.

It may not yet be clear why each of these assumptions is plausible; they will be defended in the next section. But we must first demonstrate why they are inconsistent.

Consider, then, a perceptual experience E of object O. By assumption (1), O must be a mind-independent object. By (2), the nature of E is partly determined by the nature of O itself. Assumption (3) says that there could be an experience which is subjectively indistinguishable from E but where no mind-independent object is being perceived; so *a fortiori*, O is not perceived. Call this experience E*. It follows that E and E* have

different essential natures: for the nature of E is partly determined by the nature of O, and the nature of E* cannot be. But this is inconsistent with assumption (4), which implies that E and E* are experiences of the very same specific psychological kind, since they are subjectively indistinguishable. The question then is: how can the nature of a perceptual experience essentially depend on the mind-independent objects of experience if it is possible for an experience of the very same specific kind to exist in the absence of these objects? The obvious answer is: it can't. And yet perceptual experience does seem essentially to involve a dependence on mind-independent objects: experience is our paradigm the mind's 'openness' to the mind-independent world. The problem of how to resolve this contradiction is what I am calling the problem of perception.

A few things need to be clarified before we proceed. First, it is important to realise that the first three assumptions taken together are not inconsistent. The first says that the object of experience E is a mind-independent object O. The second says that the nature of E is partly determined by how things are with O. The third says that there could be an experience E* subjectively indistinguishable from E in the absence of the perceived O. There is no inconsistency here. If E is a perception, then all that follows from assumptions (1)-(3) is that there can be an experience which is subjectively indistinguishable from a perception but which is not a perception.

Second, the assumptions talk about the 'nature' of an experience. What I mean by this is its nature from the point of view of the subject having the experience – rather than, say, its physiological nature as a brain state (if experiences are brain states at all; see Noë 2002 for criticism of this idea). The nature of an experience from the subject's point of view is also called the 'phenomenal character' of the experience. A description of the

phenomenal character of an experience is a description of what it is like to have an experience. But this talk of 'what it is like' to have an experience is not intended to imply that it should be understood in terms of 'qualia' or non-intentional properties of experience.

Third, it is important that assumption (4) talks in terms of *specific* psychological kinds. For the claim is not that there is some loose heterogenous kind under which E and E* fall; but that they fall under some specific kind. Otherwise it would be easy to give the following 'deflationary' response to the problem:

'Events E and E* both fall under a kind K – say, the kind picked out by the term "experience" – so what is wrong with saying that some members of K are object-involving and others are not? After all, if two events fall under one kind, this does not mean that they have to fall under all the same kinds.'

This deflationary response would dissolve the puzzle; but it would only do so by failing to recognise that the kind under which E and E* fall, according to assumption (4), is intended to be the most specific psychological kind. The point may be expressed in the terminology of determinate and determinables (see Yablo 1992 for this distinction). 'Conscious experience' picks out a determinable kind: there are many more determinate kinds falling under it: 'visual experience' picks out a determinate of this determinable. A visual experience of a rabbit is yet more determinate; of a white rabbit from a certain orientation even more so; and so on. The identity of subjective indistinguishables is intended to apply to the most determinate kind of experience. The reason for this is the plausible (though, as we shall see, controversial) thought that experiences are *subjective* states, in the sense that how they seem to a subject of experience exhausts how they are

(see Kripke, 1980 lecture 3). So if there is a difference in experience which is subjectively detectable then we have not reached the most determinate psychological kind of experience. The fourth assumption says that when two experiences do not differ in this way, then they are of the most determinate kind.

Finally, something needs to be said about this problem of perception relates to the traditional 'argument from illusion'. As a number of writers have noted (see e.g. Snowdon 1992; Smith 2002: 8) many things have been called 'the argument from illusion', including some versions of the argument I have just outlined. But there is one clear line of argument which is distinct from the one outlined, which runs roughly as follows. We all know that things can appear to be other than they really are; when how things appear to be conflicts with how they are, then the things we are aware of in appearance must be different from the mind-independent objects we take ourselves to be perceiving; so the immediate objects of perception must be mind-dependent (see Robinson 1994: 31). Smith (2002) distinguishes this argument for mind-dependent objects of experience from the argument based on the possibility of hallucination. A full treatment of perception should discuss this former argument too; but here I will restrict myself mainly to the problem which arises out of the possibility of hallucination, since it seems to me that this presents a more difficult and deeper problem for any attempt to give a satisfactory account of perception which preserves its ordinary appearance to us. It is essentially this problem which Valberg (1992) calls 'the puzzle of experience'. And both Smith (2002) and Robinson (1994) see their various 'arguments from hallucination' (forms of the problem presented here) as more powerful than the argument from illusion. The conception of the problem of perception developed here draws heavily on these

authors, and especially on the detailed expositions in Martin (1995), (2000) and (2002). These writers present this problem of perception in different ways, but all of them are variations on the theme as I have presented it above: how to reconcile the manifest phenomenology of perception with the possibility of this kind of hallucination. (Martin (2000) also shows how this problem has a common core with the earlier tradition of 20th century philosophers who discussed perception in detail: Moore (1905), (1910); Russell (1912); Price (1932) and Broad (1923); see Swartz (1965) for a classic collection of readings.)

The rest of this paper will be concerned with this conflict between the assumptions (1)—(4). This problem is a *phenomenological* problem, in the broad sense of having to do with how things appear to us. The way perception appears to us – in the sense of the general claims we would make about it, having reflected on ordinary perceptual phenomena and our concept of perception – is arguably, partly expressed in the claims (1)—(4) above. But these claims seem to be inconsistent. This problem seems to be distinct from the epistemological problem discussed above, of how perceptions can give us reasons for beliefs. In framing the problem, we employed no assumptions about what can or cannot be a reason for a belief. Rather, we seem to have discovered a deep incoherence within our idea of perception itself.

Of course, it may said that be that the reason the problem of perception is so worrying is *because* we think that perceptions must be reasons for beliefs, and the problem of perception shows that they cannot be. On this view, if it were not for the fact that perceptions must serve as reasons for beliefs, then we should not be worried about the internal incoherence of the idea of perception. This is not the approach which will be

defended here, but if you do take this approach, then you should regard the material in this paper as a preface to what you regard to the genuine problem of perception.

It should also be noted that even if the problem of perception is not *this* epistemological problem (the problem of reasons for belief) this does not mean it has epistemological elements at all. For example, it is plausible that the best way to understand one experience's being subjectively *indistinguishable* from another is in epistemological terms: experiences are indistinguishable when the subject is unable to tell them apart just on the basis of having them (see Martin, forthcoming). There is no sharp boundary here to be drawn between epistemology and the theory of mind, and there is no need for one; this paper is only concerned to distinguish the problem of perception just outlined from the problem of how perceptions provide reasons for empirical belief.

As Valberg (1992) argues, the problem of perception is a kind of antinomy: we seem to have a good argument for the view that mind-independent objects are not essential to our perceptual experiences; but also we have overwhelming pre-theoretical reasons to believe that they are. It may be thought, however, that the assumptions which generated the problem are not as overwhelmingly plausible as they have been presented. If that were so, and we could happily reject one or more of them, then the problem would be solved. So we need to examine the assumptions in more detail.

3. Mind-independence

The mind-independence assumption says that when a subject has a perceptual experience as of an object or objects, the only object or objects perceived – if any objects are

perceived at all – are mind-independent objects. This assumption needs to be clarified and then distinguished from various similar but distinct ideas.

First, the clarifications. When assumption (1) talks of a 'perceptual experience as of an object' this is meant to apply to situations in which no actual real object is experienced, as well as to situations in which objects are perceived. We can accept for the sake of argument that that 'x perceives y' entails the existence of y; but we can make the harmless stipulation that 'x has a perceptual experience as of y' does not.

Second clarification: to say that only mind-independent *objects* are perceived is to say, *inter alia*, that no mind-dependent objects are perceived. On our ordinary way of thinking about perception, we do not think that we are aware of ordinary material things *by being aware* of other objects; or that we normally perceive objects *by perceiving* other objects; or that we normally perceive certain objects *in virtue of* perceiving others. As we shall see, many theories of perception have ended up advancing these claims (see for instance, Jackson 1977; Lowe 1992). But these are supposed to be surprising theoretical consequences, not part of a reflection upon common sense.

The next clarification is that this assumption is, of course, meant to allow that we also perceive the properties of objects, as well as the objects themselves. When I perceive the snow-covered churchyard, I perceive the whiteness of the snow, the brownness of the wall behind, the crumbly texture of the stone... and so on. Whether or not all these properties (e.g. the colours) are mind-independent is not something which this paper will discuss. We are considering the mind-independence of *objects* here, because if there were no mind-independent objects, there would be no mind-independent properties either. For

there could hardly be mind-independent properties if there were no mind-independent objects of which they were properties. Or so I shall assume here.

One final clarification. Up to now, I have been talking purely in terms of visual perception. Does this mean that the mind-independence assumption (and therefore the problem of perception) only concerns the sense of sight? This question demands a more extensive discussion; but the short answer is no. The immediate objects of the other senses are also mind-independent. This is true even of those senses whose immediate objects are not particular physical *objects*, but (for example) smells and sounds. It is plausible to say that we hear things by hearing sounds; therefore sounds are the direct objects of the sense of hearing. But sounds are not presented in experience as minddependent, in the sense that they depend for their existence on particular states or acts of mind. The sound of the coach is something which others can hear (as revealed by my spontaneous unthinking surprise when others cannot or do not hear what I hear). Likewise with smell. The smell of the goulash is not presented as something which is dependent on my smelling of it: it seems to me that others should be able to smell it too. There are metaphysical views that deny any ultimate mind-independent reality to sounds and smells, but these views too are attempts to revise our ordinary way of thinking of these things. According to our ordinary way of thinking, hearing, smell and taste have as their objects sounds, smells and tastes: objects which are independent of the particular states of mind of the person apprehending them. So the mind-independence claim applies to them, *mutatis mutandis*. (For more on how the problem of perception, somewhat differently construed, arises in the senses other than vision, see Smith 2002: 23-25; for important discussions of the sense of touch, see O'Shaughnessy 1989 and Martin 1992.)

I have said that it is part of our ordinary belief about perception that its objects are mind-independent in character. That this is so can be seen from the fact that all (or almost all) serious theories of perception agree that our perceptual experience seems as if it were an awareness of a mind-independent world. One's awareness of the *objects* of one's perceptual experiences does not seem to be an awareness of something which depends on experience for their existence. A classic statement of this point of view as a starting-point for the philosophy of perception is given in P.F. Strawson's 'Perception and its Objects' (1979). Here Strawson argues that 'mature sensible experience (in general) presents itself as, in Kantian phrase, an *immediate* consciousness of the existence of things outside us' (1979: 97). He begins his argument by asking how someone would typically respond to a request for a description of their current visual experience. Strawson answers, surely plausibly, that we might respond in something like the following way: 'I see the red light of the setting sun filtering through the black and thickly clustered branches of the elms; I see the dappled deer grazing in groups on the vivid green grass...' (1979: 97). There are two ideas implicit in this answer. One is that the description talks about objects and properties which are, on the face of it, things distinct from this particular experience. The other is that the description is rich, describing the nature of the experience in terms of concepts like *deer* and *elms* and the *setting sun*. The description of the experience is not merely in terms of simple shapes and colours; but in terms of the things we encounter in the 'lived world' in all their complexity. As Heidegger puts it,

We never ... originally and really perceive a throng of sensations, e.g., tones and noises, in the appearance of things...; rather, we hear the storm whistling in the

chimney, we hear the three-engine aeroplane, we hear the Mercedes in immediate distinction from the Volkswagen. Much closer to us than any sensations are the things themselves. We hear the door slam in the house, and never hear acoustic sensations or mere sounds. (Heidegger 1977: 156)

It may be said that descriptions of experience like this involve a commitment to the existence of things outside the experience; but surely it is possible to describe experience without this commitment? So let us suppose that we ask our imagined perceiver to repeat their description without committing themselves to the existence of things outside their experience, but without falsifying how their experience seemed to them. Strawson claims that the best way for them to respond is to say 'I had a visual experience such as it would have been natural to describe by saying that I saw…' and then to add the previous description of the trees and the deer etc. We give a description of our experience in terms of the ordinary objects of our world. And we do this even if we are trying not to commit ourselves to the existence of these objects. In M.G.F. Martin's words, 'The public, mindindependent objects of perception and their features are not banished from one's attention just because one shifts one's interest from how things are in the environment to how things are experientially' (Martin 2002: 384).

Strawson is at pains to point out that this is not a philosophical theory, one that would (for example) refute scepticism about the external world. Rather, it should be a starting point for philosophical reflection on experience (1979: 94). So it is important that this intuitive datum of consciousness is not supposed to rule out idealist conceptions of perception (such as that defended in Foster 2000). As we shall see below, idealists will

say that the objects and properties perceived are in a certain way mind-dependent. But this is consistent with saying that they are presented in experience *as* mind-independent.

The mind-independence assumption, however, says more than that experience *presents* its objects as mind-independent; it says that they *are* mind-independent. That is, it is part of our commonsense conception of perception that the objects and properties we experience when we do perceive *are* the objects and properties out there in the mind-independent world. As Tyler Burge says, 'our perceptual experience represents or is about objects ... which are *objective*. That is to say, their nature (or essential character) is independent of any one person's actions, dispositions or mental phenomena' (Burge 1987: 125).

4. Object-dependence

Strawson's remarks about the intuitive starting point for discussions of perception are also relevant to our second assumption: that when a subject has a perceptual experience of an object, the nature of the experience is partly determined by the nature of the actual object currently being perceived. For, to echo Strawson, if I want to describe what it is like to experience the churchyard now, I describe the churchyard itself, as it is at this moment: the collapsed gravestones, the crumbling statues, the snow starting to melt around the sides of the grass. The phenomenological point here is that when we reflect upon how our experience is, and try to 'turn inwards' to describe the nature of the experience itself, the best way to answer is by describing the objects of experience and how they seem to us. As Valberg puts it, when we take this kind of reflective attitude to our experience, 'all we find is the world' (1992a, p.18). When we try to describe an

experience in its intrinsic nature, an advance of having any specific theory of what the intrinsic nature of experience is, we describe the objects and properties which are experienced. Starting from this phenomenological point, already defended in the previous section, our second assumption involves the move to the conclusion that the way these objects actually *are* is part of what determines the phenomenal character of an experience.

Why believe the object-dependence assumption? The intuitive basis behind it, I believe, is the idea that when an object is experienced in perception, it is 'there' or 'given' or 'present to the mind' in a way in which it is not in other mental states. Here I do not mean merely that the verb 'perceives' is factive: in the sense that a claim of the form 'S perceives that p' entails p. This is true; but 'S knows that p' is factive too. Yet the objects of knowledge do not, as such, have 'presence' in the relevant sense – except of course in the case when one knows something is there by seeing it. (This 'presence' is the phenomenon Scott Sturgeon calls 'scene immediacy': 2000, chapter 1.)

What is this perceptual presence? One way to approach this question is to consider the differences between perception and pure thought (i.e. thought which is non-perceptual). Our first assumption, mind-independence, does nothing to distinguish perception from pure thought, since in thinking about the mind-independent world my thought too presents mind-independent objects (see, e.g., Searle 1983: 16). Thought, so to speak, goes straight out to the object itself. And the object itself is (normally) something mind-independent, in the case of thought as much as in the case of perception. The difference is that in the case of thought how the actual object of thought *is* at the moment I am thinking of it does not in any way constrain my thinking of it; but in the case of

perception it does. My perception of the churchyard is immediately responsive to how the churchyard is now, as I am perceiving it. But my (non-perceptual) thought need not be: in the middle of winter, I can imagine the churchyard as it is in spring, I can consider it covered in autumn leaves, and I can think of it in all sorts of ways which are not the ways it presently is. I can think of all these things in their absence. This is not available in perception, because perception can only confront what is presently given: in this sense, you can only see what is *there*. It is because of this that perception is said to have an *immediacy* or *vividness* which thought lacks: this vividness derives from the fact that perceived objects and their properties are actually given to the perceiver when being perceived, and determine the nature of the experience. This is the underlying idea behind the second assumption.

Notice that the assumption does not say that the phenomenal character of one's entire experience is *exhausted* (or completely determined) by the nature of the actual objects and qualities which are presented in an experience. Such an assertion is implausible and easily refuted. A scene can look very different when one removes one's glasses: my perceptual experience of the churchyard then becomes hazy and blurred, the contours of objects become indistinct. But this difference in experience need not derive from a difference in the objects of experience. This does not mean that the second assumption is false; it just means that not all phenomenal differences in experience are differences in the objects of the experience. Rather, some phenomenal differences are differences in *the ways in which* those objects are experienced.

This kind of case is not plausibly classified as a case of perceptual *error* or misperception. When I take my glasses off, I need not take the perceived churchyard to

be different in any way. Nor need I be misrepresenting (and therefore representing) the things in the churchyard as having blurry boundaries. Rather, this might be described as a case where things can seem different without seeming to be different. It is consistent with the object-dependence assumption that one's experience has other phenomenal aspects which are not aspects of how the objects of the experience seem to be. But this does raise the question of how we should understand the properties apparently instantiated in experience (e.g. blurriness) if they are not, and not experienced as, properties of the objects of experience. For surely, in an experience like this, there is blurriness instantiated *somewhere*: something is blurry. But if the mind-independent churchyard is not blurry, what is? Perhaps one could say that the blurriness is a property which emerges out of the relation between the perceiver – whose sense-organs are constituted in a certain way – and the mind-independent churchyard. It is the fact that I (with my bad eyesight) am looking at this churchyard (with objects and properties arranged in a certain way) that my experience has the character that it does. Although this suggestion is vague, it may well be on the right track; but notice we cannot say this sort of thing about the case of hallucination, where there is no mind-independent object being perceived at all, and therefore nothing to be related to.

This problem will be discussed further below, when we come to consider how theories of perception come to deal with the problem of perception. This section has only been concerned to demonstrate the initial plausibility of the assumption.

5. The possibility of hallucination

Despite the rather elaborate expositions of these principles just given, the first two assumptions are not intended to be highly theoretical claims; rather, they are meant to be something which becomes obvious with a little reflection upon experience. The third assumption, that hallucinations of a certain kind are possible, depends on a little (but not much) theorising about experience. Remember that the claim is that it is possible to have an experience of an object as having a certain property, F, even if there is no such object; and such an experience is subjectively indistinguishable from a veridical perception of a real object being F. The idea of an experience of this kind which is subjectively indistinguishable from a perception is what is meant by a 'hallucination' in this context.

'Subjectively indistinguishable' could be understood in a number of ways. It could be understood in terms of the experiences sharing subjective non-intentional qualities or 'qualia' (Shoemaker 1990; Loar 2003) or in terms of the experiences sharing their 'narrow' or non-environment-dependent intentional content (see Davies 1991 and 1992 for a discussion of this idea). But it is important to emphasise that, as Martin (forthcoming) has shown, one does not have to accept these substantial theories of experience in order to accept the idea of hallucination; so one cannot reject the possibility of hallucination by objecting to the coherence or plausibility of these theories. All one has to accept is the uncontroversial idea of two experiences being such that a subject could not know, simply in virtue of having the experiences, whether they were having one or the other.

But although the idea of distinct experiences being subjectively indistinguishable is not itself problematic, some philosophers have balked at the idea that any genuine perception could really be subjectively indistinguishable from a hallucination. Some are

worried about this idea because they have an 'externalist' theory of the intentional content of mental states which entails that hallucinations must be necessarily exceptional; it would not be possible to be a subject who was in a state of perpetual hallucination (see McCulloch 2002, chapter 7). But this idea, whatever its other merits, is beside the point here. The possibility of hallucination, assumption (3) of the problem of perception, does not say that someone could be hallucinating all the time. Assumption (3) is consistent with the most extreme externalist theory of mental content. (Though as we shall see in 3.3, the conjunction of (3) and (4) is not.)

Others have questioned the methodology employed when talking about hallucinations. They are sceptical about the empirical facts underlying assumption (3): do we really know that such mental states can come about? Are not all real hallucinations — whether the product of drugs, psychosis or dehydration etc. — radically different in their phenomenal character from genuine perceptions? So why should we be so confident that there can even be subjectively indistinguishable perceptions and hallucinations? Austin (1962) played on the fact that there are real phenomenal differences between genuine perceptions and actual delusory and hallucinatory experiences in his dismissal of philosophers' characteristic 'arguments from illusion' in the theory of perception. To say that there could be hallucinations in our sense is akin to the Cartesian fantasy that there could be dreams which are subjectively indistinguishable from real experiences. But, Austin points out, dreaming that one is being presented to the Pope is nothing like really being presented to the Pope (1962: 48-9). And likewise, it might be said, with hallucinations. We do not really know whether there can be such things, this

methodological objection runs, so we should not base our philosophical theorising on such shaky empirical and introspective foundations.

But this kind of objection, too, is beside the point. Our assumption about hallucinations does not say that there ever actually are any such hallucinations, and nor does it rely in its description of the relevant kind of hallucination on any actual facts about real hallucinations. It just asserts the bare metaphysical possibility of an experience of the kind in question. This seems to be a possibility which resides within our idea of experience. However, it might reasonably be asked how we know this. The best way to answer is to appeal to a broad and uncontroversial empirical fact about experience: that it is the upshot or outcome of a causal process linking the organs of perception with the environment. This claim is not, as Valberg makes clear (1992: 24), the same as a causal theory of perception, which aims to give an analysis of the concept of perception in causal terms. It is a substantially weaker idea: it is just the assertion of the fact that our experiences are the effects of things going on inside and outside our bodies. If this is so, then we can understand why hallucinations are a possibility. For any causal chain reaching from a cause C1 to effect E, there are intermediate causes C2, C3 etc., such that E could have been brought about even if C1 had not been there but one of the later causes. If this is true of causal processes in general, and perceptual experience is the product of a causal process, then we can see how it is possible that I could have an experience of the churchyard which was brought about by causes 'downstream' of the actual cause, the churchyard.

So the possibility of hallucination does rest on a broadly empirical assumption: that experience is the product of a causal process. One could reject the possibility of

hallucination only, it seems, by rejecting this empirical claim, and asserting either that experience is not the effect of some causal process at all, or that there are non-causal conditions which somehow determine how an experience is. Neither option is very plausible.

6. The identity of subjective indistinguishables

The final assumption in our formulation of the problem is that two experiences which are subjectively indistinguishable are experiences of the same kind. Therefore my hallucination of the snow-covered churchyard is a mental state of the same kind as my veridical perception of the actual churchyard. What can be said in favour of this assumption?

Some philosophers will argue that this is implied by the best theory of our mental life (see, for example, Farkas 2003). Our best way of distinguishing the things we classify as mental, it is claimed, must derive from the way we know about these things: we know our mental life with a kind of authority which we do not have over any other realm of knowledge. This approach is sometimes called 'Cartesian', because of its claimed origin in Descartes's ideas about how to distinguish a mental substance, with its principal attribute *thought*, from a material substance, with its principle attribute *extension*. It is worth pointing out that the approach can survive independently of Descartes's specific ideas about the differences between mental and physical substances, and it need not assume Descartes's dualism. Nonetheless, this Cartesian approach has encountered a lot of criticism in recent philosophy of mind, especially since the rise of externalist theories of mind (see Pessin and Goldberg 1996 for a collection of readings on the externalist

view of mind). The Cartesian view is a controversial theory of mind. So if our problem of perception depended on the Cartesian view of mind, as some believe (McDowell (1982) suggests something like this), then the problem might be easily solved; or at least, the debate can be transformed into one over the merits of the Cartesian view in general, and nothing specific to the philosophy of perception.

Unfortunately, the problem of perception cannot be dismissed so easily. For the assumption can be defended on weaker premises than the Cartesian theory provides. Here we can identify two kinds of argument: one from the metaphysics of mind, and another from principles behind ordinary psychological explanation.

The metaphysical argument would proceed first by arguing that we have reasons, independent of the philosophy of perception, to believe that mental states or events are dependent on physical states or events in the brain (the qualification 'states or events' will now be dropped, but should be taken as understood). This kind of dependence is a form of physicalism about the mental, weaker than the traditional identity theory and it is often expressed as a 'local supervenience' thesis: no two mental events or states of a thinker can differ without there being some local physical difference in the brain of the thinker (see Kim 1993; and Crane 2001 chapter 2 for an account of identity theories and other forms of physicalism). The converse of this supervenience thesis is the idea that two identical local physical states in the brain of the thinker will give rise to identical mental states.

Suppose we accept this local supervenience thesis. Then it follows that reproducing the local physical state which is of the same type as the proximate cause of a genuine perception will also reproduce the supervening mental state. According to

assumption (3), the genuine perception has a cause C* which is purely local to the thinker's brain, although this cause is itself dependent on causes external to the thinker. C* lies along the causal chain stretching from the object of perception to the inner state of the visual cortex which, we may assume, is the physical end-point of the perceptual process. Assumption (3) implies that replicating C* will replicate an experience E* which is subjectively indistinguishable from a genuine perception E. The local supervenience thesis says that replicating physical states will produce mental events of the same mental kind. It follows that the subjectively indistinguishable states E* and E must be mental states of the same kind. This is our third assumption.

We can reach the same conclusion by considering, not the metaphysics of mind and the physicalist thesis of supervenience, but our everyday practice of psychological explanation. People's intentional actions, we tend to think, are explained by their psychological states. We cite how they believe the world to be and what they desire to happen in explaining why people do what they do. Some philosophers argue that our understanding of sameness and difference of mental states is derived from their role in psychological explanation: similar actions from similar agents are explained in the same way, by citing the same underlying psychological states (for this theme in the philosophy of mind, see Lycan 1999, part V). We can also cite subjects' perceptual experiences of the world as explanatory of their actions: one reason for this is that what people believe about the world is often determined by their perceptual experiences. Thus we might say that a subject who genuinely perceives a glass of wine in front of him might reach out to drink it because it seemed to him that it was there and he fancied a drink; but someone who is unknowingly hallucinating a glass of wine in front of him might do exactly the

same thing, because he fancied the same thing and things seemed the same to him. If we identify mental states as the same when (*ceteris paribus*) they lead to the same action, then we have a reason to count the hallucination E* as the same kind of mental state as the genuine perception E. This is another reason for the common kind assumption. (For arguments of this kind, in connection with the doctrine of externalism, see Segal 1989. For a defence of the externalist response that externalist, relational states – like knowledge and perception construed as (2) does – actually provide better explanations than internalist, intrinsic states, see Williamson 2000: 60-64; see also Yablo 1997.)

This completes the exposition of the problem of perception. The exposition has been lengthy, but this has been necessary because of the complex structure of the problem, and also in the light of the dismissal of it which one finds in much philosophical literature. (especially that influenced by Austin 1962). The paradox or antinomy we have unearthed comes from the fact that if experiences E and E* are the same kind of mental state, then it cannot be that one essentially involves the existence of the object perceived, and the other doesn't. We shall finally consider of how philosophers have attempted to dissolve this antinomy.

7. The sense-datum theory

The problem of perception derives from a conflict between the four assumptions. So the natural way to respond to the problem is to show that, contrary to appearances, not all of the assumptions are true. Following Martin (1995, 2000, 2002), it can be shown that all of the main theories of perception which have arisen in the twentieth century involve a denial of one of these assumptions, or assumptions very like them. Martin (2002: 421)

persuasively argues that each theory of perception is an 'error theory' of perception (in J.L. Mackie's (1977) sense). Each theory convicts common sense of an error about perception. The strategy adopted in this section is an application of this idea of Martin's. It will first be shown, in the rest of this section, that the sense-datum theory denies assumption (1), the intentionalist theory denies assumption (2), the disjunctivist theory denies assumption (4). It is worth noting that, with the exception of the sceptical approach to the methodology of the philosophy of perception discussed above (2.3), no serious theory denies assumption (3), the possibility of hallucination. This fact supports the present conception of the problem of perception. For the problem may be epitomised as: how should we conceive of perception, given the possibility of hallucination? The possibility of hallucination functions as the starting point for the problem.

The sense-datum theory solves the problem of perception as follows. It is true that (2) the phenomenal character of perceptual experiences depends upon the nature of the objects of experience; it is true too that (3) hallucinations are possible, and, because of (4), they are the states of mind of the same determinate kind as perceptions. But these are consistent because (1) is false: it is not true that the only objects which are perceived are mind-independent objects. Hallucination was defined as a state in which one is aware of no *mind-independent* object, yet one is standing in an awareness relation to *something*, that something must be a mind-*dependent* object: the mind-independence assumption is false. Rather, mind-dependent objects are perceived in hallucination and in perception, and the phenomenal character of the experience is determined by the nature of these objects. These objects are *sense-data* (plural; the singular is 'sense-datum'): mind-dependent objects of experience (see Broad 1923, Moore 1905, 1910; Price 1932).

The sense-datum theory need not deny that we are presented with objects as if they were mind-independent. But it will insist that this is an error. The things we take ourselves to be aware of are actually mind-dependent, although they may not normally seem like that. This is an important point, since it shows that the sense-datum theories are not simply refuted by pointing to the phenomenological fact that the objects of experience do not seem to be mind-dependent sense-data. A consistent sense-data theorist can accept this fact, but insist that what seem to be mind-independent entities are really sense-data.

So the sense-datum theory denies (1): that the *only* objects which are perceived are mind-independent objects, since mind-dependent objects are the immediate objects of perception. But it can say that we are *indirectly* aware of these objects: that is, aware of them by being aware of sense-data. A sense-datum theorist who says this is known as an *indirect realist* or *representative realist*, or someone who holds a *representative theory of perception* (see Jackson 1977, Lowe 1992). A theorist who denies that we are aware of mind-independent objects at all, directly or indirectly, but only of sense-data is known as a *phenomenalist* or an *idealist* about perception (see Foster 2000 for a recent defence of this view).

The difference between indirect realism and idealism is not over the truth of (1), or over any other thesis specific to the theory of perception. The difference between them is over the metaphysical issue of whether there are any mind-independent objects at all. Idealists, in general, hold that all objects and properties are mind-dependent. There are many forms of idealism, and many arguments for these different forms, and there is no room for an extensive discussion of idealism here. What is important in this context is

that idealists and indirect realists can agree about the nature of perception considered in itself, but will normally disagree on grounds independent of the philosophy of perception about whether the mind-dependent sense-data are all there is. Thus Foster (2000) argues for his idealism first by arguing for sense-data as the immediate or direct objects of perceptual experience, and then arguing that idealism gives a better explanation of the reality underlying this appearance, and of our knowledge of it. Hence, idealism and indirect realism are grouped together here as 'the sense-datum theory' since they agree about the fundamental issue in the philosophy of perception.

The sense-datum theory accepts (2): that the phenomenal character of an experience is determined by the nature of its objects. But it holds that these objects are mind-dependent objects (so 'object' in (2) does not mean 'mind-independent object'). A sense-datum theory can argue for this claim by holding that whenever a sensible quality is present in experience, there must be an object which instantiates this quality.

Remember the blurry experience of the churchyard. The sense-datum theory will say that there is definitely something which is blurry: but it is not the churchyard. So it must be something else, not identical to the churchyard. The principle behind this reasoning is what Howard Robinson calls the 'phenomenal principle':

If there sensibly appears to a subject to be something which possesses a particular sensible quality then there is something of which the subject is aware which does possess that sensible quality. (1994: 32)

If we assume the possibility of hallucination, (3), it follows that there is an object in the case of hallucination too. The object of a hallucination cannot be a mind-independent object since bringing the experience into existence is sufficient to bring the object into existence. And since, assuming (4), the perception is a state of the same kind as a hallucinatory state of mind, the same kind of object must be brought into existence by the state of mind. Hence the immediate objects of perception are mind-dependent objects. And hence the sense-datum theory treats the objects of experience as *constituents* of the experience. The experience itself is a relational fact; but the distinctive claim of the sense-datum theory is not simply that a relation holds between the subject and the object. Rather, it is that the experience itself is partly constituted by the object.

The sense-datum theory was much discussed in the first half of the 20th century (see references above; and Martin 2000 for a historical discussion). It was widely rejected in the second half of the 20th century, though it still had its occasional champions in this period (for some examples, see Jackson 1977, O'Shaughnessy 1980, Lowe 1992, Robinson 1994). The sense-datum theory is normally dismissed today, for many reasons. Some of these are objections specifically to the indirect realist version of the sense-datum theory: for example, the claim that the theory gives rise to an unacceptable 'veil of perception' between the mind and the world. This would not be an objection to the idealist version of the theory. Other objections rest upon controversial doctrines from elsewhere in philosophy, for example, Wittgenstein's objection to the idea of a 'private object' (see Robinson 1994 for some responses to these kinds of objection). But perhaps the most influential objection, rarely explicitly stated but present in the background of much discussion, stems from the prevailing naturalism of contemporary philosophy:

although there is, perhaps, nothing incoherent in the very idea of mind-dependent objects being brought into existence by experiences, nonetheless it is incompatible with other things we know about the natural world. If it were possible to have a theory of perception which made the best of the conception of perception embodied in our assumptions above, but which did not commit itself to mind-dependent objects, then, naturalists say, we should look elsewhere.

8. Intentionalism

The intentionalist theory of perception solves the problem of perception as follows. It is true that (1), when an object is actually perceived, it is mind-independent. And it is also true that (3) hallucinations are possible, and that, given (4), they are of the same determinate psychological kind as perceptions. So it follows that a state of this kind, a perceptual experience, could exist in the absence of the relevant mind-independent object. But there is no inconsistency here because (2) is false: it is not true that the phenomenal character of a perceptual experience is partly determined by the nature of the object of experience since an experience could have that phenomenal character even if no such object existed.

The intentionalist theory of perception is a generalisation of an idea presented in Anscombe (1965), and the 'belief theories' of Armstrong (1968) and Pitcher (1970). Anscombe had drawn attention to the fact that perceptual verbs satisfy the tests for non-extensionality or intensionality (see Crane 2001 chapter 1 for an exposition of these notions). For example, just as I can think about something which does not exist, so I can have an experience of something which does not exist. Anscombe regarded the error of

sense-data and direct realist theories of perception as the failure to recognise this intensionality.

Armstrong and Pitcher argued that perception is a form of belief. (More precisely, they argued that it is the *acquisition* of a belief, since this is a conscious event, as perceiving is; rather than a state or condition, as belief is. But for simplicity I will take this qualification as read in what follows.) Belief is an intentional state in the sense that it represents the world to be a certain way, and the way it represents the world to be is said to be its *intentional content*. Perception, it was argued, is similarly a representation of the world, and the way it represents the world to be is likewise its intentional content. When I visually experience that the churchyard is covered with snow, the content of my experience is how things are represented to be: *viz.* that the churchyard is covered with snow. But just as I can believe that *a is F* without there being any thing which is *F*, so I can have a perceptual experience that *a is F* without there being any thing which is *F*.

This is a reason for saying that perception is just a form of belief-acquisition.

Everyone will agree that perception does give rise to beliefs about the environment. But there are a number of reasons for thinking that perception should not be understood purely in terms of the acquisition of belief. One obvious reason, discussed by Armstrong, is that one can have a perceptual illusion that things are a certain way even when one knows they are not (this phenomenon is sometimes called 'the persistence of illusion'). The famous Müller-Lyer illusion presents two lines of equal length as if they were unequal. One can experience this even if one knows (and therefore believes) that the lines are the same length. If perception were simply the acquisition of belief, then this would be a case of explicitly contradictory beliefs: one believes that the lines are the

same length and that they are different lengths. But this is surely not the right way to describe this situation. In the situation as described, one does *not* believe, in any sense, that the lines are different lengths. (Armstrong recognised this, and re-described perception as a 'potential belief'; this marks a significant retreat from the original claim and it arguably amounts to a retraction.)

However, it seems that what is significant about the belief theory of perception is not so much its claim that perception is belief, but that it is an *intentional* state; for many states of mind other than belief are intentional. An intentional state is a state of mind with an intentional content; that is, it involves some representation of the world as being a certain way. Like belief, perception represents certain things as being the case in the mind-independent world. When things are like this, then the things which are perceived are the usual mind-independent objects which can also be the objects of belief. The intentionalist theory of perception accepts assumption (1).

But the intentionalist theory of perception rejects the second assumption: that the nature of an experience is partly determined by the nature of its object. This is because the only objects they allow there to be are mind-independent objects – but in the case of hallucination, there is no mind-independent object being perceived. And they accept assumption (4): perception and hallucination are states of the same determinate kind. But what is this kind? The intentionalist can say something like this: it is the state of *sensorily representing that things are a certain way*. In our example, it is the state of *visually representing that there is a snow-covered churchyard outside the window* – a state which someone could be in whether or not there is such a churchyard.

Intentionalists can say the same kind of thing about perceptual error which is not hallucination. If the snow appears to me to be grey and muddy, but in fact it is in shadow, then the intentionalist will say that my experience represents the snow to be grey and muddy, when in fact it is not. Here, as in the case of hallucination, Robinson's Phenomenal Principle is rejected just as it would be for belief: for no-one thinks that the Principle would have any plausibility if 'it sensorily appears to a subject that...' were replaced by 'if a subject believes...'. However, intentionalists should not say that the case of blurry vision need be a case of the subject misrepresenting the world as blurry. To explain phenomena like this they sometimes appeal to intrinsic, non-representational features of experience (called 'qualia'): the blurriness is a property of the *experience itself*, not of its intentional object (for qualia, see 3.4.1 below). But some intentionalists try and avoid positing such qualia (see Tye 2002).

It might seem odd to attribute to intentionalists the denial of object-dependence, since many intentionalists are also *externalists* about intentional content: that is, they deny the local supervenience of the intentional on the physical. In other words, externalists hold that two perceivers who are intrinsically or locally identical in all their physical properties need not be in the same intentional states. This is because subjects' intentional states depend on the nature of their environment (see Pessin and Goldberg (eds.) 1996). It might be thought, then, that an externalist intentionalist should embrace object-dependence rather then reject it.

But as we shall see, the only kind of externalist who embraces object-dependence in our sense is a disjunctivist: for only they can consistently say that the state which one has when one is perceiving an object is of the kind which cannot be had when hallucinating. Intentionalist externalists will typically say something weaker (for discussion, see Davies 1992). If they base their externalism on considerations such as Putnam's twin earth argument, or on the teleological theory or the causal theories of content, they are only obliged to say that intentional states depend for their existence and nature on the environment in *general*. This is consistent with saying that one can be in an intentional state which concerns a particular object, and yet that state need not depend for its existence or nature upon how things are with that particular object at that moment. Thus an externalist can consistently say (a) that one cannot have intentional states whose contents concern water, for example, if one's environment did not contain water; and (b) that one could be in the same state of mind as one is in when perceiving this glass of water, even if the particular glass of water does not exist – or is somewhere quite invisible to you – at the moment one is perceiving it. The key idea here is that objectdependence (assumption (2)) is described in terms of how the perceived object currently is - i.e. at the time of the experience. Intentionalism about perception is committed to denying that how an object is at the time of an experience is essential to the phenomenal character of an experience.

Hence the issue is not simply whether the existence of the experience entails or presupposes the existence of its object. Suppose for the sake of argument that experience essentially involves the exercise of recognitional capacities, and I have a capacity to recognise the Queen. Let's suppose too that this is a general capacity which presupposes her existence. It is consistent with this to say that I could be in the same intentional state when I am hallucinating the Queen, as when I am perceiving her. Although the *capacity* might depend for its existence on the Queen's existence, not every *exercise* of the

capacity need depend on the Queen's perceptual presence. The capacity can 'misfire'.

And if this is true, the object-dependence assumption is false: since how the Queen is *at*the moment of the experience need not even partially determine how my hallucinatory experience is. This is entirely consistent with externalism as a general theory of intentional content.

An externalist intentionalist might attempt to do justice to the role of particular objects in perception by holding that in any particular veridical experience, the actual object perceived is a constituent. They can say this because the content of the experience is given by an open sentence; we can therefore think of the object of experience, in the veridical case, as being the value of the free variable in that sentence. (For this proposal, see Burge 1991; see also Martin 2003, who argues that the availability of this position shows how an intentionalist can accommodate the particularity of the objects of experience.) In this sense, particular objects are essential to some particular experiences, in the sense that without the object, it would not be *that particular experience* – since that particular experience is, as a matter of fact, veridical. But nonetheless, another experience can have the same content – what is given by the open sentence – in the case where no object is there. (In this case, the experience's content would lack a truth-value.)

This is an important version of intentionalism, but it is worth emphasising that it still is committed to the denial of assumption (2) since it holds that the nature of a perceptual experience of an object need not be determined by how the object is (in the case where there is no object perceived). And moreover, the position holds that a hallucination and a perception can share content; and given that having the same content is the fundamental way of classifying psychological states as the same, the position can

hold that hallucinations and perceptions are of the same psychological kind. In effect, then, this intentionalist position is committed to the truth of (2) for *veridical perception*. But that is, of course, something that all intentionalists should accept: if you replace 'perceptual experience' with 'veridical perception' in (2) then it is plainly true. The question is whether it is true for perceptual *experience*. Intentionalists say no; sense-data theorists and (as we shall see) disjunctivists say yes.

Given intentionalism's acceptance of the first assumption (mind-independence), it is easy to understand what is present to the mind in the case of veridical perception: the churchyard, the snow etc. But what should be said about what is presented in the hallucinatory case? As we have seen, intentionalists typically say that experiences are representations; and one can represent what does not exist (see Harman 1990, Tye 1992). This is certainly true; but isn't there any more to be said? For how does a representation of a non-existent *churchyard* differ from a representation of a non-existent *garbage* dump, say, when one of those is hallucinated?

One proposal is that the objects of hallucinatory experience is the *properties* which the hallucinated object is presented as having (Johnston 2003). Another answer, deriving from ideas of Husserl's, is to say that these hallucinatory states of mind have merely 'intentional objects' (Smith 2002, chapter 9). This idea cannot be dealt with here in detail, but it is important to realise that intentional objects are not supposed to be *entities* or *things* of any kind. When we talk about perception and its 'objects' in this context, we mean the word in the way it occurs in the phrase 'object of thought' or 'object of attention' and not as it occurs in the phrase 'physical object'. So in this context, 'object' does not mean 'thing', any more than 'object of thought' means 'thing of

thought' (see Valberg 1992: 22). An intentional object is always an object for a subject, and this is not a way of classifying things in reality. Hence Smith's appeal to intentional objects is consistent with the denial of (2), since (2) talks about 'actual objects' and what is meant is *things*. An intentionalist need not be committed to intentional objects in this sense; but if they are not, then they owe an account of the content of hallucinatory experiences.

This is one place at which the intentionalist theory needs to be developed. Another place where more needs to be said is in their treatment of veridical perception. For the natural way for an intentionalist to explain the veridicality of perception is to say that it is simply a matter of the truth of the propositional content p reported in a propositional attitude report of perception: S perceives that p. But if it is possible to have a hallucination whose content is (as an accidental matter of fact) true, then the truth of the propositional content cannot be sufficient for the veridicality of an experience. For example, suppose I am hallucinating a clock on the wall in front of me, and it just so happens that there is a clock on the wall in that very place (see Grice 1961; Lewis 1988). Such 'veridical hallucinations' present a problem for the intentionalist's way of construing veridicality: for in such cases, there is a true proposition which is the content of the experience, but the experience is not a veridical hallucination. The normal response is to say that an experience counts as veridical (as a case of seeing, in the case of visual experience) if there is an appropriate causal link between the experience and its object. But spelling out the appropriate causal link has proved a difficult task; and, moreover, some philosophers (notably Snowdon 1979-80) have argued that the concept of

perception is not a causal concept. Intentionalists still have work to do to make their theory fully coherent.

10. Disjunctivism

The disjunctivist theory of perception solves the problem of perception as follows. It is true that (1) the objects of genuine perception are mind-independent; and it is true that (2) the phenomenal character of an experience is partly determined by the nature of these objects. Certainly hallucination is possible (assumption (3)). But this does not create an inconsistency because (4) is false: genuine perception and a subjectively indistinguishable hallucination are not mental states of the same determinate psychological kind. The possibility of hallucination (3) and the identity of subjective indistinguishables (4) together imply what Martin (forthcoming) calls the 'common kind assumption' about perception: 'whatever kind of mental event occurs when one is veridically perceiving some scene ... that kind of event can occur whether or not one is perceiving'. The disjunctivist theory rejects the common kind assumption, because it rejects the identity of subjective indistinguishables.

By denying (4), the disjunctive theory does not deny that there is some true description under which both the perception of a rabbit and a subjectively indistinguishable hallucination of a rabbit can fall. It is easy to provide such a true description: both experiences are *experiences which are subjectively indistinguishable from a perception of a rabbit*. Disjunctivists do not deny that such a true description is available. What they deny is that what *makes* it true that these two experiences are describable in this way is the presence of the *same determinate mental state* in the case of

perception and hallucination. In the case of the perception, what makes it true that the description applies is that the experience is a perception of a rabbit; in the hallucinatory case, what makes it true that the description applies is that the experience is a hallucination of a rabbit. What the disjunctivist rejects is what J.M. Hinton calls 'the doctrine of the "experience" as the common element in a given perception' and an indistinguishable hallucination (Hinton 1973: 71). The most specific common description of both states, then, is a merely *disjunctive* one: the experience is *either* a genuine perception of a rabbit *or* a mere hallucination of a rabbit. Hence the theory's name.

The theory was first proposed by Hinton (1973) and was later developed by P.F. Snowdon (1979), John McDowell (1982 and 1987) and M.G.F. Martin (2002, forthcoming). It has recently been endorsed by Hilary Putnam (1999) and Timothy Williamson (2000). In his endorsement of the theory, Putnam argues that the distinctive feature of disjunctivism is 'that there is nothing literally in common' in perception and hallucination, 'that is, no identical quality' (1999: 152). This remark, however, shows a common misunderstanding of disjunctivism. For as noted above, disjunctivists do say that there is something literally in common between a perception of an X and a hallucination of an X – each state is subjectively indistinguishable from a perception of an X – and to that extent they exhibit a common 'quality'. As McDowell says, 'the uncontentiously legitimate category of things that are the same across the different cases is the category of how things seem to the subject' (McDowell 1987: 157). But what the members of this category have in common is not that they are all the same kind of experience. It is rather that to be a member of this category, a state of mind merely has to satisfy a disjunctive condition of the kind described in the previous paragraph.

Disjunctivists need not deny either that there is a common *physical* state – for example, a brain state – shared by the perceiver and the hallucinator. Indeed, if they accept the justification given for (3) above, they should not deny this. What they will deny is that the state of perceiving an object is identical with, or supervenes upon, this physical state (though they can accept a more global supervenience thesis of the mental state on the subject's body plus environment). This is because perceiving an object is an essentially relational state, of which the object perceived is a constituent; or in other words, the perception is *constitutively dependent* on the object perceived. In this disjunctivism resembles the sense-datum theory, except that the object in question is a mind-independent object rather than a mind-dependent sense-datum. And in holding that mind-independent objects are the only objects perceived, disjunctivism resembles the intentionalist theory, except that it denies that the sort of state one is in when perceiving could be had in the absence of such an object. Whereas the intentionalist sees the properties presented in perceptual experience as represented, the disjunctivist sees these properties as *instantiated* in perception, and as merely represented in hallucination (see Martin 2002: 392-5 for these claims). Disjunctivists tend to argue that only by seeing properties as instantiated in this way can we do justice to the sense in which perception is the *presentation* as opposed to the *representation* of its objects (see the discussion in Searle 1983: 45-6 and the commentary on this by McDowell 1994).

Disjunctivism manages this compromise between sense-datum theories and intentionalist theories, thus preserving our first two intuitive assumptions, by denying (4) the identity of subjective indistinguishables. Why deny (4)? Certainly, as we noted above, a principle like (4) cannot be derived from an uncontroversial general principle about all

mental states: it is not true that if two mental states are subjectively indistinguishable, then they are of the most specific psychological kind. If I know two identical twins, I might, for example, call to mind a memory image of one twin playing the piano which might seem exactly the same to me as a memory image of the other playing the piano. So I am unable to tell by introspection whether my memory image is an image of one twin rather than the other. But this is consistent with the image deriving from a genuine memory of one of the twins playing the piano. It's just I cannot tell merely by undergoing this experience which one it is a memory of.

But where conscious perceptual experiences are concerned, (4) might seem to be more plausible. So is there an independently plausible reason for the disjunctivist's denial of (4)? Putnam argues that there is, since:

There cannot be phenomenal states whose *esse* is *percipi*, phenomenal states that obey the principle that if two occasions seem identical to a subject as far as their appearance is concerned, then the subject is in the same phenomenal state. The difficulty is, quite simply, that indistinguishability in appearance is not a transitive relation but being in the same state ... is a transitive relation. (Putnam 1999: 130)

The argument he gives for this is based on sorites reasoning. It is often claimed that a series of colour patches 1, 2....100 might be such that adjacent pairs (e.g. 1 and 2) are subjectively indistinguishable in colour, but that the first patch is subjectively distinguishable from the 100th. Hence subjective indistinguishability is not transitive, and therefore it cannot specify a condition for the identity of mental states, since any such

condition must be transitive. (This is sometimes called the argument from the 'phenomenal sorites': for some recent discussions see Graff 2001, Mills 2002.)

If Putnam were right, there would be a good reason for denying (4) that subjective indistinguishability of experiences implies identity. But if he is right, then the disjunctivist cannot say that there is any identical state, condition or quality which encompasses perception and hallucination. This is what Putnam claims as his conclusion, of course; but as we saw above, it is not what disjunctivists actually say, nor what they ought to say. So given that Putnam is wrong about this aspect of disjunctivism, he also must be wrong about the phenomenal sorites. In other words, there must be a common 'state' which is defined by subjective indistinguishability. So since both disjunctivists and intentionalists alike must accept this, they both must respond to the charge that the phenomenal sorites shows that subjective indistinguishability is not transitive (see Graff 2001 for an important argument that subjective indistinguishability is, contrary to widespread opinion, transitive). Putnam's argument is a poisoned chalice for the disjunctivist; they should not endorse it.

There do not seem to be any uncontroversial knock-down arguments against (4). It may be preferable, therefore, for the disjunctivist not to attack (4) directly, but to embrace the rejection of (4) as a necessary consequence of accepting the other assumptions. McDowell has argued that it is only by accepting disjunctivism that we can give an adequate account of how the mind is genuinely in touch with reality. For McDowell, an intentionalist theory of perception is no better than a sense-data theory in this respect, since both theories understand the essence of perception in terms of some state of mind which is not essentially world-involving. This gives rise to the risk of losing

genuine perceptual intentionality – genuine perceptual content with objects – and leaving just 'darkness within' (see McDowell 1987: 250). The way to avoid this risk is to reject the idea of experience as constituting the 'highest common factor' in perception and hallucination (for a similar motivation, see McCulloch 2003).

Taking a different approach, Martin argues that abandoning (4) is the least revisionary position among all the possible responses to the problem of perception, and thus follows Hinton (1973) in holding the disjunctivist position to be the default starting point for discussions of perception (Martin forthcoming). In other words, the disjunctivist position best accommodates our pre-theoretical conception of perception – the conception described above as 'openness to the world'. This approach can concede that assumption (4) also has some pre-theoretical, intuitive appeal; but it will insist that rejecting (4) involves less of a departure from the phenomenological data than rejecting (1) or (2).

Opponents of disjunctivism tend to put pressure on where it can seem that the disjunctive explanation comes to an end earlier than it should. Hence Sturgeon (1998, 2000, chapter 1) has argued that unlike other theories of perception, disjunctivism cannot account for the apparently manifest fact that both perception and hallucination can be (subjective) reasons for beliefs or actions. For example: I perceive a rabbit and gain the belief that there is a rabbit there; this together with my other attitudes gives me a reason to chase it. Sturgeon argues that the same collections of reasons could be present in the hallucinatory case too. But how does disjunctivism explain this if it cannot appeal to a common experience which can be a reason in both cases? Similarly, Smith (2002 chapter 8) argues that disjunctivism fails to give an account of the object of a hallucinatory

experience, and therefore is committed to the counter-intuitive view that in hallucination one is literally not aware of anything.

The debate about perception in analytic philosophy at the beginning of the 21st century in some ways echoes the debate of a century earlier. Russell, Moore and their contemporaries were engaged in a debate about the objects of experience which has many elements in common with today's debate, although there are many differing elements too. They were concerned about what the objects of perceptual experience were, whether the objects of experience were external to the mind, and what was present to the mind in the case of illusion and hallucination. These questions have their present-day counterparts posed by what has been called here the problem of perception. However, it seems fair to say that while at the beginning of the 20th century, the chief protagonists in the philosophy of perception were the direct realists and the sense-data theorists, at the beginning of the 21st century they are the disjunctivists and intentionalists.

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