

Chapter 10
Perceptual Knowledge

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I

This essay deals with epistemological issues concerning perception. These can be briefly indicated by the question: "How, if at all, is perception a source of knowledge or justified belief?" To keep a discussion of a very complex subject matter within prescribed bounds, I will mostly focus on the "justified belief" side of the above disjunction, bringing in questions about perceptual *knowledge* only when dealing with a position that is specially concerned with knowledge. There are some other housekeeping moves to be made before we can get under way.

(1) First a couple of points about epistemic justification. (a) Justification comes in degrees. I can be more or less justified in supposing that Yeltsin will resign the presidency, depending on the strength of my reasons for this. The epistemological literature mostly treats "justified" as an absolute term. Presumably this is because some minimal degree is being presupposed. I will follow this practice. (b) For most of our beliefs, including perceptual beliefs, what we typically identify as a justifier provides only *defeasible, prima facie* justification. Thus the way something looks to me *prima facie* justifies the belief that it is an elephant. That is, this belief will be justified, all things considered, provided there are no sufficient overriders of this *prima facie* justification, for example, strong reasons that there could not be an elephant in this spot, or reasons for thinking that my visual apparatus is malfunctioning. I will be thinking of *prima facie* justification in this essay.

(2) What sorts of beliefs are we to think of as candidates for being justified by perception? Perceptual beliefs, of course, i.e., beliefs that are given rise to by perception. But there is an important distinction between two sorts of beliefs that satisfy this condition.

A. Beliefs about what is putatively perceived *The tree in front of me is a maple*.

B. Beliefs to the effect that one is perceiving something *I see a maple tree* or *I see that this tree is a maple*.

It is beliefs of the A sort that are at the heart of the epistemology of perception, just because they constitute the most fundamental doxastic perceptual output most fundamental in two ways. First, they are ontogenetically and phylogenetically most basic. Even the least sophisticated cognitive subjects lower animals and very young infants who have no language get information about the environment from perception. But it takes greater cognitive sophistication to form propositions to the effect that one is perceiving so-and-so. Second, it seems that the primary function of perception is to give the subject information about the environment, rather than information about the subject's perceptual activity and accomplishment. Hence this essay will deal with issues concerning how perception serves as a source of justification for beliefs about what is putatively perceived.

(3) Here, as elsewhere in epistemology, there is an important distinction between two enterprises. (a) We can raise the radical question as to whether we have any knowledge (justified belief) in the domain in question. This amounts to deciding how to react to a certain kind of scepticism. (b) Assuming that we do have knowledge (justified beliefs) of the relevant sort, we can try to understand that determine what the conditions are under which one has knowledge (justified beliefs) in that domain, make such internal distinctions in the domain as seem called for, clarify the basic concepts involved in carrying out these tasks, and so on. In the history of epistemology (a) has bulked large. With perception in particular, many philosophers talk as if the concern with skepticism exhausts the subject. But, again in order to keep this essay within reasonable limits, I will forgo grappling with scepticism, which in any event is treated elsewhere in this volume, and focus on (b). [Editor's note: skepticism regarding perception is treated in the essay by Williams, this volume.]

(4) Philosophers have been concerned both with the epistemology of perceptual belief and the nature of perception. Under the latter heading we can distinguish two main interrelated problems, (a) what it is to perceive an object (event, situation, state of affairs), and (b) what is the nature and structure of perceptual experience (consciousness). The positions taken on these issues, especially the second, have a crucial bearing on epistemological issues. It seems obvious that perceptual experience plays a major role in determining the epistemic status of beliefs based on it. But what kind of role it plays depends on what it is like. If we think of perceptual experience as purely internal, just a subjective state of the perceiver, its epistemic role *vis-à-vis* beliefs about the environment will be different from what it is if it involves some direct awareness of extramental reality. Again, if, as it is fashionable to think nowadays, perceptual experience is essentially propositionally structured, then it may be that it already contains perceptual beliefs of the sort we are concerned with here, in which case the experience is in need of epistemic support, instead of or as well as being an ultimate source thereof.

(5) It is obvious that one's general epistemological orientation has an important influence on one's epistemology of perception. This relevance will obtrude itself throughout the essay. But at this point I will set aside one branch of a major

divide in epistemology, that over whether any belief can be justified otherwise than by its relation to other beliefs. Most of those who answer this question in the negative espouse some form of coherentism, the view that particular beliefs are justified or not by how they fit into some total system of belief, and how internally coherent that system is. A coherentist will have no use for the idea that perceptual beliefs can be justified by experience, whereas those who take a more "local" view of justification are free to allow this. This difference in general epistemology makes an enormous difference to the epistemology of perception. It seems to me incontestable that coherentism can't be the right way to approach perception. If I look out my window and see snow on the ground, and everything is working normally, then surely I am amply justified in believing there is snow on the ground, even if this does not fit coherently in my total belief system, and even if that system exhibits a very low degree of coherence. Hence I will exclude coherentist approaches from consideration. 1 [Editor's note: coherentism is treated in the essay by BonJour, this volume.]

II

(6) Another preliminary point that needs more extensive consideration is the difference between the following questions. (1) How, if at all, are perceivers (sometimes) justified in their perceptual beliefs? (2) How, if at all, is it *possible* to justify perceptual beliefs? (1) is addressed to the (typical or frequent) situation of real-life perceivers. It tries to determine what, if anything, in their actual situations renders their perceptual beliefs justified. (2) is a question about what considerations could be adduced to justify perceptual beliefs, whether or not this is something that perceivers typically, or ever, adduce or are aware of. Thus (2) could be answered by spelling out some elaborate philosophical argument that is so complex as to be available only to a select few. But (1) restricts itself to justificatory factors that are widely distributed, even though most perceivers might not be clearly aware of them or of their bearing. (2) is the enterprise often called "proving the existence of the external world."

One reason this distinction is important is that if we are not aware of it, as philosophers often are not, we will wind up arguing past each other. Thus Price, Broad, and others, object to a "causal theory of perception" that perceivers rarely if ever carry out a causal inference from perceptual experience to external cause when they form perceptual beliefs. But when Locke or Descartes or Russell or Lovejoy, or more recently Moser, defend the epistemic credentials of perceptual beliefs by appealing to causal arguments, they are best read as engaging not in (1) but in (2).

As intimated above, even if (2) could be successfully carried out, it would leave (1) without a satisfactory answer, provided that the success depends on argumentation that few if any perceivers can be aware of. Nevertheless, (2) is not totally irrelevant to (1). Suppose we carry out (2) by showing that whenever one

has a perceptual experience of a certain sort, a certain kind of fact obtains in the external world. That would show that having an experience of that sort confers a positive epistemic status (justification or knowledge) on a belief in that fact that stems from that experience. At least it would show this on an externalist account of justification or knowledge. 2 We will look at some externalist accounts in section iv.

Partly because of this relevance, and partly for its intrinsic interest, it is worth glancing at some attempts to carry out (2). These are usefully divided into a priori and empirical arguments. The former try to show that it is logically or conceptually impossible that perceptual beliefs should not often be true. An example is the claim that concepts of perceptible kinds and properties consist of "criteria" (Wittgenstein) or "justification conditions" (Pollock) in terms of sensory experience, so that it is conceptually necessary that when one is having a certain kind of sensory experience one is *prima facia* justified in supposing there is an object, or an object with a property, for which that experience is a justification condition.3 Here I will concentrate on empirical arguments.

These typically proceed by assuming that it is unproblematic that perceivers have knowledge of the character of their own perceptual experiences. They then look for some way of making cogent inferences from that knowledge to the propositional contents of typical perceptual beliefs (for example, *there is a robin on my lawn*). But a survey of such arguments affords little ground for optimism about the prospect of success.4 Look first at a very simple example. One might try to construct an enumerative induction from correlations of experience type and external fact. If experience of type *e* is conjoined in many cases with external putatively perceptible fact of type *f*, we can infer that they are generally correlated and hence be justified in inferring from an *e* to an *f*. But, as Hume and many others have noted, this runs into the difficulty that to get knowledge of particular instances of such pairings, we would already have to have perceptual knowledge of the external perceived objects, the very thing that is in question.

A somewhat more elaborate example is an argument to the best explanation. It is contended that there are various features of our experience that are best explained by the usual supposition that this experience has among its causes the physical objects we normally suppose ourselves to be perceiving in these experiences. Such considerations are found in the work of C.D. Broad.5 The features in question can be illustrated as follows.6 (1) It often happens that whenever I look in a certain direction I undergo sensory experiences of pretty much the same sort. This can be explained by the supposition that there are physical things of the sort I believe myself to be perceiving that remain in that location and contribute to the production of similar experiences. And when I receive significantly different experiences from looking in that direction, this is plausibly explained in terms of physical changes in that location. (2) If I move from point *a* to point *b* my experiences undergo a characteristic continuous change that, again, is of roughly the same sort over a considerable period, and this is best explained by supposing that the objects I seem to be perceiving along the route remain relatively stable

over the period of time in question. And again, when the sequence is different from what it had been, this can be plausibly explained by differences in the physical constituents along the route. Explanatory arguments like this are subject to two difficulties. (a) No one has ever succeeded in making a plausible case for the superiority of this "standard" explanation to its alternatives, like the self-generation of sensory experiences or their direct production by a Cartesian demon or a Berkeleyan God. (b) More crucially, the patterns in experience cited as the explananda involve suppositions about the physical environment we could only know about through perception, thus introducing a circularity in the argument. In these cases those suppositions include my repeatedly looking in a certain (physical) direction, and my physically moving from one location to another. If we were to make the explanandum purely phenomenal, we would not be able to find patterns that it is plausible to explain in terms of the putatively perceived external objects, as I argue in *The Reliability of Sense Perception*. 7

III

With these preliminaries out of the way I am ready to explore various ways in which philosophers have tried to understand the conditions of justification of perceptual belief. A good starting place is the intuitively plausible idea that when I form the visual belief that a robin is on my front lawn, that belief is justified, if at all, by my current visual experience. The experience, which, as we might say, is as if I am seeing a robin on the lawn, gives rise to the belief and thereby renders it justified. It is plausible to suppose that the experience has this epistemic efficacy because it consists in, or involves, a direct awareness of the robin and its position on the lawn. My visual experience justifies the belief because the latter is simply the conceptual encoding of the realities that are directly presented to my awareness in the visual experience. This is the so-called "naive" direct realism that is one of the perennial answers to our central question of how perceptual beliefs are justified. I shall be contending that it is, in essentials, the correct answer, though to make it adequate we will have to go some distance beyond this crude formulation.

We must distinguish two ways in which perceptual experience might be involved in the justification of perceptual beliefs. (a) The belief might be justified by the experience itself, or by the fact that the belief stems from the experience, as the last paragraph suggested. (b) The belief might be justified by the subject's *knowledge* (justified belief) that she has an experience of that kind. I have already hinted at reasons for rejecting (b) as an account of real-life justification of perceptual beliefs. For one thing, perceivers typically have no actual knowledge of the character of their experiences. Even if they could always acquire such knowledge by attending to the matter, they rarely do so attend. Their attention is almost always fastened on the external (putatively) perceived scene, not the experience by virtue of which they perceive it. Second, if they had such knowledge it would play that role by functioning as an adequate reason for the perceptual belief. And that in

turn would require a successful inference from the fact that the experience is of a certain sort to the perceptual belief, or at least the possibility of such an inference. But, as I suggested above (but by no means proved), it looks as if no such inference is possible. Hence for this reason (b) cannot be successfully carried through. 8

Before leaving this approach I should mention one consideration that has made (b) seem an attractive or even compelling prospect. Traditional foundationalism in epistemology (q.v.) has supposed that all knowledge (justified belief) must rest on foundations that are absolutely certain. It seems that if there are such foundations of empirical knowledge, they consist of one's knowledge of one's own conscious states. And so, on such a view, we must show that whatever empirical knowledge one has of other matters is derived from one's knowledge of one's own conscious states. But the difficulties that have attended attempts to develop this kind of foundationalism weaken any support it gives to (b).

Turning now to (a), before considering how, if at all, a perceptual belief might be justified by an experience on which it is based, we must consider the idea that even if that is part of the story it is not all of it, at least not always. It seems that other knowledge of the subject sometimes makes a contribution. I am looking for Bernice's house. I've been to her house a number of times and I recognize it by its appearance. If the look of the house is all that I go on, then my belief that this is Bernice's house is based solely on the character of the visual presentation. But is that so? For all I know, there are many other houses that look just like this, given the distance and angle and lighting with respect to which I am viewing it. It is reasonable to think that I am also taking into account my current location that I am on a certain block of a certain street, or at least in a certain part of a certain town, whether I explicitly think about these matters or not. In that case my belief would be justified partly by the character of the visual presentation and partly by my knowledge of my current location.

Some philosophers think that all cases of perceptual recognition exhibit this mixed character. If so, the doxastic conditions will often have to be more hidden from the subject's awareness than the location beliefs in the above case. One candidate is what we might call "adequacy conditions." It might be thought that whenever I perceptually recognize x as P on the basis of a certain perceptual appearance, a belief that such an appearance is an adequate sign of P is also part of what justifies the belief. But the trouble with this is that it leads to an infinite regress. If for any basis, $B1$, of a belief there is a further basis, $B2$, which consists of a justified belief that $B1$ is an adequate basis, then the same principle will apply to $B2$, and so on ad infinitum. At some point we must take it as sufficient that the basis is adequate, without also requiring that the subject justifiably believe this. Another candidate for an omnipresent doxastic basis is the justified belief that one's perceptual apparatus is working normally. But one can recognize the relevance of this consideration without supposing that a justified belief in normality has to figure as part of the justification of the perceptual belief. One can hold, rather, that the experience suffices to justify *in the absence of any sufficient reasons to suspect abnormality*. That is, normality considerations can figure as possible

overrides of *prima facie* justification, rather than as part of what confers *prima facie* justification.

If we can generalize from the disposal of these two candidates, we need not worry about the possibility that perceptual beliefs *always* draw their justification, at least in part, from other justified beliefs. Nevertheless, there is a strong case for the thesis that this is not infrequently the case, as my example of house identification indicates. Hence doxastic contributors to justification will figure in any comprehensive epistemology of perceptual belief. But in the space at my disposal here I will concentrate on the experiential contribution, which deserves to be called the heart of the matter, both because that is always involved and because it is distinctive of perceptual justification.

IV

When we begin to think about how to specify the conditions under which an experience provides support for a perceptual belief, two other oppositions in general epistemology become relevant. (In the ensuing discussion I will use "evidence" in a broad sense for anything that has the potentiality of increasing the justification of a belief, whether it is reasons, other things the subject knows or justifiably believes ("evidence" in a narrow sense), or experience.) First, there is the question whether it is sufficient for justification that one simply *has* evidence, or whether it is required that the belief is *based* on that evidence. Though a decision on this point will pervasively affect the shape an account of epistemic justification takes, it is not crucial for the present topic just because it is plausible to restrict perceptual beliefs to those *based on* perceptual experience, apart from questions about their justification. Hence there is little or no chance of a perceptual belief's not being based on experience that constitutes evidence for it.⁹

The second opposition is between internalism and externalism in epistemology (see ch. 5 above). These terms are used variously, but I will understand them here as follows. Internalism restricts factors bearing on epistemic status to those to which the subject has some high grade of cognitive access, typically specified as knowable just on reflection. While externalism, though not excluding such factors, does not enforce any such restriction. The most important divergence between these orientations concerns certain truth conducive conditions which a subject cannot be expected to ascertain just on reflection. Two of these have been prominent in the epistemology of perception: reliability of belief formation and the truth indicativeness of the experience on which the belief was based. Externalist accounts of the epistemology of perceptual beliefs can feature one or the other of these. I begin with an account of the latter sort by Fred Dretske.¹⁰ This concerns knowledge specifically; Dretske deliberately ignores justification.

First, Dretske's epistemology of perceptual belief is based on a direct realism of object perception. He argues, successfully in my opinion, that at the heart of perception is an awareness of objects that does not involve belief (judgment) in

any way. He calls this "non-epistemic seeing" and abbreviates it as "seen".¹¹ Here are the conditions he lays down for a bit of visual knowledge ("S sees that *b* is *P*").

- (i) *b* is *P*. (the truth condition)
- (ii) *S* sees *b*.
- (iii) The conditions under which *S* sees *b* are such that *b* would not look, *L*, the way it now looks to *S*, unless it was *P*.
- (iv) *S*, believing the conditions are as described in (iii), takes *b* to be *P*.¹²

(Dretske explains that the belief that (iii) which he requires in condition (iv) can be more or less implicit.) What this account amounts to is that when I base a true belief that *b* is *P* on the way *b* looks, that belief counts as knowledge provided the look is an adequate indication of *b*'s being *P*. And it is an adequate indication provided that *b* wouldn't look that way if it were not *P*. My visual belief that the tree is a maple, a belief based on the tree's looking a certain way, counts as knowledge provided that the tree wouldn't have looked that way (in these circumstances) if it weren't a maple.

This account is externalist, not only because of the truth condition (1), but, more distinctively, because the truth of the crucial counterfactual, (iii), is not the sort of thing one can ascertain just on reflection. And, like most externalists, Dretske, by condition (iv), requires that the belief be *based on* the relevant evidence in order that it achieve the positive epistemic status in question.

I find Dretske's view very attractive as an account of perceptual knowledge,¹³ though, as I will bring out shortly, it, or rather suitable parts of it, is less promising as an account of justification. I will now say a few words about a *reliabilist* approach. The general idea of a reliabilist approach to knowledge or justification is that a belief gets one or another positive epistemic status by being formed in a way that is generally reliable, one that would yield mostly true beliefs in a suitably large and varied range of cases in conditions of the sort in which we typically find ourselves.¹⁴ The relation of this to Dretske's "adequate indication" account depends on how this "way of being formed" is thought of. If we spell it out in terms of the way the belief is based on features of experience (way of looking), then it turns out to be another formulation of the same basic idea. For if the way of looking would not occur in those circumstances without the belief's being true, as Dretske requires, then forming the belief on the basis of that way of looking, in those circumstances, would be a reliable way of forming it. But if, with Goldman and many other reliabilists, we do not wish to restrict perceptual belief formation to any such formula, then the reliabilist approach would apply more widely. In any event, reliabilism is externalist for the same reason as Dretske's account: the general reliability of the mode of belief formation exemplified in this case is not something that one could be expected to ascertain just on reflection.

It is plausible to suppose that if we can handle Dretske's counterfactuals successfully, and if we can assign particular processes of belief formation to general

"ways of forming beliefs" that can be assessed for reliability in epistemically useful ways, then either externalist approach identifies an important epistemically positive feature of beliefs, one that, together with truth, bids fair to be a sufficient condition of knowledge. The main dissatisfaction with such accounts is that they give us no hint as to how we tell whether their conditions are satisfied in a particular case. If we are interested not just in understanding the *concept* of perceptual knowledge but in finding out where we have it and where we do not, we are likely to feel let down. That is not to say that we have no capacity at all to determine when a Dretske-type counterfactual is true or when a way of forming a perceptual belief is of a reliable type. But it would obviously be desirable to have more of a general method for achieving this, and externalist epistemologists are not forthcoming on this point. They bend over backwards to make the (correct) point that knowing (being justified in believing) that *b* is *P*, on the basis of perception, does not require being able to know or show that one is. But being able to tell whether one is or not is obviously a cognitive desideratum. Moreover, if as I argue in *The Reliability of Sense Perception*, we cannot construct a noncircular successful argument that what we ordinarily take as experiential bases of perceptual beliefs yield mostly true beliefs, this is a serious problem for externalists, for on their view one has perceptual knowledge only if the perceptual belief in question is based on experience in such a way as to generally yield true beliefs. It is worth noting that they seem mostly untroubled by this. Since they typically adopt the nonskeptical approach to epistemology in terms of which this essay is written, they feel warranted in assuming that our usual ways of forming perceptual (and other) beliefs are truth-conducive until we have reasons in particular cases to abandon that assumption.

V

There is a reason for holding that even if externalist accounts like these are adequate accounts of perceptual knowledge (not thought of in terms of justification), they are deficient as accounts of the justification of perceptual belief. 15 That is because there is an internalist constraint it is plausible to apply to justification but not to knowledge, viz., that in order for something to justify a belief the subject must have the capacity for some insight into its doing so. This is weaker than requiring a capacity to ascertain justificatory efficacy just by reflection. But it is sufficiently strong to rule out typical externalist accounts. It is clear that a case of perceptual belief formation can satisfy Dretske's conditions without the subject having any insight whatsoever into this. This is presumably the case with lower animals and small children, and may well be the case with many unsophisticated normal adult humans. I will now explore the ways in which the justification of perceptual beliefs might be construed from this kind of internalist perspective.

But first I should mention a recently prominent view that there is something fundamentally wrong-headed about the idea of a belief being justified by an experience. Davidson, after opining that "nothing can count as a reason for

holding a belief except another belief," acknowledges that the only alternatives to this worth taking seriously attempt to ground beliefs on experience. But this won't do, he says. "The relation between a sensation and a belief cannot be logical, since sensations are not beliefs or other propositional attitudes. What then is the relation? . . . the relation is causal. Sensations cause some beliefs and in *this* sense are the basis or ground of those beliefs. But a causal explanation of a belief does not show that or why the belief is justified." 16 To be sure, Davidson offers this argument as a support for coherentism, and I have already excluded coherentism from consideration. Nevertheless, I want to say why I think that this argument doesn't do the job. In a word, it is much too heavy-handed. It question-beggingly assumes that only *logical* relations can carry justificatory force. Moreover it undiscriminatingly takes causation and justification to be mutually exclusive. But before swallowing this, we should reflect that there are causes and causes. Whether the kind of cause a visual experience is can confer justification on the kind of effect a perceptual belief is depends on the details of what these causes and effects are like and further facts about their relationship. (*Of course*, the abstract fact that x causes y has no implications for justificatory efficacy.) That is, it depends on the outcome of the kind of exploration on which I am about to embark.

When we try to give an internalist account of the way perceptual experience confers justification on perceptual beliefs, we are forced to attend to the differences between ways of construing that experience. These differences do not make an important difference for externalist accounts, since those accounts do not trade on connections between the intrinsic character of experiences and the content of beliefs. So long as the experience wouldn't be formed in those circumstances without the belief's being true, or so long as the belief results from the experience in a way that is generally reliable, it doesn't matter how the experience is constituted. No doubt, we would have to attend to that if we tried to *explain* the truth of the counterfactual or to explain the reliability; but no such explanation has to enter into the externalist account of what it is to know (justifiably believe) something perceptually. But since the internalist enterprise requires us to find a way in which it can be apparent to the subject how the experience renders the belief justified, there seems to be no place to look for this except in some connection between the intrinsic character of one's perceptual consciousness and the content of the belief. And what connection there is depends on both ends of the link.

Turning then to the main alternatives for a characterization of the intrinsic nature of perceptual experience, I assume that even if that experience is by its very nature conceptually, propositionally, or judgmentally structured (none of which I accept), we are concerned here with that aspect of the experience that makes it distinctively perceptual, an aspect we are assuming to be non-conceptual, non-propositional. Hence we can ignore the question of whether conceptualization is essentially involved. Proceeding on that basis, and painting the picture in broad strokes, we can discern four main accounts.

1. *Direct realism*. This takes perceptual consciousness to consist, most basically, in the fact that one or more objects *appear* to the subject *as so-and-so*, as

(restricting ourselves to vision) round, bulgy, blue, jagged, etc. In other terms, they *present* themselves to the subject as so-and-so. This view takes perceptual consciousness to be irreducibly relational in character. And, where one is genuinely perceiving objects, situations, and events in the external environment, it takes the relation to have an external object as its other term. This distinguishes it from its rivals, all of whom take perceptual experience to be (intrinsically) purely intramental.

2. *The sense-datum theory.* This agrees with 1. in taking perceptual consciousness to consist in an awareness of objects, to have an "act-object" structure. But the objects in question are never the familiar denizens of the physical world, but are instead special, nonphysical objects of a markedly peculiar character. They have the special role of bearing the qualities that putatively external perceived objects sensorily appear to have.

3. *The adverbial theory.* Perceptual consciousness is simply a *way* of being conscious; it does not display any sort of "act-object" structure. Just as a mode of consciousness, it is not a cognition of objects of any kind.

4. *Phenomenal quality view.* This is a position that I think is rather widely held but has not received the systematic development of the first three. It agrees with 2. in taking perceptual experience to be a direct awareness of something "mental," something private, but it differs in construing these private objects as qualities of mental states, which you could term sensations, rather than as subsistent nonphysical particulars.¹⁷

Thus direct realism is distinguished from the other alternatives by insisting that perceptual consciousness is essentially, in itself, an *awareness of objects*, which are, in normal cases, *physical objects in the environment*. Unlike the other views, it does not regard perceptual experience, in normal cases, to be purely "inside the head."¹⁸ When I take myself to be seeing a red apple, the direct realist will say that I am directly aware of something (an apple if things are going right) that looks red and apple-shaped to me. Sense-datum theory will say that I am directly aware of a red, apple-shaped sense datum that is a special nonphysical particular that exists only as a bearer of sensory qualia like color and shape. The phenomenal quality view will say that I am directly aware of sensory qualia of (some of my) current mental states, qualia like redness. And the adverbial theory will say that I am sensing in a red, apple-shaped *way* or *manner*.

To avoid misapprehension, let me make it clear that direct realism, as I construe it, does *not* hold that presented objects always are what they present themselves as. It is compatible with recognizing a considerable amount of misleading appearance. *X* can look like a cow when it is an automobile. A tower in the distance can look round when it is square. And so on. To be sure, if perceptual appearances were always or usually misleading, they would be of much less value epistemically than I take them to be. But that value does not require infallibility.

Reflecting on the bearing of these differences on perceptual epistemology, one can hardly avoid being struck by the apparent superiority of direct realism. On that view perceptual experience in itself involves, in normal cases, a cognitive relation with external objects that perceptual beliefs are about. Hence it seems

obvious how an experience could be a source of knowledge (justified belief) about such objects. If the leaf looks yellow to me or the house visually presents two front windows, that is an obvious basis for supposing the leaf to be yellow or the house to have two front windows (*a prima facie*, defeasible basis of course). But with the other construals, according to which the experience involves no intrinsic cognitive connection with the external world, there is no such intuitive justificatory force. Perceptual experience is a purely subjective affair, and as such it wears on its face no (even apparent) information about the external environment. Why should we suppose that sensing in a certain way, or being aware of a nonphysical sense datum or a phenomenal quality of a mental state, should tell us anything about what there is in the immediate environment of the perceiver and about what that is like? Of course, there may be *externalist* connections of the sort envisaged by the counterfactual or reliabilist approaches. It may be that sensing in a certain way is a reliable indication of the presence of a maple tree, or that the way in which a certain sensing gives rise to a belief that a car is driving down the street is a reliable way. But we are currently exploring the possibility of a more internalist perceptual epistemology, according to which a perceptual belief is justified only if the perceiver has, or can have, some insight into how her experience provides justification for the belief about the external environment to which it gives rise. And the direct realist construal would seem to provide that in a way its alternatives do not. The supposition that a leaf's looking yellow supports the belief that that leaf is yellow is just as clear as the plausibility of the supposition that, by and large and in the absence of sufficient reasons to the contrary, perceived things are as they perceptually appear to be. Whereas on the other construals it is difficult to see how perceptual experience confers any such *prima facie* credibility. Later we will see that things are not so rosy for direct realism as this preliminary statement suggests. But for now I want to explore what happens when advocates of the other views of perceptual experience address the epistemological problem. Since 4. has not been prominent in this literature, I will confine the discussion to the sense-datum and adverbial theorists.

My sample sense-datum theorists will be Broad, Price, Moore, Russell, and C. I. Lewis, while adverbial theory will be represented by Chisholm. The first point to note is that they all agree with me that there is a major problem in building an intuitively plausible bridge between perceptual experience, as they conceive it, and putatively perceived facts about the external environment. They all reject simple inductive arguments for general experience-external fact correlations, for reasons like those I gave in section ii. But when it comes to attempting to show how experience provides a basis for beliefs about the physical world, they divide into two groups on the question of the proper construal of those beliefs. Some of them, including Broad, Moore, Price, and Chisholm are *realists* on this point. They accept the common-sense view that the physical world we take ourselves to perceive is of a radically different ontological nature from sensory experience itself and is what it is independently of our experience. *Phenomenalists* like C. I. Lewis and Russell (at a certain stage) advocate construing physical objects in terms of

what sensory experiences a subject would have under certain conditions. To say that there is a plate on the table is to say something about what visual, tactful, and other experiences a percipient would have under certain conditions, *and that's all there is to it*. That's what there being a plate on the table consists in. Physical objects, to use a favorite term of Russell's, are "logical constructions" out of sense data (or sense experiences). 19

Let's first look at how realist sense-datum theorists approach the epistemology of perceptual belief. Broad and Price, as we saw earlier, discuss various ways in which sense data are patterned, ways which suggest an explanation in terms of the influence of objects we suppose ourselves to perceive.20 But they reject the claim that anything about the putatively perceived world can be established in this way. Broad goes so far as to say that if the "external world" hypothesis had a finite initial probability, its explanation of these facts would increase that probability, though he sees no grounds for such an initial probability. Price goes further than Broad in discerning the circularity involved in the argument, the ways in which the allegedly pure starting points are actually infected with all sorts of suppositions about the physical world, e.g., that the subject is or is not moving in a certain direction. They agree that one cannot successfully establish putatively perceived facts about the external world from premises concerning sense data or our experiences. And Chisholm, from the adverbial side, agrees with this.21

So what positive view do these philosophers have of the epistemic status of perceptual beliefs? The one favored by Price and Moore, and Chisholm part of the time, constitutes a sort of cop-out.22 Having despaired of finding any reason for supposing that a certain kind of experience indicates the truth of a certain perceptual belief about the external world, they simply lay it down that perceptual beliefs are to be taken as *prima facie* credible just by virtue of being formed. They are, as we might say, *prima facie self-warranted* just by being perceptual beliefs. To quote Chisholm, "if he takes there to be a tree, then . . . this intentional attitude, this taking, tends to make it probable that the talcing has an actual object."23 And Price: "the existence of a particular visual or tactful sense-datum is *prima facie* evidence (1) for the existence of a material thing such that this sense-datum belongs to it, (2) for the possession by this thing of a front surface of a certain general sort."24 I call this a "cop-out" because it abandons the attempt to find any kind of intelligible connection between the character of the experience and the content of the perceptual belief formed on its basis, such that this connection would enable us to understand how the experience can provide support for the belief. This position is just as neutral with respect to the constitution of the experience as the externalist positions we surveyed earlier.

What basis, if any, is there for this *prima facie self-warrant* principle? Here attitudes vary. Chisholm sometimes takes it to be directly known a priori, sometimes to owe its status to the fact that it is part of a system of principles that best accommodates particular intuitive cognitions of particular cases of justification, sometimes to be the only way of escaping skepticism. Price, after surveying various alternatives, opts for the view that "perceptual consciousness is an *ultimate*

form of consciousness not reducible to any other; and further, it is an *autonomous* or self-correcting form of consciousness." In other words, the principle needs no external support, even though it is not self-evident. It is clear that these theorists are settling for less than what they were hoping and aiming for initially, and finding ways to make do with what they have found.

As for phenomenalists, they are not faced with an ontological gap between experience and the physical world, but that does not mean that they are home free on the epistemological question. Even if there is nothing to physical things or facts other than what sense experiences would occur under certain conditions, we are still faced with the problem of how we know something about an unlimited number of such contingencies from a particular sense datum or sensation, or some limited number thereof. Phenomenalists generally claim that this is a matter of induction, a mode of inference that, even if not without its problems, is crucial in many other spheres of thought. They thus take themselves to have shown at least that there are no special epistemological problems about perception. But a more serious difficulty for their position concerns their phenomenalist account of physical objects. Chisholm showed, in a classic article, that one cannot begin to formulate a set of propositions concerning the conditions under which a subject *S* would have an experience of type *E*, a set that it is at all plausible to take as equivalent to a certain physical fact, without including physical facts in the antecedents of the conditional propositions.²⁵ Hence the project of reducing propositions about physical objects to propositions that are solely about experience cannot be carried through.

The difficulties that the likes of Price and Broad have with constructing a plausible view of how perceptual experience can *justify* beliefs about the external world depend, *inter alia*, on their taking epistemic justification to be essentially truth-conducive. This means that it is part of the concept of epistemic justification that if a belief is justified to a high degree, it thereby is likely to be true. As many epistemologists have persuasively argued, if we don't conceive epistemic justification in that way, why should we care so much whether our beliefs are justified?²⁶ It is combining this conviction with their sense-datum construal of perceptual experience and realism about physical objects that drives them to what I termed a "cop-out." But another reaction to the problem is to abandon truth-conducivity as a constraint on justification. This is what we find in Chisholm. He takes us to have an intuitive idea of a belief's being more or less justified, an idea that is conceptually independent of truth or probability of truth. He thinks that we know intuitively, *a priori*, in many cases that a given belief enjoys a certain degree of justification or not, and that we can inductively generalize from such cases to principles that lay down conditions for justification.²⁷ Thus, though he believes that having justified beliefs is the best way of getting the truth, he feels confident that he can tell when a belief is justified without showing that it is likely to be true.

Another way of divorcing justification from truth-conducivity is the Wittgensteinian idea that our concepts contain *criteria* of their correct application.

The fluctuation in grammar between criteria and symptoms makes it look as if there were nothing at all but symptoms. We say, for example: "Experience teaches that there is rain when the barometer falls, but it also teaches that there is rain when we have certain sensations of wet and cold, or such-and-such visual impressions". In defense of this one says that these sense-impressions can deceive us. But here one fails to reflect that the fact that the false appearance is precisely one of rain is founded on a definition. 28

This idea has been developed by John Pollock in his view that the meaning of many of our concepts, including concepts of perceptible objects, is given by "justification conditions" rather than by "truth conditions." 29 Thus it is part of our concept of a bird that such-and-such visual experiences count as justifying the belief that what one sees is a bird. If this view can be successfully carried through, it obviously gives us an insight into how and why the kinds of experiences we ordinarily take to justify perceptual beliefs with a certain content really do so. There are problems with the approach. For example, it seems to require that we ascribe a concept of epistemic justification to all perceivers, at least all perceivers who have justified perceptual beliefs, and this seems questionable. But the main point I want to make in this context is that since the concept of justification has been cut loose from truth, by both Chisholm and Pollock, it runs up against the question of why we should be so concerned with how justified our beliefs are.

VI

So the sense-datum and adverbial views, which construe perceptual experience as purely intramental, run into difficulties in forging an account of the justification of perceptual beliefs by experience that gives us insight into how and why it works. I believe that the phenomenal qualities view, when combined with realism about the physical world and a truth-conducivity conception of justification, will run into similar problems. But before we award the palm to direct realism, we must surmount two obstacles.

First, we must confront the considerations that have seemed to most philosophers in the modern period to show conclusively that perceptual experience cannot essentially involve any cognitive relation to an extramental object. Here some historical background would be useful. An Aristotelian form of direct realism was dominant in the high Middle Ages, but it was widely abandoned at the beginning of the modern era because of its connection with Aristotelian physics. That physics took "secondary" qualities like color, and felt heat and cold, roughness and smoothness, to be objectively real and even, in some cases, physically efficacious. Thus the Aristotelians felt justified in supposing that when something looks red or feels cold, objective physical properties are presenting themselves to us perceptually.

But with the rise of the new mathematical physics, secondary qualities were banished from the physical world because they were not susceptible of

mathematical treatment. And since nothing perceptually appears to us as solely bearing the "primary," mathematicizable properties like size, shape, and motion, thinkers rejected the view that we are directly aware of external physical reality in perception. Perceptual experience, being rife with secondary qualities, had to be construed as purely intramental, as, in the current jargon, an awareness of "ideas".

There are considerations independent of the shape of physical science that convince most current philosophers that perceptual experience does not consist of any cognitive relation to the extramental. The crucial point is that there are hallucinatory experiences in which the supposed external perceived object does not exist, and these are introspectively indistinguishable from veridical perception. Case studies of psychotics present examples aplenty. Such experiences have been taken to support a stronger or weaker objection to direct realism. The stronger is that perceptual experience never includes a direct awareness of an existent external object. This is supposed to be shown by the intrinsic indistinguishability of hallucinations and the real thing. It need not be alleged that they are never phenomenally distinguishable; that is clearly false. It is enough that they sometimes are not. The argument is that since veridical perceptual experience is of just the same sort, experientially, as (some) hallucinations, then since the latter involves no awareness of an external object, neither does the former. Thus we are driven to some kind of purely subjective construal of all perceptual experience.

The Achilles heel of this argument is the supposition that the ontological constitution of an experience is completely displayed to introspection. Why suppose that? Why suppose that there are no differences in ontological structure that are not revealed to the subject's direct awareness? Why couldn't an experience in which something genuinely is presented to one be phenomenologically just like one in which nothing is? Once we ask these questions, we see that the above argument rests on groundless prejudices. If the demands of theory require it, we are free to take phenomenologically indistinguishable states of affairs as significantly different in ontology. Moreover, we need not confine ourselves to appeals to abstract possibilities. The persistent disputes about the constitution of perceptual experience are eloquent testimony to the point that our direct awareness of our experiences does not suffice to settle the question. If perceptual experience wears its ontological structure on its sleeve, how could many philosophers be confident that it consists of awareness of nonphysical sense-data and many others be equally sure that it does not? The fine ontological structure of perceptual experience is a matter for theory, not one's normal awareness of one's own conscious states.

But even if hallucinations do not prove that perceptual experience is never a direct awareness of external objects, they certainly prove that it isn't always that. And this is enough to show that direct realism, as so far presented, cannot be a comprehensive account of perceptual experience. We might take it as a correct account of veridical perceptual experience, but there are strong motivations for finding a single unified account. The best strategy for the direct realist would be to find some other kind of entity that is directly presenting itself to the subject's

awareness as so-and-so when no physical object is available. In some cases this might be the air or the space in a certain area of the environment. But another alternative that would seem to cover all hallucinations (and dreams as well if they are to be ranged under perceptual experience) would be a particularly vivid mental image. This suggestion would not commend itself to materialists and many other contemporary philosophers as well. But there is, in fact, considerable psychological evidence that mental images are perceived in something like the way external objects are. We cannot pursue this issue here, beyond pointing to the necessity of some such development to enable direct realism to handle hallucinations.

More to the present purpose, the fact of hallucination complicates the application of direct realism to the question of how an experience can justify a perceptual belief. As I have been presenting this, a direct realist account of perceptual experience gives us real insight into how an experience can justify a perceptual belief in the following way. Since the experience just *is* a matter of an object, *o*, presenting itself to one's experience as *P*, that confers *prima facie* justification on the belief that *o* is *P*, on the enormously plausible principle that it is *prima facie* credible to suppose that things are as they experientially appear to be. But now we are forced to confront the fact that not all perceptual experiences *are* a matter of an object of the sort they seem to be perceptions of presenting itself as so-and-so. Suppose I have an hallucinatory experience of a computer that, so far as I can tell just by having the experience, is a case of a computer's visually presenting itself with the word "externalism" displayed on the screen? Does this experience provide *prima facie* justification for the belief that there is a computer in front of me with "externalism" displayed on the screen? On the one hand, it seems that I must hold that it does, so long as there is no way in which I can tell that I am not aware of a real computer. But then I must abandon the simple epistemological application of direct realism for which I have been commending it. Justification of perceptual beliefs by experience would no longer be confined to cases in which the object the belief is about directly appears to the subject as so-and-so. Indeed, it is beginning to look as if direct realism is in no better position than its rivals on this issue. For here too we are in the position of providing insight into how a purely intramental experience can confer justification on a belief about something extramental.

There are two positions direct realism can take on this issue, one more externalist and one more internalist. On the former, we stick to the original unqualified position. Perceptual experience justifies beliefs only about what the subject is thereby directly aware of. If in hallucinations it is visual images that appear so-and-so to the subject, it is the false belief that some image has sentences (really) appearing on its (real) screen that is *prima facie* justified by the experience. Since the subject has no direct cognitive access to the hallucinatory character of the experience, she doesn't realize that her belief is about a mental image; but that is what is more externalist about the position. On the latter, more fully internalist position, we limit our construal of the justifying experience to what is directly accessible to the subject. Since whether the experience is veridical or hallucinatory is not directly

accessible, we limit the specification of the experiential justifier to what is neutral between those alternatives something like *it is (experientially) just as a computer is presenting itself to me as having "externalist" on its screen*. And what we can take to be *prima facie* justified by the experience is dictated by that description, viz., a belief that a real computer in front of her has "externalist" on its screen. 30 This *prima facie* justification will be overidden if the subject comes to know or justifiably believe that the experience is hallucinatory. Note that both of these positions are internalist in restricting the justifier, what does the justifying, to experiences that are directly accessible to the subject. They differ in that the former position takes the justification to accrue to a belief about what is actually appearing to the subject, while the latter takes it to accrue to a belief about what seems to the subject to be presenting itself to her.

Note that both positions enjoy the advantage I have attributed to the direct realist epistemology of perceptual belief. For they are both squarely based on the idea that *X*'s appearing *P* to *S* provides *prima facie* justification for believing that *X* is *P*. The more externalist version preserves this idea unmodified, at the cost of leaving the subject unable to tell with certainty, from the inside, just what belief is so justified. The more internalist position extends the range of justifying experiences to include introspectively indistinguishable lookalikes, but their characterization is parasitic on the characterization of the real article. And so the original idea that *X*'s looking \emptyset to *S* *prima facie* justifies *S* in supposing that *X* is \emptyset is still at the heart of the account.

Notes

1. For an interesting coherentist attempt to handle perceptual belief see Laurence BonJour, *The Structure of Empirical Knowledge* (Cambridge, MA: Harvard University Press, 1985), ch. 6. For extensive criticism of coherentism see John W. Bender, ed., *The Current State of the Coherence Theory* (Boston: Kluwer, 1989).
2. For an explanation of the distinction between externalism and internalism in epistemology see section iv and the essay by Sosa in this volume.
3. I briefly discuss this argument at the end of section v.
4. For an extensive critique of both a priori and empirical arguments see William Alston, *The Reliability of Sense Perception* (Ithaca: Cornell University Press, 1993).
5. C. D. Broad, *Scientific Thought* (London: Routledge & Kegan Paul, 1923), chs. 9 and 10, and *The Mind and Its Place in Nature* (London: Routledge & Kegan Paul, 1925), ch. 4.
6. Broad, *The Mind and Its Place in Nature*, pp. 196 8.
7. William Alston, *The Reliability of Sense Perception* (Ithaca: Cornell University Press, 1993).
8. At least his second reason holds on an internalist account of justification, on which the subject must have some insight into that and how a reason is adequate in order that the belief for which it is a reason be thereby justified. An externalist account of justification or knowledge is a different ball game, as I will note shortly. But even for

externalism the first consideration, the typical absence of knowledge of the character of one's sensory experience, is applicable.

9. To be sure, even if a perceptual belief must be based on some experience, there may be experience that is fitted to be evidence for it on which it is not based. But that combination is not likely enough to warrant consideration.

10. Fred Dretske, *Seeing and Knowing* (London: Routledge & Kegan Paul, 1969).

11. *Ibid.*, ch. 2.

12. *Ibid.*, pp. 79 88.

13. There are problems, as usual, with the counterfactual involved. Dretske has insightful things to say about how to interpret it, but I can't go into that here.

14. See Alvin Goldman, "What is Justified Belief?", *Journal of Philosophy*, 73 (1979), and *Epistemology and Cognition* (Cambridge, MA: Harvard University Press, 1986).

15. Needless to say, anyone who is thoroughly convinced that justification of belief is necessary for knowledge will not find any account of knowledge more attractive than a parallel account of justification, since she will hold that the former must go through the latter. It should also be noted that although Goldman takes reliability as what confers justification on beliefs, Dretske's account of perceptual knowledge spelled out above needs a bit of jimmying to turn it into an account of justification. (I), the truth requirement has to be dropped of course, and since (iii), as stated, implies that, it has to be weakened, by making it a high probability claim, for example.

16. Donald Davidson, "A Coherence Theory of Truth and Knowledge," in Ernest LePore, ed., *Truth and Interpretation: Perspectives on the Philosophy of Donald Davidson* (Oxford: Blackwell, 1986), p. 310.

17. My colleague, Jonathan Bennett, has forced me (by rational argument, not threats) to acknowledge 4. as a serious alternative.

18. This, of course, raises the question of how direct realism treats complete hallucinations where no direct awareness of an external object is involved. I will come to that later.

19. See "The Ultimate Constituents of Matter" and "The Relations of Sense-Data to Physics," both in Bertrand Russell's *Our Knowledge of the External World as a Field for Scientific Method in Philosophy* (Chicago: Open Court, 1914). (Beginning in the 1920s Russell took an increasingly realist approach to the physical world.) For C. I. Lewis's phenomenism see his *An Analysis of Knowledge and Valuation* (La Salle, IL: Open Court, 1946), chs. 7 9.

20. Broad, *The Mind and Its Place in Nature*, ch. 4, and H. H. Price, *Perception* (London: Methuen, 1932), ch. 4.

21. Roderick Chisholm, *Theory of Knowledge* (Englewood Cliffs, NJ: Prentice-Hall, 3rd ed. 1989). Cf. G. E. Moore, *Philosophical Studies* (London: Routledge & Kegan Paul, 1922), chs. 2, 5, 7; and *Some Main Problems of Philosophy* (London: Allen & Unwin, 1953), chs. 2, 5, 7.

22. Broad seems content with the "would increase the initial probability if it had any" position hinted at above.

23. Chisholm, *Theory of Knowledge*, p. 47.

24. Price, *Perception*, p. 185.

25. Roderick Chisholm, "The Problem of Empiricism," *Journal of Philosophy* XLV (1948).

26. An incisive formulation of this argument if found in BonJour, *The Structure of Empirical Knowledge*, ch. 1.

27. Though the priority of particular cases is the dominant strand in his writings, he sometimes suggests, as noted earlier, that general principles of justification are directly known a priori.

28. Ludwig Wittgenstein, *Philosophical Investigations*, tr. G. E. M. Anscombe (Oxford: Blackwell, 1953), no. 354.

29. John Pollock, *Knowledge and Justification* (Princeton: Princeton University Press, 1974).

30. I would prefer not to say that she is justified in a singular belief about a particular object, because there is no object of the sort she believes herself to be directly aware of that is appearing to her in this case. Since there is a reference failure, no singular proposition forms that content of any belief of hers, and hence the question of whether a belief with such a content is justified, and if so how, does not arise. However, an existentially quantified belief, *there is a computer in front of me with "externalism" on its screen*, could still be *prima facie* justified.